

**SHARIAH AUDIT IN ISLAMIC FINANCIAL INSTITUTIONS:  
THE EFFECTS OF SPIRITUALITY AND MODERATING  
ROLE ON JUDGEMENT AND DECISION MAKING**

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**INSTITUTE OF POSTGRADUATE STUDIES  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

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INSTITUTIONS: THE EFFECTS OF SPIRITUALITY  
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DECISION MAKING**

**YAZKHIRUNI BINTI YAHYA**

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**SHARIAH AUDIT IN ISLAMIC FINANCIAL INSTITUTIONS: THE EFFECTS OF SPIRITUALITY AND MODERATING ROLE ON JUDGEMENT AND DECISION MAKING**

Field of Study: Shariah Auditing

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## ABSTRACT

Auditing in the Islamic framework or also known as Islamic auditing has a wider scope than the current practice of auditing. Main objective of auditing from the Islamic perspective is to embrace the *Maqasid As – Shariah* (Objective of Islamic Principles) as well as to uphold the *shariah* principles in all practices and process. *Shariah* auditing requires auditors to judge whether the process and outcomes of audit comply with the Islamic principles, which have a far-reaching implication beyond the usual attestation of current practices of auditing that is to give attestation, assurance of financial statement and internal control of the institutions is adequately safeguarded and protected. The Central Bank of Malaysia in *Shariah* Governance Framework specified that *shariah* audit should be conducted by internal auditors. This study has three objectives and has been undertaken through qualitative phase (interview) and quantitative phase (experiment). For first objective, this study attempts to investigate the types of knowledge required during *shariah* auditing process in IFIs. Research data for this exploratory stage is obtained from 15 semi - structured interviews conducted with the chief internal auditors of IFIs, *shariah* committee, academicians, bankers, external auditors and regulators. It is discovered that, the IBF, *shariah* knowledge and internal audit knowledge are essential to be acquired by internal auditors during *shariah* auditing process. Then, second objective of this study is to identify whether spirituality has significant effects towards *shariah* auditing judgment performance. Furthermore, the third objective of the study investigated the moderating effects identified as task complexity, knowledge and ethics, which are recognized as ‘Determinants of Performance’ towards *shariah* audit judgment performance. The Social Cognitive Theory (SCT) is used to explain the influence of spirituality and moderating variables towards *shariah* auditing judgement performance. To date, current discourse of *shariah* audit by internal auditors is limited in which its role, function, and implementation in

IFIs has not been fully addressed. Moreover, research in the field of spirituality and judgment decision making (JDM) focusing on internal auditors' judgment in real practices is relatively new compared with the development of spirituality and judgment decision making involving external auditors. Therefore, the study contributes to the literature on how spirituality has implication on JDM. A total of 146 internal auditors participated in the experiments. The results reported that spirituality influenced internal auditors' *shariah* audit judgment performance. Then, the findings from the experiments, which tested the moderating effects, identified i.e. task complexity, knowledge and ethics produced mixed results. Of all the three moderators, task complexity was deemed significant towards relations between spirituality and *shariah* audit judgment performance. In contrast, knowledge and ethics did not seem to have a significant moderating influence on the spirituality and *shariah* audit judgment performance. The interviews complemented experiment's design as well as interpretation of results. Finally, the findings may have some implications for regulators and others concerned with establishing guidelines, rules and knowledge requirements pertaining to *shariah* auditing practices. As such, practitioners might include spirituality as one of the important factors to increase quality of JDM process and *shariah* auditing process.

## ABSTRAK

Pengauditan dalam rangka kerja Islam mempunyai skop yang lebih luas daripada amalan semasa pengauditan kerana perbezaan pandangan dan konsep. Objektif utama audit dari perspektif Islam adalah untuk menghayati *Maqasid As - Syariah* (Objektif Prinsip Islam) dan juga untuk menegakkan prinsip-prinsip syariah dalam semua amalan dan proses. Pengauditan Islam memerlukan juruaudit untuk menilai sama ada proses dan hasil audit mematuhi prinsip-prinsip Islam, yang mempunyai implikasi lebih meluas berbanding amalan pengauditan biasa iaitu hanya memberi penyaksian, jaminan penyata kewangan dan kawalan dalaman institusi ini dilindungi dan dijaga secukupnya. Bank Negara Malaysia (BNM) dalam Rangka Kerja Tadbir Urus Syariah (SGF, 2010), mengariskan bahawa audit syariah perlu dijalankan oleh juruaudit dalaman. Bagi kajian ini mempunyai tiga objektif dan telah dijalankan melalui fasa kualitatif (temu bual) dan fasa kuantitatif (eksperimen). Bagi objektif pertama, kajian ini bertujuan untuk menyelidik jenis pengetahuan yang diperlukan semasa proses audit syariah dalam IFI. Data kajian untuk peringkat penerokaan ini diperoleh daripada 15 semi - temu bual berstruktur dijalankan dengan ketua juruaudit dalaman IFI, jawatankuasa Syariah, ahli akademik, pegawai bank, juruaudit luar dan pegawai dari Bank Negara Malaysia. Didapati bahawa, IBF, pengetahuan syariah dan pengetahuan audit dalaman adalah penting untuk dikuasai oleh juruaudit dalaman semasa proses audit syariah. Kemudian, objektif kedua kajian ini adalah untuk mengenal pasti sama ada spiritual mempunyai kesan yang penting pada prestasi penghakiman audit syariah. Objektif kedua kajian ini pula adalah untuk mengenal pasti sama ada faktor spiritual mempunyai kesan yang penting terhadap prestasi dan mutu audit *shariah* ketika juruaudit dalam membuat pertimbangan dan keputusan. Disamping itu, kajian ini juga cuba untuk memahami faktor-faktor/variable moderator mempengaruhi prestasi proses dan mutu audit *shariah* ketika juruaudit dalam membuat proses pertimbangan dan keputusan. Antara

faktor/moderator yang dikaji adalah daripada segi tahap kerumitan tugas pengauditan, pengetahuan dan etika juruaudit dalam. Teori Kognitif Sosial (SCT) digunakan untuk menjelaskan pengaruh spiritual dan faktor – faktor moderator dalam prestasi dan mutu audt *shariah* ketika juruaudit membuat pertimbangan dan keputusan. Seramai 146 juruaudit dalaman telah mengambil bahagian dalam eksperimen ini. Keputusan penyelidikan eksperimen melaporkan bahawa faktor spiritual mempengaruhi prestasi proses dan mutu keputusan audit *shariah* oleh juruaudit dalaman ketika proses pertimbangan dan membuat keputusan. Akhir sekali, dapatan daripada eksperimen yang merujuk kepada faktor/moderator lain seperti tahap kerumitan tugas pengauditan, pengetahuan dan etika, menghasilkan keputusan yang bercampur-campur. Daripada ketiga-tiga moderator, tahap kerumitan tugas dianggap penting dalam mempengaruhi hubungan spiritual dan mutu prestasi proses pengauditan *shariah*. Namun, pengetahuan dan etika tidak mempunyai pengaruh yang besar ke atas spiritual terhadap mutu prestasi proses pengauditan *shariah*. Data kaji selidik, adalah pelengkap reka bentuk eksperimen dan juga tafsiran keputusan. Akhir sekali, hasil kajian mungkin mempunyai implikasi bagi penguatkuasa i.e Bank Negara Malaysia dan lain-lain yang berkenaan dengan garis panduan penubuhan, peraturan dan keperluan pengetahuan yang berkaitan dengan amalan-amalan audit syariah. Oleh itu, pengamal mungkin boleh mempertimbangkan elemen spiritual sebagai salah satu faktor penting untuk meningkatkan kualiti proses pertimbangan dan membuat keputusan dan process pengauditan *shariah*.

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## LIST OF SYMBOLS AND ABBREVIATIONS

AAA	: American Accounting Association
AAOIFI	: Accounting and Auditing Organization for Islamic Financial Institutions
AIBIM	: Association of Islamic Banking Institutions Malaysia
ANOVA	: Analysis of Variance
AOS	: Accounting, Organization and Society Journal
ASIFI	: Auditing Standard for Islamic financial institutions
BAFIA	: Banking and Financial Institutions Act
BBA	: Bayt Bithamani Ajil - Islamic Home Financing
BNM	: Bank Negara Malaysia (Central Bank of Malaysia)
BOD	: Board of Directors
CBOK	: Common Body of Knowledge
CIA	: Chief Internal Auditor
COBAC	: Committee on Basic Auditing Concepts
CSR	: Corporate Social Responsibility
DV	: Dependent Variable
FFF	: Full-Fledged Foreign Islamic Financial Institutions
FFL	: Full-Fledged Local Islamic Financial Institutions
GPS – 1	: Garis Panduan <i>Shariah</i> - 1'
GSIFI	: Governance Standard For Islamic Financial Institutions
HSS	: Human Spirituality Scale
IBBM	: Institute of Bankers Malaysia
IBFIM	: Islamic Banking and Finance Institute Malaysia
IFIs	: Islamic Financial Institutions
IFSA (2013)	: Islamic Financial Services Act 2013
IFSB	: Islamic Financial Services Board
IHL	: Institutions of Higher Learning
IIA	: Institute of Internal Auditor

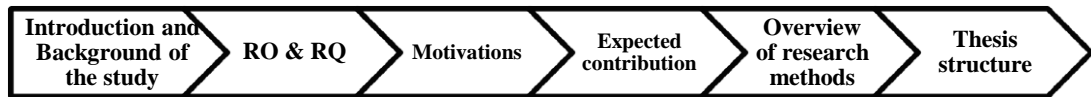
IIARF	: IIA Research Foundation
IIAM	: Institute of Internal Auditor Malaysia
IIUM	: International Islamic University Malaysia
IPPF	: International Standards for Professional Practice of Internal Auditing
ISAR	: Internal <i>Shariah</i> Audit Reports
ISRA	: International <i>Shariah</i> Research Academy for Islamic Finance
IV	: Independent Variable
JDM	: Judgement Decision Making
KPI	: Key Performance Indicators
MASB	: Malaysian Accounting Standards Board
MCQ	: Multiple Choice Questions
MIFC	: Malaysian International Islamic Centre
SC	: <i>Shariah</i> Committee
SCF	Islamic banking subsidiaries of conventional foreign financial institutions
SCL	: Islamic banking subsidiaries of conventional local financial institutions
SCT	: Social Cognitive Theory
SPSS	: Statistical Package for Social Sciences
SSB	: <i>Shariah</i> Supervisory Board
PwC	: PricewaterhouseCoopers
RO	: Research Objective
RQ	: Research Questions

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## CHAPTER 1: INTRODUCTION

Discussions in this chapter are presented in the following diagram:



**Figure 1.1: Structure of Chapter 1**

### 1.1 Introduction and background of the study

The emergence of Islamic financial institutions (IFIs) has created a new phenomenon within the global finance arena, particularly in the development of Islamic economics and finance. Not surprisingly, considerable attention has been given to the area of Islamic economics and Islamic finance. However, efforts are still needed in formulating the appropriate principles governing Islamic economics and Islamic finance in the areas of accounting and auditing. These efforts need to align with the new development of Islamic financial institutions that has triggered significant changes in the requirements of international financial reporting standards (IFRS) for Islamic finance transactions, expectation, and needs that are *shariah* compliance as demanded by the public for Islamic finance survive. Likewise, the scope of these standards should also vouch the transparency of all activities and operations of IFIs in upholding Islamic principles.

Prior research has shown a growing concern on the interaction of business activities and Islam (Abdel – Magid, 1981; Gambling and Karim, 1986; Alam, 1991; Hamid, Craig, and Clarke, 1993, Mirza and Baydoun, 1999). Such business concern is expected as Islam recognizes business activities as part of *ibadah* (worship and obedience to Allah) provided that they are performed in accordance with the commands of Allah and

the Islamic code of conduct (Ahmad, 1988), which are unequivocally spelt in several *Quranic* verses such as 2:30; 14:32-33 and 31:20. Therefore, it is apparent that Islam does not separate business or worldly activities as such from its doctrines.

Thus, the main objective of the establishment of IFIs is to assist Muslims and Islamic societies as a whole on how to invest their money in the most beneficial manner, which is consistent with the *shariah* principles. Such consistency focuses on certain precepts, such as the prohibition of interest, profit sharing, and avoidance of activities that are prohibited by Allah, to safeguard the interest of societies (Dusuki, Ali, and Hussain, 2012). In fact, from the regulators' point of view, *shariah* compliance in the IFIs is the utmost and ultimate requirement that should be adhered to and preserved. In this regard, the new regulations issued by the government of Malaysia under the *Islamic Financial Services Act* (2013) (IFSA, 2013) clearly prescribes the importance of *shariah* compliance in all IFIs operations and business. In particular, IFSA's regulatory objective as spelt in Section 6 emphasizes the imperative of promoting financial stability and compliance with *shariah*. As such, according to Section 28 (1) IFSA (2013), IFIs at all times must ensure that their aims, operations, business, affairs, and activities comply with *shariah*. More importantly, IFIs are obligated to make sure that their internal policies and procedures are consistent with the standards issued by BNM to manage their business, affairs, and activities in accordance with the *shariah* principles.

Collectively, the Board of Directors (BOD), Chief Internal Officer (CEO), senior officer, and *shariah* committee (SC) are all responsible to make sure that IFIs comply with the standards specified by BNM at all time, including carrying out audit on *shariah* compliance. To ensure such undertaking, IFSA (2013) under Division 3, Section 37 states that IFIs may engage certified institutions to appoint any person to carry out such



an audit on *shariah* compliance by the institutions. (Dusuki et al., 2012). In addition, auditing allows auditors to express their opinions based on truthful, fair judgment on whether the financial statements and materials that have been prepared are in accordance with the *shariah* rules and principles as well with relevant accounting standards.

If any findings of such an audit indicate a breach of provisions has been committed, the guilty IFIs would be liable to appropriate penalty. Specifically, Section 28 (5) of the IFSA it mandates that any person who contravenes this Act shall be liable to imprisonment for a term not exceeding eight years or to be fined not exceeding 25 million or both. Clearly, the act highlights the duty and the importance of the IFIs to ensure their business activities are in compliance with the relevant *shariah* precepts of which it becomes an offence under the law for the Islamic financial institutions to breach this conformance. Given the severity of such punitive measures, it is crucial for IFIs to ensure their activities and operations must comply with all the *shariah* principles.

Such confidence and reliance, however, may not be shared by their customers and shareholders without taking several important measures. Essentially, IFIs should carry out the followings: (i) communicate all relevant information in order to assist users in evaluating their companies' financial compliance with the *shariah* principles, and (ii) provide attestation and assurance that their financial business or operations are in compliance with all the relevant *shariah* principles. Achieving and sustaining such attestation and assurance would entail IFIs to undertake Islamic auditing (*shariah* auditing) and *shariah* review (compliance process). The *shariah* auditing process, which is unique compared to conventional banking process, helps IFIs establish credibility and reputation from the Islamic financial standpoint. In fact, through *shariah* auditing

process, IFIs are able to reduce the risk of *shariah* non-compliant issues that have the potential to cause severe repercussions, leading to damaging legal actions if such issues are left without proper redress.

Furthermore, the consequences of *shariah* non-compliant activities can potentially tarnish IFIs' reputation and reduce the confidence of depositors, investors, customers, and other stakeholders with the institutions (Dusuki et al., 2012; Shafii, Supiah, and Syahidawati, 2010). Further compounding these problems, any income deriving from non-compliant transactions would not be deemed as profits and revenues, which have to be channeled to charity organizations.

In 1992, the Accounting and Auditing Organization for Islamic Bank and Financial Institutions (AAOIFI) was established in response to the international demand. The primary objective of its establishment was to fulfill the needs of Islamic banks and financial institutions in terms of monitoring and regulating accounting and auditing practices among IFIs. Essentially, financial accounting and auditing issues addressed by AAOIFI helps provide relevant information through periodic reports regarding an entity's financial position, results of its operations, and cash flows to assist users in making appropriate decisions. More profoundly, AAOIFI also states that the financial reporting of Islamic banks is different from the conventional banks, where the former must comply with the principles and rules of the *shariah* in all their financial dealings. In addition, the function of Islamic banks is significantly different from those of traditional banks that have adopted the Western model of banking. Likewise, the relationship between Islamic banks and their investors or depositors is different from the relationship of those who deal with traditional banks.

In view of these differences, more research or studies in the area of accounting and auditing are needed to capture the impacts of the compliance of Islamic beliefs on the operations of Islamic financial institutions within the Islamic framework or *shariah* principles. Auditing in the Islamic framework has a wider scope compared to traditional auditing. In the contemporary practice, auditors are directly responsible only to their clients, who are the owners of the business being audited. In particular, these auditors are not guided by any religious principles, and the quality of managerial decisions are none of their concern. Therefore, auditors are merely responsible to give their opinions on whether a company's financial statement has been prepared in accordance with the relevant accounting and auditing standards or not. In light of the Islamic teachings, the role of auditors would embrace a different approach and objectives to uphold the *shariah* principles. Thus, discussion on the role of auditors in the auditing of Islamic financial institutions would entail analysis of issues of *shariah* audit and *shariah* compliance and factors affecting auditors' performance and judgment process, especially involving a group of external auditors and internal auditors.

To elaborate factors affecting judgment in decision-making and audit performance, it is important to understand the definition and issues of *shariah* auditing itself. Specifically, *shariah audit* is defined as an audit for the attestation for *shariah* compliance. Occasionally, the term *shariah audit* is used interchangeably with the term *shariah compliance (review audit)*. According to Alwi (2007), the AAOIFI's Governance standard No 2 (GSIFI 2) provides a vivid interpretation of *Shariah* audit as defined in Para 3, GSIFI 2 AAOIFI Standards as follows:

*“Shariah review or audit is an examination of the extent of and IFI's compliance, in all its activities, with the shariah. This examination includes contracts, agreements, policies, products, transactions, memorandum and articles of association, financial statements, reports (especially internal audit and central bank inspection), circular, etc.”*

On the other hand, from the Malaysian perspective, *shariah* auditing is defined based on the *Shariah Governance Framework for Islamic Financial Institutions* (2010) - (SGF, 2010), which was issued by Central Bank Malaysia (BNM), as follows;

*“Shariah audit refers to the periodical assessment conducted from time to time, to provide an independent assessment and objective assurance designed to add value and improve the degree of compliance in relation to the IFI’s business operations, with the main objective of ensuring a sound and effective internal control system for Shariah compliance”.*

*Section IV, Principle 7 (ii); 7.7*

In the Malaysian context, *shariah* auditing and *shariah* review are unambiguously spelt out in a set of guidelines in SGF (2010) issued by BNM on 20 May 2010. This set of guideline stipulates that the internal auditors from the internal audit department should conduct *shariah* auditing, and the internal auditors should be competent in the *shariah* knowledge and understanding of the *shariah* issues related to Islamic banking products and operations. On the other hand, Part IV, Division 3, Section 37 (1) of IFSA’s act (2013) states that IFIs are required to appoint any person to carry out audit on *shariah* compliance by the institutions. However, this act does not specifically spell out the responsible group who must perform the audit on *shariah* compliance. Thus, it is unclear whether the responsibility for such an undertaking falls onto a *shariah* officer, an internal auditor, or an external auditor. Furthermore, the same act does not clearly explain the competency requirements of the person who is responsible to conduct such an audit on *shariah* compliance.

Being a relatively new financial perspective, many questions arise that have to be answered accordingly. ‘How comprehensively we should define *shariah* audit?’, ‘what is the scope of *shariah* audit?’, ‘who are qualified to perform the task?’, and ‘what are the factors affecting internal auditor’s *shariah* audit performance and their judgment process?’ are some of the typical questions that may have a huge impact on *shariah*

audit. These questions are to be expected as the practices and understanding of *shariah* auditing, principles, and factors influencing auditors' performance are not fully matured yet at this moment.

Given the complex issues of *shariah* auditing, examination and understanding of *shariah* auditing as well as factors affecting internal auditors' performance and judgment process while performing *shariah* auditing is vital. In this respect, Abdul Rahman (2008) highlights the need for the establishment of a comprehensive *shariah* audit program, which consists of a manual based document that clearly spells out step-by-step *shariah* audit procedures, policies, and processes when offering Islamic financial services. The audit program should also take into consideration the standard operating procedures, which include accounting (e.g., MASB and AAOIFI), regulatory requirements (BNM), and other requirements. This idea is supported by Haneef (1997) who highlights the urgent need for the Islamic economics, banking, and finance and as well as accounting and auditing to have their own particular framework and criteria due to the differences in epistemology frameworks between Islamic thoughts and conventional thoughts.

To address the above needs, this research was carried out to study the factors that may affect the *shariah* auditing judgment in decision-making process and performance, namely spirituality, ethics, types of knowledge, and levels and types of *shariah* auditing and internal audit task complexity. Despite extensive research in the West on factors affecting auditors' judgment in the decision-making process, such research in *shariah* audit or methods on how they conduct the audit process on Islamic banking services remains scarce.

In light of this scarcity, this study attempts to fill this gap by providing new insights into *shariah* auditing process, which requires a different approach that can affect the judgment in decision-making done by auditors as well as *shariah* auditing performance. Conventionally, judgment in decision-making requires a researcher to use a psychological lens to understand, evaluate, and improve judgment, decisions, or choices in an auditing setting (Nelson, Tan, and Trotman, 2005). Auditors, being either external or internal, are always required to exercise their judgment and reasoning intelligently when performing auditing process and evaluating audit findings. For example, they need to judge whether the financial statements, which they have audited, are based on a sound, fair financial view. They must also decide whether to give reasonable assurance reports pertaining to the efficiency and effectiveness of a company's internal control. The audit process entails judgments about the amount and type of evidence to collect, the extent to which such evidence is credible, and the actions that should be taken in response to the evidence that has been collected and evaluated (Ashton and Ashton, 1995). Judgment and decision-making process is largely influenced by certain factors such as level of knowledge, competency level, experience, environment, and motivations.

According to Solomon and Trotman (2003), judgment refers to subjective assessments made as a prelude to taking action; on the other hand, decision refers to actions that people take to perform tasks or to solve problems. In contrast, Bonner (1999) defines judgment as mental activities of forming an idea, an opinion, or an estimate about an object, an event, or a phenomenon by which these mental activities influence an individual to predict the outcome of such an object, an event, or a phenomenon. Subsequently, after making such a judgment, the decision activities would then follow that involve making a choice among variables and predictions based on

such a choice (Bonner, 1999). In essence, Bonner (1999) contends that decision activities refers to the process by which an individual makes up his or her mind regarding a prevailing issue and takes an appropriate course of action resulting from his or her prior judgment. For example, an auditing judgment may involve auditors to judge matters like the competency of the client's management, the materiality level of financial statement, and the effectiveness of the client's internal control. In turn, the auditors must decide how to gain knowledge pertaining to the veracity of each element of the financial statement, the amount and type of evidence to gather, and ultimately the report that needs to be issued (Solomon and Trotman, 2003).

Exercising judgment is a common practice in many critical, professional domains, such as law, medicine, and accounting (Boritz, Gaber, and Lemon, 1987 as cited in Ramamoorti, 1995). Studying factors affecting judgment is a complex endeavor as it involves a myriad of interrelated factors. To date, a number of behavioral studies have been devoted to examine the nature of professional judgment, expert novice cognition, heuristics and biases in decision making, decision strategies, acquisition of knowledge, effects of memory, effects of environmental and motivational factors, and effects of experience (Abdolmohammadi and Wright, 1987; Ashton, 1984; Bonner and Lewis, 1990; Smith and Kida, 1991; Libby and Luft, 1993; Nelson, Libby, and Bonner, 1995; Tan and Kao, 1999). From the accounting and auditing standpoint, the nature and level of a particular profession requires a greater accountability for professional judgment. Thus, exercising professional judgment demands clear explanations and justifications. In this regard, (Simon, 1977 as cited in Ramamoorti, 1995) experts are compelled to disclose how they have drawn their conclusions, what reasoning have they employed, and what evidence they have relied on.

Given this imperative, studying internal auditors' judgment in decision-making and its impact on *shariah* auditing performance is important. Such an undertaking is challenging because investigating *shariah* auditing judgment itself requires different approaches and understanding, as it needs to include factors such as spirituality, knowledge requirements, abilities, and task complexity toward *shariah* auditing performance. More importantly, *shariah* auditing requires internal auditors to judge whether the processes and outcomes of a *shariah* audit comply with the Islamic principles, which have a far-reaching implication beyond the usual attestation that the internal control of the Islamic financial institutions is adequately safeguarded and protected.

## 1.2 Objectives of the Study and Research Questions

Discussions in this sub-topic consist of:



**Figure 1.2 : Objectives and Research Questions**

### 1.2.1 Objectives of the Study

In this study, three main objectives were framed to guide the research. The first objective of this study is to identify and discuss the current practices and perceptions of internal auditors regarding *shariah* auditing issues, especially after the issuance of *Shariah Governance Framework* for IFIs by BNM in terms of the scope, objectives,



types and level of knowledge, competency of internal auditors, and factors that might influence internal auditors' judgment performance.

Given the distinctive concepts and features of an Islamic audit, the second objective of this study is to investigate factors, especially those derived from JDM research that may affect internal auditors' *shariah* auditing performance based on their judgment and decision-making process. The determinants or factors in this study are spirituality, task complexity, knowledge, and ethics.

The third objective of this study is to investigate the moderating effects of determinants such as task complexity, knowledge, and ethics on the relationship between spirituality and *shariah* audit judgement performance. The researcher hypothesized that the spirituality level of internal auditors would directly affect *shariah* auditing judgement performance.

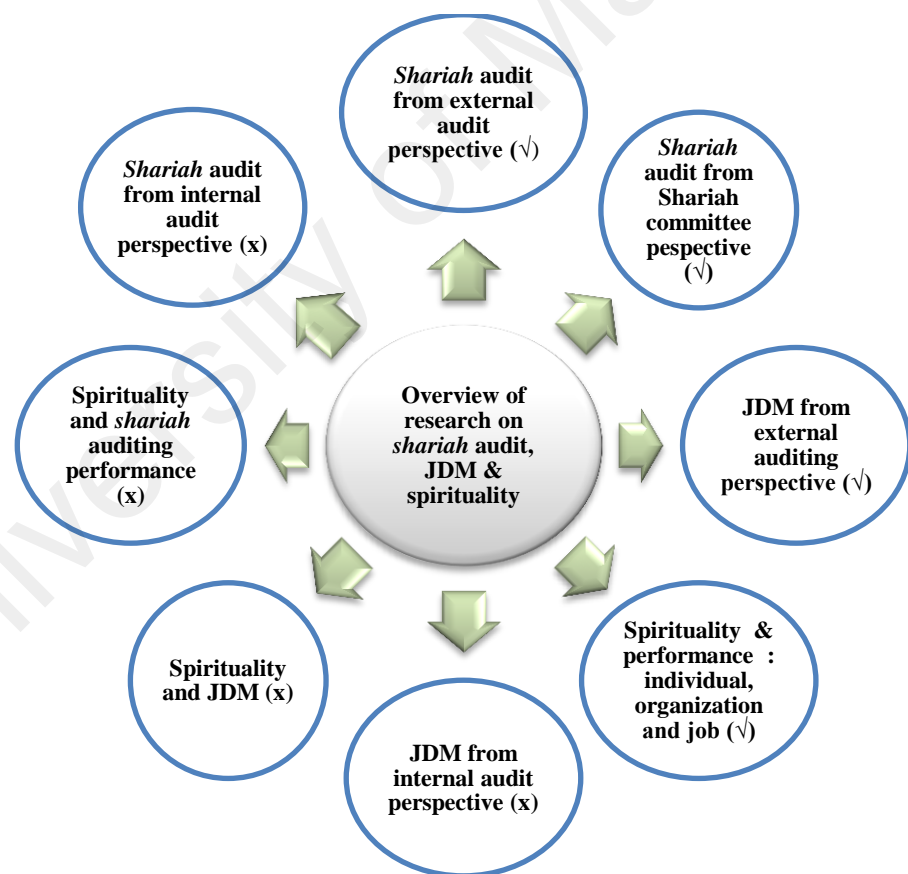
The understanding of the relationship between spirituality and *shariah* auditing judgement performance is important because the former would greatly influence *shariah* auditing judgement performance. Such an influence hinges on the nature of *shariah* auditing that requires different objectives and approaches. These different approaches are needed to cater to the Islamic worldview that aspires the attainment of *Maqasid al-shariah* and *shariah* knowledge, and to scrutinize the impact of Islamic transactions that are deemed *shariah* non-compliant. From the Islamic perspective, according to Imam Ghazali in his book *Ihya Ulumuddin*, spirituality or *ruhaniyyah* will create *iman*, or belief towards the religion. *Ruh*, being a primordial soul created by Allah (SWT) in every human, is always in constant search for the *truth* and attempts to connect with the *One* who created it. Hence, as pointed out by Hawa (2004), Islamic spirituality is capable of producing impeccable Muslims who would worship Allah and

serve their society with kindness and benevolence. In view of this impact, spirituality has become an important factor that is being given serious attention in business, management, mental health, and psychology studies. Spirituality has also become the focus of many studies in the West where a growing number of articles and academic papers have been published that highlight the role of spirituality in enhancing leadership, satisfaction, commitment, and performance of an individual in an organizational setting. The findings of these studies suggest that these factors would significantly influence an individual and organizational performance (see Ashmos and Duchon, 2000; Krishnakumar and Neck, 2002; Kolodinsky, Giacalone, and Jurkiewicz, 2008; Rulindo and Mardhatillah, 2008; Usman and Danish, 2010; Beekun and Westerman, 2012; Petchsawang and Duchon, 2012; Beheshtifar and Zare, 2013 and etc.). To emphasize the importance of spirituality, Ali (2005) asserts that “*Spiritual and mental needs strengthen the quest for perfection and actualization of one’s potential in serving the community and organization, while pursuing his/her activities*”. Thus, spiritual people, who have positive, upright minds, are predisposed to perform good deeds, which lead to achieving satisfaction and self-actualization.

Based on the highlighted factors, the objectives of this study are to critically analyze the literature by focusing on;

- 1) the knowledge requirements’ of internal auditors to perform *shariah* auditing in Islamic Financial Institutions (IFIs) in Malaysia;
- 2) the impact of spirituality on judgment and performance of internal auditors in carrying *shariah* auditing in Islamic Financial Institutions (IFIs);
- 3) the impact of the moderating factors (i.e., task complexity, knowledge and professional ethics) on the relationship between spirituality and *shariah* auditing performance.

In summation, issues surrounding *shariah* auditing are beginning to emerge in the literature, emphasizing the emerging importance of Islamic finance in the world. Being a relatively new financial construct, several criticisms and controversies are inevitable due to the lack of empirical evidence that deals with the real practices of *shariah* auditing among internal auditors in IFIs. Particularly, factors affecting *shariah* auditing judgment performance need to be explored to further understand the dynamics of Islamic finance. Based on this setting, this study explores existing issues and challenges to gain an in-depth knowledge regarding current *shariah* auditing practices, especially those experienced by the internal auditors themselves. Figure 1-3 illustrates the elements of the research, which highlight existing gaps that entail further investigation.



**Figure 1.3 : Research Gap**

### 1.2.1 Research Questions

Three research questions were formulated to address the three research objectives.

These research questions are as follows:

1. What is the kind of knowledge that internal auditors need in order to perform *shariah* audit in Islamic financial institutions (IFIs) in Malaysia?
2. Does spirituality affect judgement performance of internal auditors in Islamic financial Institutions (IFIs) in Malaysia?
3. Do different levels of task complexity, knowledge, and ethics moderate the relationship between spirituality and *shariah* auditing performance?

<b>Research Objective (RO) - 1</b>	<b>TO EXAMINE THE KNOWLEDGE REQUIREMENTS' OF INTERNAL AUDITORS TO PERFORM SHARIAH AUDIT IN ISLAMIC FINANCIAL INSTITUTIONS (IFIs) IN MALAYSIA</b>
<b>Research Questions (RQ) - 1</b>	What kind of knowledge is needed by internal auditors in order to perform <i>shariah</i> audit in Islamic Financial Institutions (IFIs) in Malaysia.
<b>Research Objective (RO) - 2</b>	<b>TO EXAMINE THE IMPACT OF SPIRITUALITY ON INTERNAL AUDITORS' SHARIAH AUDIT JUDGEMENT PERFORMANCE</b>
<b>Research Questions (RQ) - 2</b>	Does spirituality affect internal auditors' <i>shariah</i> audit judgement performance?
<b>Research Objective (RO) - 3</b>	<b>TO EXAMINE THE MODERATING EFFECTS OF TASK COMPLEXITY, KNOWLEDGE AND PROFESSIONAL ETHICS ON THE RELATIONSHIP BETWEEN SPIRITUALITY AND INTERNAL AUDITORS' SHARIAH AUDIT JUDGEMENT PERFORMANCE.</b>
<b>Research Questions (RQ) - 3</b>	Do task complexity, knowledge and professional ethics moderate the relationship between spirituality and internal auditors' <i>shariah</i> audit judgement performance?

### 1.3 Motivation of the study

Discussions in this sub-topic are presented in the following diagram:

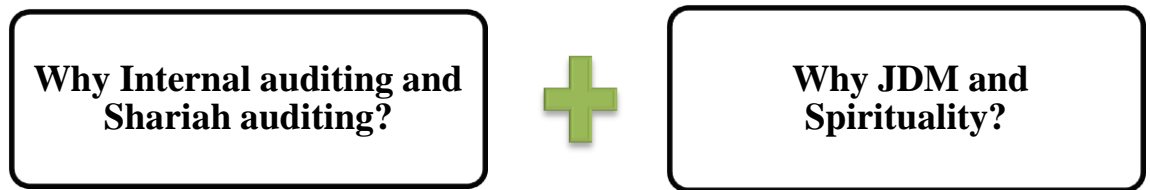


Figure 1.4: Motivations of the Study

#### 1.3.3 Why internal auditing and *shariah* auditing?

Internal auditing is becoming increasingly important in business organizations, such as banking and finance, manufacturing, insurance, health industries, among others. Previously, internal auditing was mainly (and still is) concerned with compliance; but, of late, it is focusing more on value-added function. This shift of focus is best exemplified by the definition of internal auditing issued by the Institute of Internal Auditor (IIA) as follows:

*“Internal auditing is more concerned to give independent, objective assurance and consulting activity which is designed to add value and improve an organization’s operation. It helps an organization accomplish its objectives by bringing a systematic discipline approach to evaluate and improve the effectiveness of risk management, control and governance”.*

(International Professional Practices Framework (IPPF), p.2 , IIA - 1999)

Furthermore, the complexity of financial institutions’ roles, activities, and operations to operate profitably has spurred a significant interest in the internal audit functional role. To reinforce the importance of the internal audit function within financial

institutions, the Guidelines on Minimum Audit Standard for internal auditor of financial institutions emphatically states that

*“A financial institution’s role has become more complex and with the continuing pressure to operate profitably, the industry has adopted innovative business approaches. This includes the management of complex assets and liabilities, search for additional sources of income, reaction to technological advances, response to changes in regulatory policy, and competition for deposits and insurance premiums have all added to the risks and complexities of the businesses of the financial institutions. As a result, the innovation and complexity of the industry’s pursuit of profitable activities create a constantly changing body of business and economic risks. These factors, together with the rapid pace of expansion in branch network, the increasing sophistication of operations and the centralization of operations at the head office or regional processing centers, call for a more dynamic rather than static audit process. Towards this end, internal auditors are expected to play a greater and more proactive role in carrying out management and compliance audits and to assist the financial institutions to achieve their objectives and goals. An effective internal audit function should serve as a resource to the management. The internal auditors should not only assess the soundness and adequacy of internal controls but also determine whether the established policies and procedures are effective in practice. The internal auditors should be able to advise management on the adequacy and effectiveness of the policies and procedures in protecting the organization against the attendant new risks”.*

Guidelines on Minimum audit standard for Internal Auditor of Financial Institutions  
issued by BNM in p. 2 and p.3 (Rationale).

As stated in the previous paragraph, the “*Shariah Governance Framework for Islamic Financial Institutions*” issued by BNM on 20 May 2010 stipulates that *shariah* auditing should be conducted by the internal auditors from the internal audit department. These auditors should be competent in terms of *shariah* knowledge and understanding of the *shariah* issues related to Islamic banking products, services, and operations. Therefore, in accordance with BNM’s and IIA’s assertive directives, the

*shariah* auditing function, which needs to be performed by the internal auditors, can add value and improve an organization's operations through the establishment of sound, effective internal control to adhere to *shariah* principles and compliance. To achieve this aim, the internal auditors must possess adequate Islamic knowledge to dispense their duties professionally. Thus, studying the factors that may affect internal auditors' judgment should encompass their spiritual level, level of knowledge, task complexity, and ethics.

Determining the level and extent of internal auditors' knowledge and competency is challenging. Arguably, possessing IBF knowledge, *shariah* knowledge, and internal auditing knowledge may not be sufficient to determine their level of expertise. Apparently, their expertise would have to grow to cope with the increasing demand of Islamic finance, requiring some form of training. For example, the Institute of Internal Auditors (IIA) has conducted a series of studies in internal auditing practices, which is called *Common body of knowledge* (CBOK)<sup>1</sup>, to help enhance the profession for the future. These series of CBOK study have been conducted in 1972, 1992, 1999, 2006, 2010 and CBOK 2015. One of the main objectives of CBOK is to identify key knowledge and skills for internal auditors. According to CBOK (1996), a competent internal audit department must have the appropriate knowledge of the organization, auditing task, technical applications, management process, risk and control framework, and commercial viability. In particular, CBOK (1996) stresses that the required competency relies on strong relation between task performance and internal auditors'

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<sup>1</sup> CBOK is the world's largest ongoing study of the internal audit profession, consisting of two phases: the Practitioner Survey and the Stakeholder Survey. The first phase is led by The IIA Research Foundation (IIARF) and supported by IIA institutes and chapters around the world to include comprehensive studies of practitioners at all levels. The second phase is a global study consisting of audit stakeholder perspectives (senior management, audit committees, and boards) and will complement the findings of the practitioner study. The results of this combined research will provide a rich overview of how the profession is currently being practiced and changes that are anticipated in the future - Quoted from <https://na.theiia.org/iiarf/Pages/Common-Body-of-Knowledge-CBOK>.

attributes, such as their knowledge, skills, and attitudes. This imperative is also echoed by Moore (1970) (quoted in Hassall et al, 1996) who suggests that there are two primary bases for specialization: first, the substantial knowledge in field that specialists profess to command, and second their ability to apply that knowledge efficaciously. Likewise, as outlined in CBOK (1972) (Gobeil, 1972 cited in Abdolmohammadi, Burnaby, and Hass 2006, p. 812), there are three different levels of knowledge required in the subject matter as follows:

*“(1) Appreciation of the broad nature and fundamentals involved in, and an ability to recognize the existence of special features and problems in various business transactions, and determination of what further study or research must be undertaken under various conditions.*

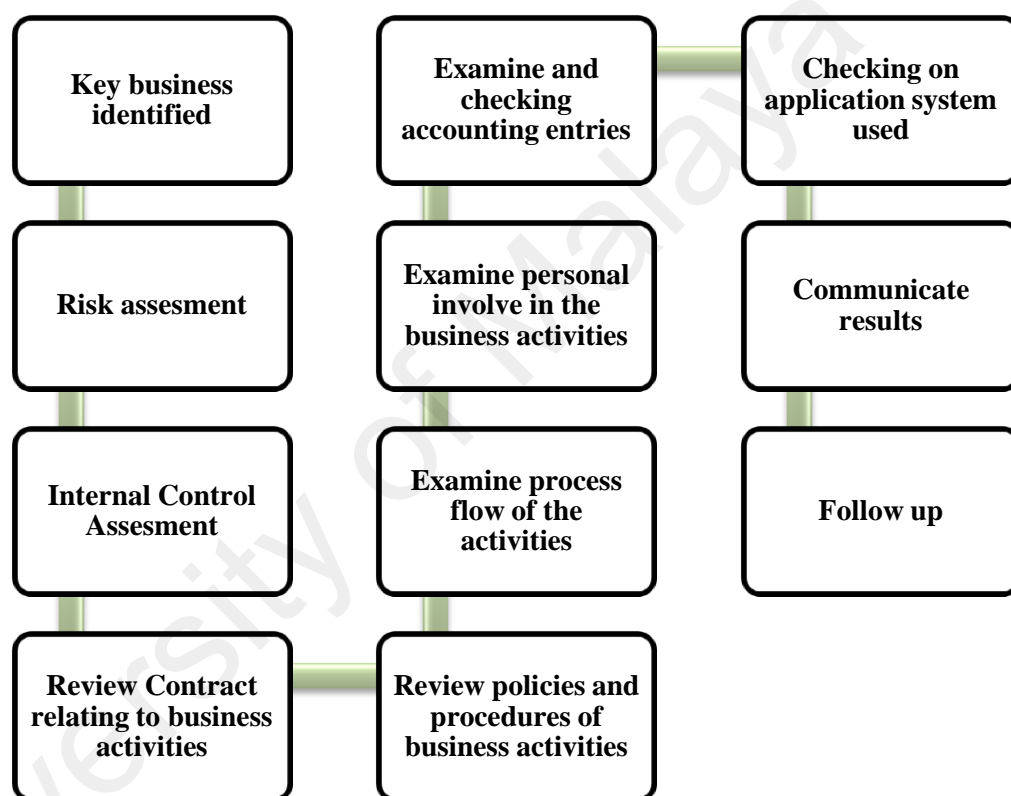
*(2) A sound appreciation of the broad aspects of practices and procedures and an awareness of the problems related to more detailed aspects thereof. It also included the ability to apply such broad knowledge to situations likely to be encountered, to recognize the more detailed aspects which must be considered, and to carry out research and studies necessary to come to a reasonable solution.*

*(3) A sound understanding of principles, practices and procedures and the ability to apply such knowledge to situations likely to be encountered to deal with all aspects without extensive recourse to technical research and assistance.”*

Therefore, examining task complexity based on the types of knowledge and competency as highlighted in CBOK studies is urgently needed. Definitely, the IBF, *shariah*, and internal auditing knowledge are important knowledge that internal auditors must have when carrying out *shariah* auditing process. More important, internal auditors are deemed competent in dispensing their duty only when they have a



repertoire of skills, knowledge, and understanding of a subject matter by which they can apply successfully in a range of contexts and organizations (Maclure and Norris, 1992 as cited in Hassall et al., 1996). In this study, an analysis of *shariah* internal auditing general practices as highlighted in previous studies (Alwi, 2007; Shafii et al., 2010; Yahya and Mahzan, 2012) and an interview were carried out comprises the following process:



**Figure 1.5 : *Shariah* Auditing Process in Internal Audit in IFIs**

External auditing has a long history in finance, serving as one of the effective mechanisms to provide assurance concerning the reliability of financial transactions and statements. As expected, there is an extensive literature regarding external auditing for public and private sectors. In fact, in the *shariah* auditing literature, discussion on external auditing mainly takes the perspective of external auditors and *shariah* committee. Likewise, this perspective has featured extensively in JDM research,

focussing only on external auditors' standpoint, not internal auditors' standpoint. Thus, existing gaps in the literature, which highlight a lack of focus on the latter's view, provide the researcher with the motivation to examine *shariah* auditing from the internal auditing perspective by integrating it with JDM research.

### **1.3.2 Why Study Judgment Decision Making and Spirituality?**

This study is mainly motivated by the lack of research on *shariah* auditing and factors affecting judgment decision-making performance in *shariah* auditing process in IFIs. To date, current discourse of *shariah* audit by internal auditors is limited in which its role, function, and implementation in IFIs has not been fully addressed. Moreover, research in the field of judgment decision making focusing on internal auditors' judgment in real practices is relatively new compared with the development of judgment decision making involving external auditors.

The lack of research in judgment decision making of internal auditors is evident from the evolution of "auditing school", which saw accounting research proliferating since 1970s. One of the earliest studies was conducted by Ashton (1974) who systematically examined the quality of auditors' judgment and reasons for the differences in the quality of auditors' internal control judgment. More specifically, his findings suggest two important aspects of judgment. First, auditors process relevant cues independently of the effects of other cues such as using configurable cue processing. Second, differences in the utilization of the six cues are related to the extent of inconsistency between auditors' judgment. Later, Ashton (1974) continued his research by exploring of the relevance of Brunswik's (1952) lens model and Libby's (1975) application of the lens model to investigate both predictability and stability of

loan officers' judgment. Since then, his findings have spurred the growth of research in other similar contexts (see Trotman, 1995).

For example, research in professional audit judgment by Ashton (1982) and Libby (1981) underscores the strong influence of human processing research in accounting, and subsequently in behavioral auditing, which is a research niche in interdisciplinary accounting research (see Ramamoorti, 1995). A case in point is Solomon and Trotman's (2003) review of experimental judgment and decision research in auditing, covering 25-year duration, as reported in *Accounting, Organization and Society (AOS)* identified that there were about 670 auditing papers published in five scholarly accounting journals in from 1976 to 2000.

JDM research, which focuses on understanding individuals' and group's judgments and decisions, has found that judgment and decision-making process greatly influences an individual's behavior (Trotman, Tan, and Ang, 2011). Therefore, analyzing JDM research in auditing would help researchers to evaluate the quality of judgments of auditors, preparers, and users of auditing reports; to understand how the judgments were made, to determine factors affecting these judgments; to develop and test theories of underlying cognitive processes; and to improve the judgments of auditors, preparers, and users of information (Trotman et al., 2011; Trotman, 1998). In addition, according to some studies, JDM research is considered as a sub field of behavior research (Ashton 2010); Libby and Luft, 1993) and human information processing (Libby and Luft, 1993). Emphatically, Trotman (1998) states that JDM research in auditing is a part of a larger area of psychological research called *Behavioral Decision Theory*. However, the behavioral dimensions of internal auditing have not been studied extensively as evident in the professional academic literature. On a positive note, nonetheless, a study conducted by Dittenhofer et al. (2010), which explored a behavior dimension in internal

auditing, could be considered as a significant movement in internal auditing research toward JDM study. Particularly, the objectives of Dittenhofer et al's (2010) study were to examine the behavioral dimensions of internal auditors that could help enhance understanding of interpersonal relations, communications, and other general behavioral aspects in the internal audit profession. Likewise, similar objectives were earmarked in the International Conference for Internal Auditor 2011, which was held in Kuala Lumpur, emphasizing researchers to conduct more research in behavioral study. In this conference, Gerrits Sarens<sup>2</sup>, who is an expert in internal auditing research, passionately argued for a new direction for internal auditing research by focusing on the process of judgment and decision making, and the behavior of the internal auditors in dealing with the managerial and organizational issues.

Unfortunately, such behavioral research pertaining to internal auditors in Islamic financial institutions is sadly lacking. Undertaking such an endeavor would certainly adopt a different approach and understanding as the nature of Islamic banking differs quite substantially from the conventional banking where the former places Islamic principles (*shariah* principles) as the guiding principle to govern its operations and activities. Naturally, the imperative of *shariah* principles would entail different standards and approaches in carrying out internal auditing in such institutions.

To help guide such auditing exercise, the *Shariah* Governance Framework – GPS 1 for Islamic Financial Institutions stipulates that internal auditors should conduct *shariah* audit periodically to provide an independent assessment and objective assurance designed to add value and improve the degree of compliance in relation to the IFIs'

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<sup>2</sup> Dr. Gerrit Sarens, is a Professor at the University Catholique De Louvain, Belgium was one of the speakers at the pre-conference session of 2011 International Conference of Internal Auditing held on 10th July 2011 at the Kuala Lumpur Convention Centre, Kuala Lumpur.

business operations, with the main objective of ensuring a sound, effective internal control system for *shariah* compliance.

Continuing efforts are also in traction to help understand Islamic *shariah* audit where several scholars have conducted a series of discourses on auditing based on the Islamic perspective. These scholars have strongly urged the needs to have credible empirical evidence to measure the competency and knowledge level of auditors in performing *shariah* auditing reliably as well as to determine factors that may affect auditors' judgment process. In fact, studies focusing on factors that may affect auditors' judgment process have been thus far wanting.

Arguably, in performing *shariah* audit, it is vital to determine whether current and conventional auditing concepts and practices can be adopted and how far, if any, the difference of concepts and practices can affect the performance of internal auditors' judgment. For these reasons, internal auditors should therefore need to be highly competent, enabling them to meet out sound judgment on transactions and internal control. With such sound judgment, the assurance for the adequacy and effectiveness of IFIs' internal control could be reliably established to reduce *shariah* non-compliant risks.

In addition, the scarcity of studies of spirituality being carried out in tandem with JDM research also needs to be appropriately addressed. Thus, the present study was carried out to investigate the spiritual aspects of internal auditors in performing their duties. From the human behavioral perspective, the investigation helped the researcher to analyze in depth the effects of spiritual factor on internal auditors' overall audit judgment performance. In particular, the differences in the internal auditors' levels of

spirituality, knowledge, task complexity, and ethics were examined in relation to audit judgment performance.

#### 1.4 Expected Contributions

Discussions in this sub-topic consist of:



**Figure 1.6 : Expected Contributions**

Undisputedly, Islamic finance will slowly, and surely, emerges to become one of the important components of the global financial industry. In recognition of this imminent emergence, more efforts are required to successfully promote the concept of Islamic finance and to offer the true benefits and assurance of Islamic finance practices to the market. To achieve such aims, a firm understanding of what constitutes the practice of *shariah* audit is desperately needed prior to implementing appropriate measures in relevant areas of finance, the consequence of which would enhance the confidence of the IFIs' stakeholders.

Hence, the main objective of the study is to determine factors affecting internal auditors' judgment performance in *shariah* internal auditing process as practiced in Malaysian IFIs. Understanding these factors would highlight the critical role of the internal auditors in providing reliable assurance and consulting activities for risk management and internal control over key systems and business processes, making

them robust and effective (IPPF, IIA). As highlighted previously, internal auditors are also responsible to safeguard *shariah* principles through adequate controls on *shariah* audit. Furthermore, it is important to study the current practices of *shariah* auditing among IFIs in light of the issuance of the *Shariah* Governance Framework - SGF (2010) by the Central Bank of Malaysia (BNM), which stipulates several important elements requiring greater emphasis. The following are the contributions expected from the present study.

#### **1.4.1 The Perspectives of Islamic Banking and Finance Industry**

There is no doubt that Islamic finance industry will continue to be an important component in the global financial industry. Recent statistics issued by Central Bank Malaysia in the Financial Sector Blue print (2011-2020) show that the Islamic finance value added to gross domestic product (GDP) has advanced by an average rate of 32% per annum, contributing a 2.1% share to Malaysia's GDP in 2009 compared to only 0.3% in 2000. This has also translated into greater job opportunities where employment in Islamic banking and finance sector contributed 11% of the total employment in the financial sector. To make further progress, it is important to develop appropriate financial knowledge and expertise that would help IFIs promote the concept of Islamic finance and to provide the true benefits and assurance of Islamic finance practices to the market. With regard to *shariah* audit issue, a survey by PwC Malaysia, which appears in *Shariah* Audit: Industry's Insight (2011), indicates that a key pillar of the *shariah* governance framework (SGF) is the *shariah* audit due to its vital role in providing public assurance on the governance of *shariah* products and services. The finding of survey also reinforces the need to expand the talent pool of *shariah* auditors to enhance the comprehensiveness of *shariah* audit coverage and to improve *shariah* audit

methodologies, including risk management. Clearly, issues pertaining to *shariah* compliance and audit are clearly a major challenge faced by IFIs and the regulators.

Thus, exploring the factors that affect internal auditors' audit judgment performance, both theoretically and empirically, would have a significant impact on the understanding of the *shariah* audit process on the business operation control, risk management control, governance control, and *shariah* compliance controls by the IFIs. More importantly, the audit process entails judgment about the amount and type of evidence to collect, the extent of such evidence that is deemed credible, and the actions that should be taken based on such evidence (Ashton and Ashton, 1995). In view of these needs, this present study helped investigate the current practice of *shariah* auditing and factors affecting *shariah* auditing performance, namely spirituality, task complexity, knowledge and ethics. With more offerings for *shariah* compliance Islamic banking products and operations, this present study also helped examine the financial integrity of Islamic internal auditing process in particular and the credibility of Islamic banking institutions in general.

In addition, the aim of this study is to investigate whether intrinsic motivations, such as spirituality and ethics, would lead to better audit judgment performance. Thus, the study helped measure the level of spirituality, competency, and proficiency of internal auditors in conducting *shariah* auditing process empirically. Results from this study would benefit the financial industry in determining the adequacy and competency of their internal auditors in terms of knowledge, skills, and intrinsic motivation, which has a tremendous impact on *shariah* auditing practices. With this information and knowledge, IFIs would be in a better position to carry out appropriate training and enhancement programs to ensure their employees would uphold relevant *shariah* principles and to promote working environments that are *shariah*-compliant. Therefore,



a study on factors affecting *shariah* auditing judgment performance should be carried out by researchers so that the knowledge gained would assist IFIs to remain significant in the banking and finance industry

#### **1.4.2 The Perspectives of Regulators, Standards Setters, Education and Training Affiliates**

Inevitably, standard setters and regulatory bodies, such as Malaysian Institute of Accountant (MIA), Institute of Internal Auditor (IIA), and Central Bank of Malaysia (BNM), need to continually improve and update their regulatory and control policies and directives as the financial landscape is continually undergoing many changes. Such continual improvements would involve establishing relevant, general standards and performing audit programs with regard to *shariah* audit. Before undertaking these improvement efforts, a clear understanding of the concepts, principles, objectives, and approaches of *shariah* audit is necessary. More specifically, common *shariah* auditing practices and underlying principles need to be examined of which the knowledge accrued would help facilitate the creation of effective *shariah* auditing and *shariah* compliance among IFIs.

In addition, the aim of the present study is to assist standard setters, regulatory bodies, and education and training affiliates in conducting appropriate enhancement programs for internal auditors and Islamic banking players. In particular, in these programs, the participants would be able to effectively learn the certification requirements, which subsequently would help them conduct *shariah* audit more effectively. Thus, gaining relevant, up-to-date knowledge, skills, and competency – important elements highlighted in the Financial Sector Blue Print (2011-2020) report – is highly critical in dealing with the challenges of Islamic finance. Likewise, this report

also highlights similar emphasis on greater collaboration and coordination among relevant agencies, regulators, government, and academia to help develop comprehensive programs that would help the creation of a pool of quality talents to serve the financial industry.

In this regard, according to a report published by Malaysian International Islamic Finance (MIFC), Malaysia has taken the initiative to promote greater advancement of the global Islamic financial industry. For example, through the Central Bank of Malaysia (BNM), this Malaysian initiative involved an allocation of budget in the form of endowment fund amounting more than 200 million ringgits to enhance the knowledge, research, talent, and intellectual discourse in the field of *Shariah* and Islamic finance. Therefore, this study would be able to help the industry to identify the levels and types of knowledge, skills, and competency that every practitioner, in particular the internal auditor, must possess. Furthermore, the findings of the study would help create an appropriate benchmark by which the design and development of relevant academic and training programs can be carried out successfully. With such programs, internal auditors of IFIs would be armed with the relevant knowledge and skills to adhere to and apply appropriate auditing standards and procedures, which are in congruent with Islamic legal maxims and *Usul Fiqh* relating to Islamic banking products and operations.

#### **1.4.3 For Academia and Literature Perspectives**

Dittenhofer et al. (2010) assert in their study that the most important elements in the internal auditing behavioral dimension are integrity and credibility. Internal auditors need to have both elements to carry out their responsibilities professionally, thus adding value to their organizations in terms of reputation, effectiveness, efficiency, and

compliance with the prevailing laws and regulations, policies, and procedures. In addition, Dittenhofer et al. (2010) also emphasize that for internal auditors to be acknowledged as credible, the latter must possess sound, relevant knowledge, trust, and ethical conduct. To date, there has been a dearth of studies focusing on the behavior of IFIs' internal auditors. Clearly, to understand such behavioral trait would require a study that needs to adopt a significantly different approach, as opposed to the conventional one.

In view of the lack of such studies, this study also attempts to fill existing gaps in current behavioral internal auditing research, *shariah* auditing research, JDM research, and Islamic banking research, the findings of which would provide insights into *shariah* auditing practices (as seen from the internal auditing perspective) as well as judgment decision-making activities. Furthermore, currently no study has been devoted to address issues of spirituality and its effects on the performance of JDM. Certainly, such studies would help practitioners and researchers to understand the finer nuances of Islamic spirituality, in contrast to conventional wisdom, that may influence performance from the JDM perspective.

Although extensive research on spirituality and performance has been carried out, not a single study has existed that adequately covers spirituality performance in JDM research based on the judgment performance framework using spirituality determinant. In today's challenging realm, spirituality determinant is becoming an important affective construct related to individuals' motivation to achieve better performance in their lives. In the real life, spirituality is actually the expressed feeling of one's accountability toward another human and his or her surroundings. In other words, spirituality is the feeling of connectedness with others (Ashmos and Duchon 2000). Thus, the findings would further enrich the current literature of JDM concerning

spirituality and Islamic internal auditing, in particular, and Islamic banking and finance, in general.

### **1.5 Overview of Research Methodology – Embedded Design**

Empirical data for the present study were mainly derived from a primary source, namely from the experimental groups. This approach is necessary to obtain reliable data concerning the behavior of a specific group of professionals, who are experts in the Islamic banking and finance. Thus, a field experiment was conducted to explore the nature and dynamics of *shariah* internal auditing process. This type of experiment is appropriate in which the researcher assigns subjects randomly into a controlled setting that actually represents a particular phenomenon (e.g., individual or social process), manipulates that phenomenon actively, and then makes various observations (measurements) of or related to the phenomenon (Solomon and Trotman, 2003). In addition, the experimental research method allows the researcher to control alternative explanations of results through random assignment of the respondents to treatments, establish a factorial design and hold factors constant (Bonner, 1999), allow the researcher to remove confounding factors, and test the effects of the condition that does not exist in practice (Trotman, 1998).

Essentially, there are three main objectives of the present study. The first objective is to investigate the current practice, types and level of knowledge, and competency level of internal auditors of IFIs in conducting *shariah* auditing. For the first objective, the researcher conducted 15 in-depth interviews with relevant parties that are involved in *shariah* auditing practices, such as the internal auditors, *shariah* committee, and regulators. The main purpose of this method is to gain a general understanding of *shariah* auditing and *shariah* compliance among the IFIs' internal auditors in terms of

the scope, objectives and framework, governing process, competency as well as the challenges and limitations of *shariah* auditing practices.

The second and third objectives of this study is to examine the impact of spirituality on judgement performance of internal auditors in carrying out *shariah* audit in IFIs and the moderating effects of critical determinants (e.g., task complexity, knowledge, and ethics) on the relationship between spirituality and *shariah* auditing judgement performance. More importantly, as highlighted in JDM research in accounting and auditing, focusing on these determinants is critical toward understanding their influences on auditors' judgment in *shariah* auditing process.

The literature is also replete with studies focusing on knowledge and memory. This type of research is important to help practitioners and researchers to understand the acquisition of knowledge, the storing of knowledge in memory, and the implications of knowledge on performance (Abdolmohammadi and Wright, 1987; Bonner and Lewis, 1990; Bonner and Pennington, 1991; Bonner and Walker, 1994; Bonner, Libby, and Nelson, 1996; Choo, 1996; Nelson et al., 1995; Ricchiute, 1984; Tan and Libby, 1997; Tan and Kao, 1999).

Investigating the causes and effects of spirituality level and moderating variables (e.g., knowledge and types of task complexity) based on survey and archival data is not fully reliable. Thus, this study used an experiment to elicit relevant data with greater reliability. In essence, an experiment enables researchers to investigate the real emotional state (or spirituality) of internal auditors and other important factors (e.g., knowledge, task complexity, and ethics) that may have an impact on *shariah* auditing performance within a controlled environment. Therefore, in this study, the researcher

carried out a series of interviews and an experiment to address the objectives of the present study.

## **1.6 Organizations of Chapter**

The discussions for the remaining chapters are outlined as follows:

**CHAPTER 2** – This chapter provides a review of previous studies of *shariah* auditing and judgment decision making, which are two important and interesting strands in finance research. The first strand relates to the issues in auditing, *shariah* auditing, and judgment decision making research. The second strand focuses on the related variables, namely spirituality, task complexity, knowledge, and ethics in the study. This part discusses the relationship of this study's subject matter; *shariah* auditing, JDM and the other variables.

**CHAPTER 3** – This chapter provides a discussion on the theoretical framework in spirituality research and judgment decision-making research. In particular, this chapter provides a detailed discourse on relevant factors of performance (i.e., task complexity, knowledge, and ethics) – which are treated as moderator variables – and their relations with spirituality. In this chapter, Social Cognitive Theory (SCT) is also discussed in light of the possible significant relation among spirituality and factors affecting judgment performance. Finally, the chapter discusses the development of five research hypotheses and the conceptual framework adopted in the study.

**CHAPTER 4** – The discussion of this chapter centers on the appropriate method of data collection and the research instrument used in measuring relevant variables based on sound principles and protocols. The highlight of this chapter revolves around an

embedded approach used by the researcher by integrating both quantitative and qualitative data.

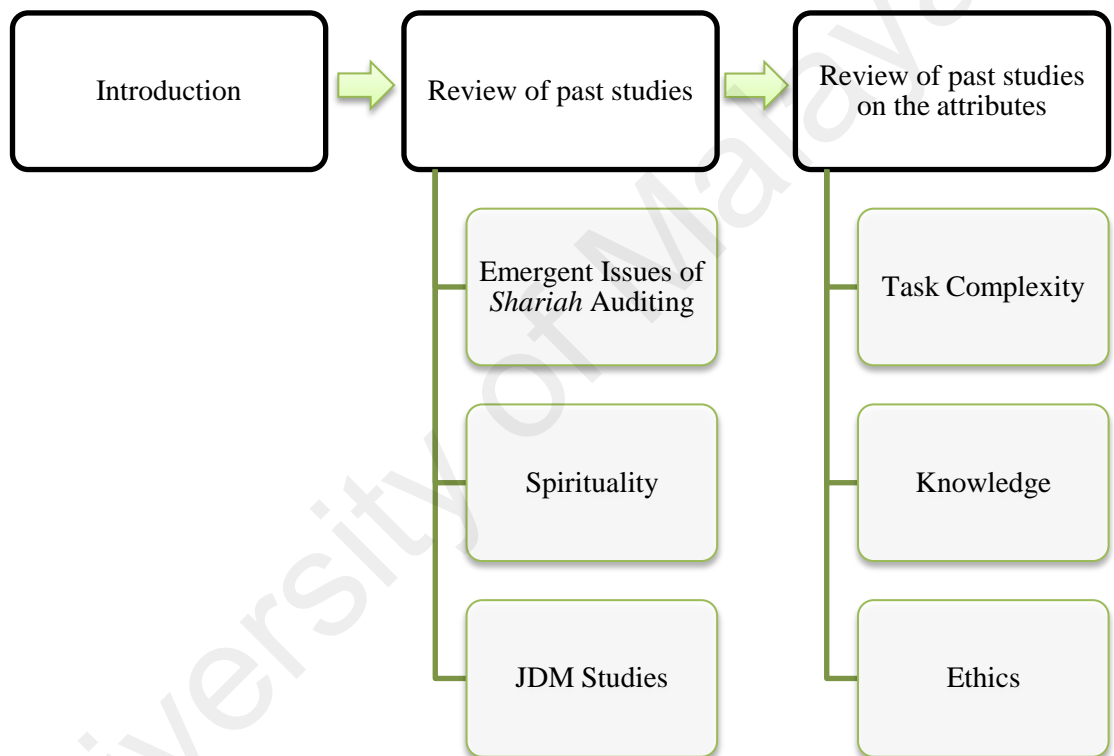
**CHAPTER 5** – This chapter consists of two parts to discuss the research findings based on the qualitative and quantitative data. The first part reports the results of the qualitative study derived from the interviews with the chief internal auditor (CIA), *Shariah* committee members, practitioners, and scholars. The first part of the chapter reports the qualitative analysis of the perceptions of the above individuals regarding *shariah* auditing practices, spirituality, and determinants of performance elicited from the interviews. The second part of this chapter reports the quantitative analysis of the empirical data of spirituality and moderator variables. In addition, analyses of the associations among all of the variables and regression analysis of these factors are also appropriately discussed.

**CHAPTER 6** – This chapter provides detailed discussions and conclusion based on the research findings reported in Chapter 5. In addition, detailed accounts of the contributions, limitations of the current study as well as suggestions for future research are also discussed in this chapter.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

The focus of this study centers on *shariah* auditing practices and its distinctive objective, spirituality, and judgement decision making related to *shariah* auditing judgement performance. Figure 2.1 summarizes the above factors that the researcher reviewed as part of this present study.



**Figure 2.1 : Factors reviewed in the study**

The literature review for this study is divided into two parts. The first part of the review concentrates on the *shariah* auditing background, objective, issues, scope, role of auditors, and its distinctive objectives of *shariah* auditing (in contrast to the conventional one), definition of spirituality, and the background and issues of judgement decision making (JDM) research. The second part of the review explores the



issues of attributes (i.e., task complexity, knowledge, and ethics) related to judgment performance. To date, the discussion on *shariah* auditing is mainly limited to the perspectives of external auditors and *shariah* committee. In other words, research devoted to the subject of JDM and internal auditing is almost non-existent. Nonetheless, several scholars have suggested a new focus of research that deals specifically with Islamic audit based on the internal auditors' perspective. The imperative for such research is made more compelling due to the implementation of SGF (2010), which recommends IFIs and *takaful* industry to engage internal auditors or the voluntary external *shariah* auditors to audit financial statements. Such an internal audit would help establish whether these entities' operations are in line with *shariah* compliance or otherwise. In this regard, the role of *shariah* committee is vital to provide a credible, reliable audit. Given this important role, the discussion of the review is heavily centered on the perspectives of internal auditors and *shariah* committee.

## **2.2 Review of Previous Studies**

This section provides a series of review discussing on emergent issues of *shariah* auditing, spirituality, and judgment decision-making (JDM). The discussions of these subsections are as follows:

### **2.2.1 Emergent Issues of *Shariah* Auditing**

#### **2.2.1.1 Definition and Regulatory Requirements of *Shariah* Auditing Practices**

Realizing the importance of *shariah* principles in Islamic finance and banking, in 2005, Bank Negara Malaysia (BNM) issued *Garis Panduan Syariah 1* (GPS-1), which contains a guideline for the establishment of the governance of *shariah* committee. Specifically, this guideline stipulates that all IFIs in Malaysia are required to comply with all the requirements as outlined in the guidelines. In particular, one of the salient

requirements is that all IFIs must establish a *shariah* committee to ensure that their business operations are in line with the *shariah* rules. Later, a new regulation called Islamic Financial Services Act, 2013 (IFSA, 2013) was issued by the government of Malaysia to address new developments in the Islamic banking.

This act clearly prescribes the importance of *shariah* compliance in all IFIs operations and business. In essence, the main objective of IFSA, as stipulated in Section 6, is to promote financial stability through compliance with *shariah* precepts. To steer the direction toward this aim, IFIs' operations, business, affairs, and activities must be aligned with the *shariah* principle as stipulated in Section 28 (1) of IFSA (2013). Later developments of *shariah* auditing witnessed *Shariah Governance Framework for Islamic Financial Institutions* (issued by the BNM on 20 May 2010) superseding the *Shariah Governance Framework for Islamic Financial Institutions* (2005). The former framework comprises three main organs, namely the board, management, and *shariah* committee. These three organs are closely interdependent to help ensure IFIs would be able to provide *shariah*-compliant services at all times. Essentially, these organs are supported by three functions, namely *shariah risk management control*, *shariah review*, and *shariah audit* functions. The *shariah* risk management control function helps identify all possible risks of *shariah* non-compliance and, where appropriate, suggests remedial measures to manage the risks. The *shariah* review function helps assess and monitor *shariah* compliance of all activities and operations on a continual basis. The *shariah* audit function helps perform annual audits to provide independent assessments of the adequacy and compliance of IFIs with established policies and procedures. Particularly, this function would assist in gauging the adequacy of the internal control of IFIs using relevant *shariah* governance mechanisms. Table 2.1 summarizes the definitions of the three organs based on the SGF (2010) guideline.

**Table 2.1: Definition of *Shariah* Review, Audit, and Risk Management based on SGF (2010)**

<p><b><u>Shariah Review :</u></b></p> <p>refers to regular assessment on <i>Shariah</i> compliance in the activities and operations of the IFI by qualified <i>Shariah</i> officer(s)<sup>12</sup>, with the objective of ensuring that the activities and operations carried out by the IFI do not contravene with the <i>Shariah</i></p> <p align="right"><i>Section IV, Principle 7 (i); 7.3</i></p>
<p><b><u>Shariah Audit :</u></b></p> <p>refers to the periodical assessment conducted from time to time, to provide an independent assessment and objective assurance designed to add value and improve the degree of compliance in relation to the IFI's business operations, with the main objective of ensuring a sound and effective internal control system for <i>Shariah</i> compliance.</p> <p align="right"><i>Section IV, Principle 7 (ii); 7.7</i></p>
<p><b><u>Shariah Risk Management :</u></b></p> <p>refers to systematically identify, measure, monitor and control of <i>Shariah</i> non-compliance risks to mitigate any possible of non-compliance events. The systematic approach of managing <i>Shariah</i> non-compliance risks will enable the IFI to continue its operations and activities effectively without exposing the IFI to unacceptable levels of risk</p> <p align="right"><i>Section IV, Principle 7 (iii); 7.15</i></p>

Under Section VI (*Shariah* Compliance and Research Function), Principle 7, the objective of *shariah* review function is to ensure that activities and operations carried out by the IFIs covering IFI's overall business operations, including end-to-end product development process from the pre-product approval to post-product approval process, do not contravene with *shariah*. The pre-product approval process refers to the process of product structuring prior to the introduction of product to the market, while post-product approval process refers to the product offering process. Then, qualified *shariah* officers, who normally have relevant academic background in *shariah* such as *Usul Al-fiqh* (the origin of Islamic Law) and *Fiqh Muamalat* (Islamic transaction), shall perform

the *shariah* review function. In conducting the *shariah* review process, these officers need to adhere to the guideline as follows:

- (i) To planning the review program encompassing the objectives, scope, reporting, rectification, and follow-up actions;
- (ii) To document the processes involved in the review;
- (iii) To communicate the outcome of the review and to highlight any non-compliance to the *shariah* committee and management;
- (iv) To rectify any instances of non-compliance with the *shariah* so as to prevent such events from recurring.

Following the review function, internal auditors of the IFIs, who are well-trained and knowledgeable in *shariah*, will then perform the *shariah* audit function. The main objective of the *shariah* audit function is to establish a sound, effective internal control system for *shariah*-compliant auditing that can be conducted periodically.

The same guideline also outlines the scope and the process of (but not limited to) *shariah* audit as follows:

a) Scope of *shariah* audit

The *shariah* audit shall cover all aspects of IFIs' business operations and activities including;

- i. Financial audit
- ii. Compliance audit of the organizational structure, people, and information technology applications system
- iii. Review of adequacy of *shariah* governance process

b) Shariah Audit Process

The *shariah* audit process will involve performing activities as follows:

- i. Identifying an appropriate scope for auditing exercises, such as auditability and relevance, by understanding the business activities;
- ii. Developing a comprehensive internal audit program or plan, which should encompass the objectives, scope, personnel assignment, sampling, control and duration as well as establishing proper audit processes, policies, and procedures of IFIs' operations;
- iii. Obtaining and referring to relevant sources, including published SAC's rulings, *shariah* committee's decisions, fatwas, guidelines, *shariah* audit results, and internal *shariah* checklist;
- iv. Conducting *shariah* audit on a periodical basis;
- v. Communicating the results of *shariah* audit to the *shariah* committee and the board audit committee;
- vi. Providing recommendations and rectification measures to be followed up by IFIs.

To spur the growth of Islamic finance, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) plays an important role in guiding *shariah* audit. AAOIFI, through its Auditing Standard for Islamic financial institutions (ASIFI), has established a series of standards and guidelines with the main objective of enabling external auditors to express their opinions as to whether IFIs' financial statements have been prepared in accordance with *shariah* rules and principles based on AAOIFI standards and other relevant national accounting standards. Essentially, the ASIFI has five chapters dedicated to guiding IFIs in carrying out Islamic audit.

The titles of these chapters (starting from the first to the last) are *Objective and Principles of Auditing*, *The Auditor's Report*, *Terms of Audit Engagement*, *Shariah Supervisory Board: Appointment, Composition and Report*, and *Shariah Review*. In addition, AAOIFI has also established *Governance Standard for Islamic Financial*

*Institutions* (GSIFI), of which its GSIFI No 2: *Shariah* Review and GSIFI No 3 : Internal *Shariah* Review discusses the issues of *shariah*. According to Alwi (2007), the AAOIFI's Governance standard No 2 (GSIFI 2) provides the most reflective interpretation of *shariah* audit as defined in Para 3, GSIFI 2 in AAOIFI Standards as follows:

*“Shariah review or audit is an examination of the extent of and IFI's compliance, in all its activities, with the shariah. This examination includes contracts, agreements, policies, products, transactions, memorandum and articles of association, financial statements, reports (especially internal audit and central bank inspection), circular, etc.”*

More importantly, the GSIFI No. 2 stipulates that the *shariah* review procedures need to include planning, executing, documenting, and reporting. The external auditors are the responsible group to conduct *shariah* review of the IFIs. As such, according to AAOIFI, coordination and close working relationship among external auditors, *shariah* committee, and audit committee is essential to ensure the effectiveness of *shariah* review. In addition, according to GSIFI No 2, external auditors need to have a sound understanding of IFIs' operations and *fatwas* (*shariah* edicts), resolutions, rulings, and guidelines. The review procedures should cover all activities, products, and locations of the IFIs.

Furthermore, external auditors are also responsible to conduct post *shariah* review procedures, such as reviewing the *shariah* review procedures, compliance of internal control procedures, and all parts of IFIs' operations, so as to establish whether adherence to the *shariah* principles is met or not. Finally, external auditors should document the review procedures and submit them to the *shariah* supervisory board for

the preparation of *Shariah* Supervisory Board Report or *Shariah* Committee Report, which would be presented to the shareholders. Hence, external auditors have to rely on the fatwas and rulings issued by *shariah* committee to help them ascertain whether IFIs' financial statements comply with all the *shariah* principles.

In AAOIFI GSIFI No. 3: Internal *Shariah* Review, the standard stipulates that the internal *shariah* departments of IFIs need to conduct *shariah* internal review. Their main responsibility is to ensure that the management of an IFI comply with the *shariah* principles. According to GSIFI No 3, the internal *shariah* review is to be carried out by an independent division, department, or part of the internal audit department. The IFI should ensure that the internal *shariah* reviewers should have no executive authority or responsibility for the activities that they are reviewing.

Furthermore, the internal *shariah* reviewers should have direct and regular communications with all levels of management, *shariah* committee, and external auditors. The same guideline recommends that the internal *shariah* review should be performed according to four vital stages: planning; documentation; examination; and evaluation of internal *shariah* review information, reporting, and follow up. In addition, the guideline also emphasizes the competency and proficiency of *shariah* internal reviewers in discharging their duties by recommending appropriate training in accounting, auditing and *shariah* principles.

Interestingly, the guidelines and standards of SGF (issued by BNM) and GSIFI (issued by AAOIFI) pertaining to *shariah* auditing and review practices have similarities and differences between them. Their similarities lie with the objectives of *shariah* auditing of GSIFI No 3 and SGF, which are to ensure *shariah* compliance of all IFIs' activities, particularly their financial statements and other operational components,

and the internal *shariah* review function. However, the AAOIFI calls for external auditors to provide attestation and assurance of *shariah* compliance as opposed to SGF guidelines.

To date, there are no regulatory requirements for external auditors to undertake *shariah* audit at IFIs in Malaysia. Then, a number of different terms have been used to refer to auditing in Islamic institutions, thus clouding one's understanding of the subject matter. For example, in the literature, some researchers recognize *shariah* audit as religious audit or Islamic audit. Occasionally, these two terms have been used interchangeably. For this study, the researcher adopted the term *shariah audit* because it signifies the objective of *shariah* audit, which is to uphold *shariah* principles.

Further compounding the problem, many practitioners do not have a clear understanding of the roles of *shariah* audit function and *shariah* review function, and the appropriate groups that are responsible to conduct these functions. This lack of understanding is evident in the literature where the roles of *shariah* audit and review have been reported to be conducted only by *shariah* committee and external auditors. Nonetheless, several researchers have called for more efforts by IFIs to establish a dedicated unit, namely an internal review or audit department to conduct *shariah* audit and reviews.

Thus, a greater understanding of *shariah* audit is entailed before such efforts can be implemented effectively. To begin with, a proper definition of *shariah* audit is required, and the literature is quite replete with definitions of *shariah* audit, which to a certain extent have confused readers. For example, Abdul Rahman (2008b , p. 9) defines *shariah* audit as “*the accumulation and evaluation of evidence to determine and report on the degree of correspondence between information and established criteria for*



*shari'ah compliance purposes.*” On the other hand, Alwi (2007) and Shafii et al.(2010) assert that *shariah* audit is a process to check whether IFIs’ services, products, and procedures comply with *shariah* principles in all their business operation, particularly their financial statements and other operational components. The *shariah* auditing process should include the products, technology supporting operations, operational processes, the people involved in the key areas of risk, documentations and contracts, the policies and procedures, and other activities that require adherence to *shariah* principle – the elements of which are in line with the standards of GSIFI No 2 and 3 and SGF 2010.

Alternatively, Haniffa (2010, p. 1) provides a compelling definition of *shariah* auditing, which states that *shariah* audit is “*a systematic process of objectively obtaining and evaluating evidence regarding assertions about religious and socioeconomic actions and events, in order to ascertain the degree of correspondence between those assertions and the applicable financial reporting framework, including the criteria specified based on shariah principles as recommended by the Shariah Supervisory Board (SSB), and communicating the results to all interested parties*”. In essence, Haniffa’s (2010) definition highlights the importance of religious and social economics events practiced by IFIs that have to adhere to *shariah* principles as prescribed in the Islamic teaching.

#### **2.2.1.2 Shariah Audit and its distinctive worldviews**

The word “audit” comes from the Latin word “Audire”, which means ‘he hears’ (E, 1979). Initially, auditing only involved a stewardship function. Then, the role of auditing was elevated to informing the members of an entity whether its management has invested their capital as planned. To clarify such a role, Watts and Zimmerman

(1983) state that before the nineteenth century the shareholders may be directors as well as auditors. As such, managing directors would issue financial reports to other directors and shareholders, some of whom were elected to serve as auditors to reflect the managing directors' stewardship as agents of the company. These reports served as a means to provide assurance regarding the lack of fraud or defalcation. Similarly, Napier (1997) states that historically the role of auditing in a company was assumed by its directors, auditors, and shareholders, whom were collectively accountable for the company's financial integrity.

During the nineteenth century, limited liability companies began to emerge. Although there was a separation between ownership and management, it became increasingly evident that shareholders were unable to obtain a complete understanding of the economic conditions of the companies in which they had invested in (Napier, 1997). Later, the end of the nineteenth century also SAW a major increase in bankruptcy in Britain, leading to the development of the accounting profession (Napier, 1997 cited in Tricker, 1982). Since then, the role of auditors has been expanding in its scope, methodology, and the extent of their responsibility to meet the continually changing needs.

On the other hand, Funkhouser and Greeno (1984) define auditing as a methodical examination involving analyses, tests, and confirmation of local procedures and practices leading to a verification of their compliance with legal requirements, corporate policies, and accepted policies. Another similar definition is from Arens and Loebbecke (1998), who define auditing as the process by which a competent, independent person accumulates and evaluates evidence of quantifiable information related to a specific economic entity for the purpose of determining and reporting on the degree of the correspondence between the quantifiable information and established criteria. Similarly,

Quattrone (2004), as cited in Carmona and Ezzamel (2006), states that the accounting and auditing concepts are the product of needs for effective allocation of resources, internal control, and monitoring activities as well as to verify the honesty of persons charged with fiscal responsibilities.

Likewise, Ashton and Ashton (1995) contend that the auditing process is an independent review to provide attestation to the function performed by an independent party. In fact, Ramamoorti (2003) asserts that the demand for external and internal auditing is crucial because both involve independent verification to reduce record-keeping errors, asset misappropriations, and frauds within business operations. In fact, the American Accounting Association (AAA) Committee in Basic Auditing Concepts provides a clear definition of auditing as follows:

*“Auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users”*  
(Committee on Basic Auditing Concepts – COBAC, 1972:2).

In the late 1970s, auditing has seen a rise in demand for greater social and environmental responsibility, entailing social and environment accounting and auditing (Gray, Owen, and Adam ,1996). Literally, this type of auditing expects organizations to uphold social needs, instead of concentrating only on profit-making activities. In this regard, Johnson (2001) defines social audit as a standard process for identifying, measuring, and reporting the ethical, social, and environmental impacts on an organization. To become a vibrant business entity, organizations should strive in protecting their social and physical environments (Mirza and Baydoun, 1999). Hence,

the auditing process can be viewed as a process of investigating the compliance of certain entities with certain established criteria and reporting the ensuing outcomes to interested parties. In essence, according to Mautz and Sharaf (1961), the purpose of an audit is primarily to provide certain interested parties with an attestation of the reliability of certain information supplied by those entrusted property of others.

Undisputedly, there is extensive research highlighting the differences between Western and Islamic business environments. In light of these differences, particularly in their objectives and concepts or practices, many researchers strongly emphasize the need for a specific system of accounting and reporting for IFIs (Abdul Rahman, 2008b; Gambling and Karim, 1986; Karim, 1995; Mirza and Baydoun, 1999; Hameed, 2000; Tag El-Din, 2004). Such specific systems are needed because the current accounting and auditing concepts and frameworks are not appropriate for the Islamic banks and financial institutions (Alam, 1991; Adnan and Gaffikin, 1997; Adnan, 1996).

Further compounding the above problem, studies focusing on the subject of *shariah* auditing are not many. In addition, a majority of the studies are confined to conventional auditing related to external auditors, emphasizing more on the accuracy, relevance, veracity of financial assessments of the balance sheets, profit-and-loss accounts, and other information required to be disclosed in the financial accounts (Khan, 1985). Arguably, Abdelgader, Graham, and Cyril's (1994) study can be regarded as one of the pioneering studies of *shariah* audit in which they studied external audit and corporate governance in Islamic banks by looking into two different perspectives, namely the practitioners' and academic point of views. The report of their study contains a comprehensive chapter dealing with a discussion on Islamic accounting and auditing, which has been organized as follows:

- The independence of religious and external auditors in Islamic banks
- The expanded role of external auditors in Islamic banks
- The setting of financial accounting standards for Islamic banks.

Based on previous literature, Abdelgader et al. (1994) conclude that the process and development of accounting and auditing concepts and standards for Islamic banks are totally different from that developed and practiced by the Western bank. Particularly, Abdelgader et al. (1994) assert the pressing need for standard setters to develop an Islamic auditing framework by which appropriate guidelines can be designed that would assist external auditors in performing their auditing process.

Furthermore, from the Islamic perspective, auditing is not a new concept in the Islamic tradition. In fact, during the early part of the Islamic era, Muslims scholars' thoughts regarding accounting and auditing were recorded in the Islamic literature, highlighting their articulate discourses on the economic challenges of their times based on the Islamic perspective that is grounded on divine revelations (*Al-Quran*) and prophetic traditions (*As-Sunnah*). Their recorded writings are a testimony to the Islamic scholars' adherence to numerous calls by Allah (SWT) in the Holy Quran, emphasizing the importance of recording one's deeds and actions.

In fact, every deed and action undertaken by human beings is continuously recorded by Allah's (SWT) angels to the finest details, which will be accounted for in the Hereafter. Moreover, Allah's (SWT) also reminds all human beings to record all their transactions truthfully as evident in many verses in the Holy Quran, underscoring the process of recording actions and deeds in all transactions, including business dealings. For example, such imperative is emphasized by the verses as follows:

*“We shall set up justice scales for the Day of Judgment, not a soul will be dealt unjustly in the least. And if there be (no more than) the weight of mustard seed, we will bring it (to account) and enough are We to take account” (Al-Quran Chapter 21, verse 47) and*

*“O you who believe! When you deal with each other in transactions involving future obligations in a fixed period of time, reduce them to writing and let a scribe write down faithfully as between the parties” (Al-Quran Chapter 2, verse 282).*

During the era of Prophet Muhammad (SAW), his wife Siti Khadijah (RA) would attentively listen to the verbal accounts of her business from the holy prophet; in other words, she audited *Rasullah's* (SAW) transactions of her trading goods (Khan, 1985). More profoundly, the establishment of an institution called *Hisbah* in the time of the holy prophet was a watershed in the development of Islamic auditing. According to the *Al-Quran* verses 4:6 and 17:14, the term *Hisbah* means “to account”, “to compute”, or “to measure”. Thus, the *Hisbah* institution is responsible for appointing the right individuals to carry out the responsibility of enjoining people to do good and forbidding them to commit evil. The main purpose of the *Hisbah* institution was to safeguard the members of society from deviant behavior, protect their faith, and ensure their religious and worldly matters strictly follow the divine law. To carry out such duties, the holy prophet (SAW) appointed a group of supervisors known as ‘*muhtasib*’.

The role of *muhtasib* was to inspect whether the operations of the markets or bazaars were in compliance with the *shariah* principles (Mirakhor, 2000). In principle, the *muhtasib* was responsible for inspecting the weights and measures of trading goods to prevent cheating, and they had the right to check the notaries who wrote down contracts on behalf of the contracting parties and the deeds of the sale (Abdullah, 2010). Arguably, the functions of *Hisbah* through its *muhtasib* closely mirror the functions of

*shariah* audit. In essence, *Hisbah* was instituted to help regulate the society and economy to ensure full practices of the Islamic principles. Khan (1985) summarizes the role of *muhtasib* as follows:

- (a) To ensure the community as a whole have a proper organization and facilities to perform *ibadat*.
- (b) To be responsible in upholding *adl* (justice) so as to protect the society.
- (c) To address various municipal needs, such as establishing hygienic environments.

In addition, the role of *Hisbah* was to supervise ethical business and accounting practices in society (Gambling and Karim, 1993). Similarly, Abdul Rahman (2008a) affirms the significance of *Hisbah* in corporate accountability and governance. From a broader perspective, the role of *muhtasib* was to preserve the sanctity of the society by guiding its members to partake in economics activities as prescribed by the divine revelations. Hence, the role of *Hisbah* is similar to the role of *shariah* auditing where the latter's main aim is to ensure Islamic banking activities would benefit the society and to uphold the *shariah* principles so as to achieve *maqasid as-shariah*.

In view of the above imperative, research in the area of accounting and auditing is entailed to examine the impact of the compliance of Islamic beliefs on the operations of IFIs within the Islamic framework or *shariah* principles. In particular, this research would help address the incompatibility of many Western values and norms with Islamic practices (Hamid et al., 1993; Mirza and Baydoun, 1999; Childs, 2002). In contemporary practice, both external and internal auditors are directly responsible to their clients, which is the management of the organization being audited. In a strict sense, the auditors are not duty-bound to adhere to religious principles and concerned with the quality of managerial decisions.

More specifically, external auditors are mainly responsible to give their opinions on whether a company's financial statements have been prepared in accordance with the accounting and auditing standards. In contrast, internal auditors are mainly responsible to conduct audit to help an organization accomplish its objectives by bringing in a systematic, disciplined approach to evaluate and improve the effectiveness of the organization's risk management, control, and governance process (International Professional Practices Framework, 2011).

Hence, audit operating under the Islamic framework would have a wider scope than traditional auditing. For the former, the role of auditors would adopt several different approaches and objectives, such as upholding *shariah* principles, with the purpose to seek Allah's (SWT) blessings. By contrast, the role and practices of conventional auditors in IFIs are markedly different from their Islamic counterpart, which have been criticized by many Muslim scholars. For instance, Khan (1985) argues that the role of conventional auditors in the capitalist framework is merely to provide assurance and attestation of financial matters to the management and shareholders of a company. In stark contrast, the role of auditors in IFIs is to ensure all business transactions of a company are duly appraised based on the Islamic principles, thus ensuring the attainment and preservation of the company's reputation and the benefits accorded to the society. In this respect, Khan (1985, p. 31-32) provides a convincing explanation as follows:

*“The scope of auditing in Islamic framework is much larger as compared to the scope of traditional auditing. From the traditional concept of attest and authority it would expand to report on various social and economic aspects of business organization. This is due to the reason that auditing in Islam has been derived from the basic values of Islamic societies and shariah principles”.*



Therefore, with the establishment of the Islamic economic and Islamic financial systems, the function of auditors and *shariah* experts need to be revised to suit the requirements of such systems (Al-Abiji, 1998; Karim, 1990; Khan, 1985). In this respect, Al-Abiji (1998) states that the dimensions of the role of auditors would change in accordance with the economic, political, and social changes that are taking place. Furthermore, Hood and Bucheery (1999) regard *shariah* auditors are “religious auditors”, arguing that this type of auditors would be guided by their religious beliefs as prescribed in the Quran, Sunnah, and *Ijma'*, the emphasis of which would overrides that of legal rules and professional code of ethics.

On the other hand, Karim (1990) differentiates the roles of *shariah* auditors and external auditors, asserting that the role of the latter is to focus on the compliance of accounting regulations of a company to ensure its financial reports are accurately prepared and presented. On the other hand, the role of the former is to focus on the adherence to Islamic precepts of a company's business dealings. The same researcher further argues that moral values and economic factors would heavily influence *shariah* auditors' and external auditors' thinking and judgment, respectively.

In addition, Briston and El-Ashker (1986) state that the functions of *shariah* auditors encompass three main areas, namely to provide advice, to check actual religious performance, and to report to the management of the *Zakah Fund*. Furthermore, *shariah* auditors also play an important role in advising the board of directors of a company regarding its operations to ensure they are in conformity with the *shariah* principles. For example, the process of investigating and monitoring the *shariah* compliance of the top management and all financial transactions would help assure the company's integrity. Lastly, another task of *shariah* auditors is to ensure that *zakah* is properly calculated and disbursed to the *asnaf* (the lawfully right recipients).

Further discussion on the role of auditors is provided by Abdallah (1994), who identifies a *shariah* auditor as part of a committee known as the *Shariah* Supervisory Board (SSB). He highlights that the role and duties of SSB is to perform *ex-ante* and *ex-post shariah* audit. Specifically, the SSB is responsible to monitor transactions in terms of designing contract agreements and forms, and later to check the actual operations of the transactions. This responsibility is evident from the main functions of the SBB listed by Abdallah (1994) as follows:

- (a) To draft and approve (in collaboration with other concerned departments and officials) model contracts and agreements to govern and regulate all banks' activities and dealings.
- (b) To update and improve the developed models to conform to *shariah* principles, rules, and spirits.
- (c) To provide advice and instructions to the management of the banks.
- (d) To inspect the banks' operations, examine the necessary documents, and summon any official of the bank when carrying out the above duties.
- (e) To present, whenever necessary, reports to the general manager and the board of directors.
- (f) To submit to the shareholders an annual report containing, among other things, the SSB's opinions on the compliance of the banks' operations with *shariah* precepts.

However, according to Abdallah (1994) and Abdul Rahman (2008a), not all the listed functions have been fully carried out in the *ex-post shariah* audit. In fact, SSB tends to audit random samples of the transactions and delegates these duties to the staff

of internal audit department of Islamic banks to perform the necessary ex-ante and ex-post *shariah* audit.

From the philosophical perspective (unlike conventional accounting and auditing), in Islam the focus is on serving God and the community rather than the individual demands – the former emphasizing social accountability and the latter stressing personal accountability (Baydoun and Willett, 2000). The main objective of western financial reporting, accounting, and auditing is to emphasize more on how to provide information only to investors and customers in making economics decision, and not to the company's employees or society. Clearly, such philosophical fissure is the result of the different Islamic and western worldviews or concepts. In this regard, Khan (1994) opines that the information requirements of an Islamic society are different from those of the capitalist society owing to different worldviews.

Al-Faruqi (1982) defines worldview as the way in which a person sees and explains the world and his or her environment. On the other hand, Chapra (1992) defines worldview as a set of implicit and explicit assumptions about the origin of the universe and the nature and purpose of human life. Likewise, Choudhury (1990) posits that worldview as a unified comprehension of the universe and all its sub systems. Therefore, based on the *shariah* perspective, the Islamic society will have its own unique worldview that shapes their behaviors and attitudes. In other words, a worldview as seen through the Islamic lens is not merely based on the mind's view of the physical world encompassing historical, social, political, and cultural dimensions, but it has a wider scope and concepts.

The Islamic worldview affirms that the universe is a testimony of the existence of God, and human beings as the *khalifah* or agents must live in this world in harmony

with other Allah's creations, striking a harmonized balance between the physical and spiritual dimensions. In contrast, the worldview of the West is rigidly entrenched in a physical dimension, which places a strong emphasis on materialistic gains and, to some extent, negates the existence of a supreme being. Al-Attas (1993) states the Islamic worldview encompasses both *al-dunya* (this World) and *al-akhirah* (the Hereafter) in which all worldly activities will be accounted for in the Hereafter. Eloquently, he explains the characteristics of the Islamic worldview as follows:

*“The Islamic worldview is characterized by an authenticity and a finality that points to what is ultimate and it projects a view of reality and truth that encompasses existence and life together in total perspective whose fundamental elements are permanently established. These are to mention the most salient one, the nature of God, the revelation (al-Quran), of his creation, of Man and the psychology of the human soul, of knowledge of religion, of freedom, of values and virtues of happiness – all of which together with the key terms and concepts that they unfold have profound bearing upon our ideas about change, development and progress”.*

On the other hand, the Western worldview or secular worldview considers human beings as creations that take the center stage, effectively removing any notions of accountability to God in every aspect of their actions and deeds. Put simply, according to the secular perspective, one's actions are deemed good, or bad, based on socially accepted materialistic and secular norms, which are devoid of divine aspects. Hameed (2000) considers Western worldview as a materialist worldview that harbors skepticism against the concept of life after death. Even if there is a semblance of divine beliefs in the Western thinking, spirituality is not a formidable factor to influence the dynamics of its economy or politics to great extent. This apathy toward religion in the West has been highlighted by Watt (1979) (cited in Hameed, 1999, p. 22) who claims that religion from western point of view is as follows:

*“Means a way of spending an hour or so on Sunday in practices which gives him some support and strength in dealing with the problems of daily life and which encourages him to be friendly towards other persons and to maintain the standards of sexual propriety, it has nothing to do with commerce or economics or politic or industrial relationship...or may even look upon religion as an opiate developed by exploiters of the common people in order to keep them in subjection”.*

In view of the differences between the Islamic and Western standpoints, it is important to investigate the judgment performance of internal auditors in *shariah* auditing process, which might be influenced by the objectives of *shariah* auditing, the Islamic worldview, and the role of internal auditors as *muhtasib* in upholding *shariah* principles to achieve *maqasid as-shariah*.

### **2.2.1.3 Needs of *Shariah* Auditing**

Of late, *shariah* auditing has become increasingly important in the Islamic banking practices. This importance may be attributed to the phenomenal growth of Islamic banking and finance, where the main responsibility of the IFIs is to adhere to *shariah* principles and rules in all of its activities. In addition, in *shariah* auditing, it is also important for IFIs to identify *shariah* non-compliant risks that can significantly compromise their financial and operational integrity (Sulaiman, 2011). Invariably, customers and depositors regard the Islamic banking practices of IFIs to be different from the conventional banking in many aspects. First, and most significant, is the elimination of *riba* (interest) in all of IFIs' financial transactions, which is the result of being *shariah*-compliant (Dusuki, 2007). Having attained such compliance would help IFIs to beef up their customers' confidence, thus making the former appears trustful and reliable in providing the required services to the latter. Hence, IFIs should seek means or approaches to achieve such attainment. One of the approaches that IFIs can use is by

providing assurance and attestation to their clientele that their financial operations are being carried out in accordance with the *shariah*. Such assurance and attestation can be accomplished by having IFIs to conduct *shariah* audit instead of conventional audit by which the former is based on the *shariah* principles (Haji Besar et al., 2009)

A particular defining feature of financial services of IFIs is the requirement of conveying to stakeholders their financial business is being conducted in conformity with *shariah* precepts (Grais and Pellegrini, 2006). Likewise, Abdul Rahman (2008a, 2008b) asserts that *shariah* compliance is the cornerstone of Islamic financial products and services, which carries many implications. Furthermore, IFIs have the moral and religious obligation to provide *shariah*-compliant products only, thus making their customers more confidence of their services. Failing to fulfil this obligation would seriously undermine their reputation as reliable institutions (Hasan, 2007).

Therefore, *shariah* audit is essential to increase the confidence of stakeholders by giving them the assurance of *shariah* compliance of IFIs activities (Abdul Rahman, 2008a). Furthermore, the implication of non-compliance with *shariah* principles may subject IFIs to similar risks as that of conventional banks, such as credit risk, market risk, operational risk, reputational risk, and fiduciary risk (Hasan, 2007 and Sulaiman, 2011). In addition, there are risks specific to Islamic banking, namely *shariah* non-compliant risks, which are not associated with conventional banking (Alwi, 2007; Sulaiman 2011).

Likewise, several scholars affirm that *shariah* audit is one of the key pillars to uphold good corporate governance in IFIs (Hasan, 2007; Idris, 2011; PwC.com.my, 2011). For instance, in the PwC's report (2011), the researchers propose that *shariah* audit is to be consisted of three-level approaches: (i) the audit of IFI's financial statements, (ii) the

compliance audit of organization, process, and people, and (iii) the review on the adequacy of *shariah* governance. In applying these approaches, internal auditors could play the role of ensuring the effectiveness of *shariah* governance framework within IFIs. Furthermore, Iqbal and Mirakhor (2008) argue that *shariah* audit would enable IFIs to establish sound *shariah* corporate governance by providing the right formulation of principles and enforcement. Similarly, Shafii, Abidin, Salleh, Kamaruzaman, and Nawal, (2013) underscore the importance of *shariah* audit in instituting good *shariah* governance by which the role of *shariah* audit is to ensure sound and effective internal control for *shariah* compliance in all aspect of business activities and operations.

#### **2.2.1.4 Past studies on *shariah* auditing**

As discussed earlier, research of *shariah* auditing from the internal auditors' perspective is very limited. However, research concerning *shariah* auditing practices and issues from the external auditor's and *shariah* committee's perspectives has been well established, revealing many interesting findings. For example, Abdallah (1994) highlights that most banks and financial institutions have not performed ex-post *shariah* audit from the perspective of *shariah* committee. According to him, ex-post *shariah* audit has been carried out on random samples of completed transactions to ensure that they conform to *shariah* rules and regulations. Similarly, Haji Besar et al. (2009) have raised the same issue as they observed *shariah* committee reports that had been prepared by respective banks' *shariah* committee lacked detailed information to establish the needed assurance. In fact, these reports were merely a general endorsement of the banks' *shariah* compliance without any emphasis on the actual operations or conduct of these banks.

Despite the above negative findings, promising results have begun to emerge suggesting a positive development in the Islamic finance and banking. For example, a relatively recent study by Shafii *et. al* (2013) indicates that there is a significant impact on IFIs by the establishment of the *shariah* audit and the strong emphasis of the role of the *shariah* committee. Their finding reveals that the *shariah* audit function can add further value to the role of the *shariah* committee, particularly the knowledge of the implementation of product process and internal control. In addition, this function facilitates the *shariah* committee members to identify possible *shariah* breach of contracts (if any) prior to and after the implementation of the product process. Therefore, the role of *shariah* committee is greatly enhanced in terms of their involvement in the actual operational and business conduct of IFIs.

In a study conducted by Abdelgader et al. (1994), they found that in Islamic banks there were two groups of auditors who had different reports on financial statements but carried the same responsibility in ensuring the Islamic banks comply with the *shariah* principles. Essentially, the groups consisted of external auditors and a religious auditor, who were appointed by the shareholders, to give assurance on the reliability of financial statements and operations of the Islamic banks. However, Abdelgader et al. (1994) caution that the ability of the external auditors to determine the compliance of IFIs' business activities with *shariah* principles lies squarely with their religious knowledge.

In addition, Abdelgader et al. (1994) have also raised another issue concerning the competency of SSB in conducting such audit. Accordingly, they highlight a number of important aspects that auditors need to deal with, namely liability of auditors to investors, assessment of management practices, social audit, and religious audit (which is to provide assurance on the Islamic banks operations that are in line with the *shariah* principles. Likewise, a study by Abdul Rahman (2008a) reinforces the importance of



*shariah* auditing in IFIs where he strongly asserts that *shariah* audit is needed to complement *shariah* governance mechanism that has been introduced by BNM. In essence, *Shariah* audit can act as a “check and balance” mechanism to help evaluate the sufficiency, or deficiency, of the present *shariah* governance mechanism.

In addition, Abdul Rahman (2008a) provides a useful discussion on the challenges, issues, and limitations in the implementation of *shariah* auditing from the perspective shared by the *shariah* committee, external auditors, and internal auditors. In particular, he emphasizes the need to have a structured *shariah* auditing framework that would guide all concerned in carrying out such audit. Having such a framework would help IFIs in recognizing and designing appropriate *shariah* auditing protocols, programs, and procedures as well as prerequisite requirements (i.e., qualifications and certifications) of those who are required to undertake *shariah* audit process.

Similarly, a study by Kasim, Hameed and Sulaiman (2009) provides insights into the current practice of *shariah* auditing. More precisely, their study examined the gap between the “desired” (expected) practice and the “actual” (current) practice of *shariah* auditing in Malaysian IFIs by focusing on four (4) important issues, namely theoretical framework, scope, qualification, and independence issues. Their findings indicated that there was a gap between the “desired” and “actual” practices of *shariah* auditing. In addition, they found that both the external and internal auditors’ competency was questionable due to the latter’s lack of expertise in *shariah*, accounting, and auditing. Furthermore, Kasim et. al. (2009) contend that the current practice of *shariah* auditing has a minimal impact on Malaysian IFIs due to the lack of *shariah* auditing framework, suggesting that existing practices of *shariah* auditing are highly unstructured.

Later, the above issue was taken by Yahya and Mahzan (2012), who found that a majority of internal auditors preferred to have a standardized framework of *shariah* audit. With such a framework, general guidelines can be developed to guide these auditors to perform their tasks more efficaciously. Furthermore, the same researchers found that *shariah* audit was exclusively carried out in IFIs that offered Islamic banking products. In contrast to Kasim et. al.'s findings (2009), Yahya and Mahzan (2012) found that most of internal auditors of IFIs understood the definition, scope, and requirement of *shariah* audit as stipulated by SGF (2010).

More importantly, Shafii et al.'s (2010) have proposed a framework for *shariah* compliance audit to be adopted by IFIs in Malaysia. This framework can serve as a guidance for auditors (i.e., *shariah* auditors, internal or external auditors) to conduct audit on the financial statements before deciding whether IFIs' transactions have complied with *shariah* requirements. The application of such a framework can help IFIs mitigate any non-compliant risks. According to Shafii et al. (2010), improper control of operational risk may lead to other types of risks, such as credit risk, management risk, investment risk, and market risk. The proposed framework encompasses four stages namely (i) preliminary requirement on the Islamic principles general rulings (ii) regulatory requirement, (iii) audit and assurance stage, and (iv) report on compliance audit. In addition, Shafii. *et al.* (2010) implore IFIs to establish and design a well-structured *shariah* audit program to train internal and external auditors so that they would be able to ascertain IFIs' operations that are in accordance with the Islamic principles based on such framework. Furthermore, the same researchers underscore the needs for external auditors to understand *shariah* internal control of the IFIs as part of their audit process. Armed with this understanding, IFIs would be able to improve the effectiveness of their operations and safeguard their resources.

To summarize, the review of existing literature and current state of affairs in *shariah* auditing highlights a host of unresolved issues, such as an inadequate understanding of auditing process, unclear roles of auditors, and a lack of proper *shariah* auditing frameworks. Tackling these issues would not only entail closer examination on existing conventional practices, principles, and frameworks, but also on other factors related to Islamic precepts, worldview, and principles. This focus of research presents a challenging undertaking as *shariah* auditing is more thorough than the conventional one (Kasim et al. 2009). Furthermore, *shariah* auditing is not pedantic, but it is holistic, encompassing all related aspects, such as the system, products, employees, environment and society (Alwi, 2007). Clearly, a study to address these concerns would highlight new insights into the understanding of *shariah* auditing in terms of the nuances between the Islamic and Western perspectives, which would engender different philosophies, roles of auditors, and conceptual frameworks.

### **2.2.2 Spirituality**

This subsection provides a discussion on spirituality from the conventional and Islamic perspectives as follows:

#### **2.2.2.1 Definition of Spirituality from the Conventional Perspectives**

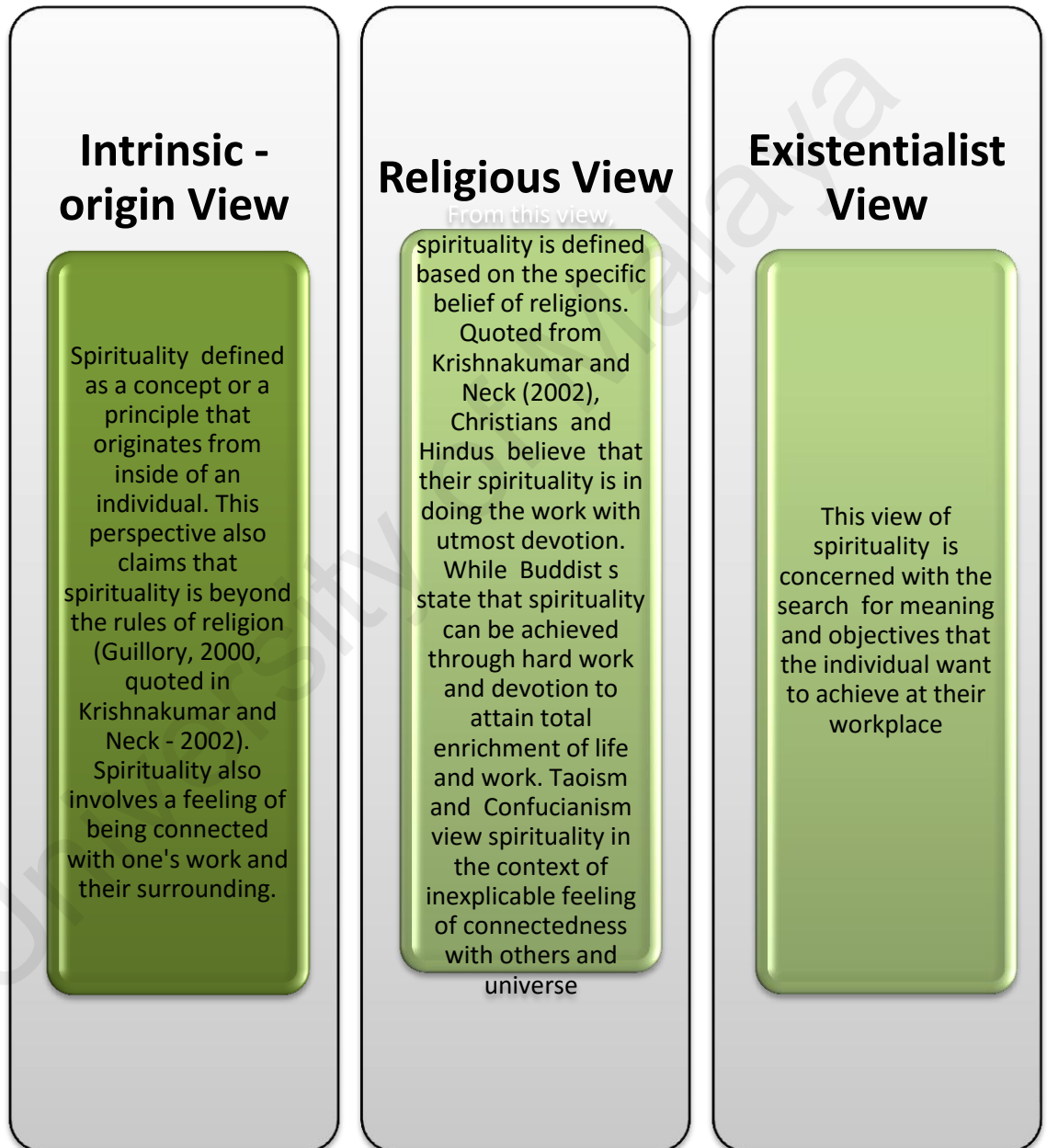
In recent times, spirituality has become a central theme in studies involving psychology, business management, organizational performance, job satisfaction, workplace performance, and work attitudes (Ashmos and Duchon, 2000; Emmons, 1999; Karakas, 2010; Milliman, Czaplewski, and Ferguson, 2003; Mohamed, Wisnieski, Askar, and Syed, 2004; Kolodinsky, Giacalone, and Jurkiewicz, 2008). For example, the discussion on spirituality delves into the individuals' personal spiritual

experiences toward their behaviours and the impact of the dimensions of workplace spirituality on individual work attitudes and behaviours (Milliman et al., 2003).

In the literature, various definitions and perspectives of spirituality have been introduced, which according to Karakas (2010), involving more than 70 definitions of spirituality related to the workplace. In essence, spirituality is a construct that is both personal and philosophical. A majority of scholars agree that spirituality involves a sense of wholeness, connectedness with others, and deeper values (Gibbons, 2000). Likewise, Wheat (1991) posits spirituality as the personal valuing, experiencing, or expressing of a larger context in an individual's life, the awareness of and connection to life and other living things, and the compassion for others. In a similar vein, Smith and Rayment (2008) state that spirituality is a state or an experience that can provide individuals with direction or meaning, or provide feelings of understanding, and support inner wholeness or connectedness. Connectedness, according to Gibbon (2000), is defined as people having a relationship with themselves, other people, nature, the universe, God or some other supernatural powers. This same view is shared by Cavanagh (1999), who defines spirituality as the search for a personal meaning and a relationship to a supreme being.

Krishnakumar and Neck (2002) conducted a study examining the diverse definitions and perspectives of spirituality. In their study, they found there were three types of viewpoints, namely the *intrinsic-origin*, *religious*, and *existentialist* perspectives as summarized in Figure 2.2. In addition, the definition of spirituality proposed by Sawatzky, Ratner, and Chiu (2005) has some common attributes that are similar to Krishnakumar and Neck's (2002, p. 2-4) definition. Compellingly, Sawatzky et al. (2005) offer three views regarding spirituality. First, spirituality is regarded as a relationship to something beyond the physical, psychological, or social dimensions of

life. In other words, spirituality exists due to the relationship between human beings and the transcendent reality associated with divinity. Second, spirituality is viewed as an existential search for the meaning and purpose of life. Third, spirituality is considered as an individual's experience that may not necessarily be expressed through predetermined behaviour and practices.



**Figure 2.2 : Krishnakumar and Neck's Three Perspectives and Definitions of Spirituality**

Table 2.1 summarizes the various definitions of spirituality found in the related literature, particularly in management and psychology, reflecting the different conceptions of scholars. Clearly, this diversity of opinions need to be examined in depth so as to enhance the understanding of spirituality (Mohamed et al., 2004). Arguably, the difficulty of defining spirituality is attributed to its nature that is highly subjective, which is beyond categorization (Mohamed et al., 2004). Hence, the importance of studying spirituality lies not in determining the “best” definition of the term itself, but rather to understand the different perspectives of spirituality and their impact on individuals’ actions (Krishnakumar and Neck, 2002). Naturally, individuals’ spirituality would have an immense impact on their behaviors, thus affecting their organization and environment. (See Section 3.2, Chapter 3 for detailed discussion).

<b>Table 2.1 : A Sample of Definitions of Spirituality in the Management and Psychology Literature</b>	
<b>Wheat, 1991</b>	As the personal valuing, experiencing, or expressing of a larger context in which individual’s life, the awareness and connection to life and other living things and compassion for others.
<b>Neck and Milliman , 1994</b>	A process of individual’s quest to fulfil their potential for greater meaning and life purpose in their work, alongside a strong sense of community and need to contribute to betterment of society.
<b>Cavanagh, 1999</b>	As a search for a personal meaning and a relation to the Supreme Being.
<b>Mitroff and Denton, 1999</b>	The basic feeling of being connected with one’s complete self, others and the entire universe.
<b>Asmos and Duchon, 2000</b>	Spirituality is about people experiencing a sense of connectedness to one another and to their workplace community.
<b>Gibbons, 2000</b>	Involves a sense of wholeness, connectedness with others and deeper values
<b>Milliman, Chapplewski and Ferguson, 2003</b>	Effort to find one’s ultimate purpose of life, to develop a strong connection to co-workers and other people associated with work and to have consistency (or alignment) between one’s core beliefs and the values of their organization.
<b>Jurkiewicz and</b>	A framework of organizational values evidenced in the culture

<b>Giacalone, 2004</b>	that promote employees' experience of transcendence through work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy.
<b>Smith and Rayment, 2007</b>	Spirituality is a state or experience that can provide individuals with direction or meaning, or provide feelings of understanding, support, inner wholeness or connectedness. Spirituality enhances individual's inner motivation, existential quest and prescription.
<b>Kolodinsky, Giacalone and Jurkiewicz, 2008</b>	Workplace spirituality can be viewed as the incorporation of one's own spiritual ideas and values in the work setting
<b>Karakas, 2010</b>	Spirituality is an idiosyncratic, multifaceted, elusive concept and difficult to be captured in a common definition
<b>Usman and Danish 2010</b>	One of religious dogmas that intervene in all crucial aspects of work life.
<b>Beheshtifar and Zare, 2013</b>	Individual's desires to find meaning and purpose in their lives and is a process of living out one's set of deeply held personal values.
<b>P. Petchsawang and Duchon, 2008; P. Petchsawang and Duchon, 2012</b>	Having compassion towards others, experiencing a mindful inner consciousness in the pursuit of meaningful work that enables transcendence.

Clearly, the concept of spirituality is not based on a single facet, but rather it is based on multiple facets, reflecting a multi-dimensional construct that is internalized as one's own feelings and experience. In turn, these feelings and experience would affect his or her performance in the workplace and organization.

#### **2.2.2.2 Definition of Spirituality from the Islamic Perspective**

From the Islamic perspective, the term spirituality originates from the word "spirit" or *ruh* in Arabic. In Islam, *ruh* is the constituent principle created by Allah (SWT) in mankind, making a distinction between living things and dead, and it also relates to *ruhaniyyah* (Rulindo and Mardhatillah, 2008). According to Ya'kub (2000) (cited in Rulindo and Mardhatillah, 2008), *ruhaniyyah* is the state of someone realizing the presence of a relationship between him or her and Allah (SWT). For this study,

spirituality is considered as a process of seeking and establishing connections with the “Ultimate Being”, other fellow human beings, and the universe, which is deeply rooted in the Islamic belief.

Accordingly, Tsafe and Abdul Rahman (2014) state that spirituality can be maintained in human’s actions, and life should always be based on the teaching of religion. More profoundly, Imam Ghazali’s influential book called *Ihya Ulumuddin* (see Rulindo and Mardhatillah, 2008) provides a compelling account of spirituality or *ruhaniyyah* as an important principle that establishes one’s *iman* or belief in religion. Because ruh is an element bestowed by Allah (SWT) on humankind, it always searches for the “truth” and transcendence and attempts to connect with the “One” who has created it.

In this regard, Hawa (2004) posits that spirituality could not be manifested unless all rituals or *ibadah*, such as fasting, prayers, pilgrimage to Mecca (*haji*) and charity (*zakah*), are observed regularly as these rituals are considered as a medium to fulfill one’s spiritual needs, thus strengthening his or her belief and cleansing his or her hearts from any form of sins and impurities (Hawa, 2004). More importantly, spirituality does not depend on individuals’ wealth, job positions, personal background, or race, but it relies on the state of their hearts by being obedient to Allah’s (SWT) commands. Spirituality can also be strengthened by performing religious activities, which is a form of conviction by the believers, as commanded by Allah (SWT).

Obviously, the different concepts of spirituality between the Islamic and Western perspectives lie with the way of expressing, facilitating, and maintaining the level of spirituality in the form of religious activities (Rulindo and Mardhatillah, 2008; Tsafe and Abdul Rahman, 2014). In the Islamic perspective, spirituality is embedded in the



Islamic worldview epistemology in which its characteristics are controlled and guided by Allah's (SWT) commands through *Al-Quran* and *As-Sunnah*. However, to certain extent, spirituality from the Western perspective has similar characteristics with that of the Islamic perspective. For example, Rulindo and Mardhatillah (2008) emphasize that ruh, being a divine element bestowed on mankind by Allah (SWT), would always direct believers to establish a connection with the "Creator". In addition, Islamic principles also emphasize strong, intimate relationships with other human beings, creatures, and the universe. This emphasis is also present in the Western perspective as shown in Table 2.1, highlighting the imperative of developing an awareness of and a connection to life and other living things. Therefore, having a firm grasp of the various definitions of spirituality from both the Islamic and Western perspectives would highlight important elements deemed relevant to the objectives, approaches, and processes of *shariah* auditing, the impact of which would help internal auditors to perform their tasks effectively.

### **2.2.3 Judgment Decision Making (JDM)**

This subsection provides a discourse on the emergent issues in JDM research and judgment from the Islamic perspective as follows:

#### **2.2.3.1 The Emergent Issues in JDM Research**

For many decades, research in judgment and decision making (JDM) has examined the behavioral aspects of rational choice theory (Mellers et al., 1998). Audit judgments involve the professional judgments of independent auditors in their audit work (Gibbins, 1992). Ashton (2010) states that judgment and decision-making process in accounting and auditing research is a behavioral study on human being as it focuses on the approach adopted and the selection process performed by auditors and accountants

while performing the audit process and procedures (in terms of risk assessments, materiality level, selection of audit process, the appropriateness of audit evidence and types of audit report to be issued).

Particularly, Knechel (2000) states that auditing process is inherently a judgment process, affecting the way auditors perceive their responsibilities, the way auditors conduct their activities, and the way auditors formulate conclusions. In this respect, Mautz and Sharaf (1961) (cited in Knechel, 2000, p. 696) emphasize that auditing is concerned with sound evidence that would lead to good reasoning. In fact, they states that *“Auditing is concerned with evidence. Therefore, in perfecting its theory of evidence, it is logical that it should resort to the study of theory of knowledge, the way of obtaining belief and evidence gives us a rational basis for forming judgments”*

On the other hand, Solomon and Trotman (2003) refer judgment as subjective assessments made as a prelude to taking action. They also assert that decision refers to actions that people take to perform a task or to solve a problem. Similarly, Bonner (1999) defines judgment as mental activities of forming an idea, opinion or estimate about an object, events, or a phenomenon wherein these activities influence the individual to make predictions for future results of events. After making judgment, decision activities will follow that involve making a choice among variables and predictions. Precisely, Bonner (1999) asserts that decision activities is about making up one's mind regarding the issues at hand and taking a course of actions resulting from judgment activities. For example, audit judgment may involve an auditor's judgment on several critical aspects, such as the competency of the client's management, the materiality level of financial statement, and the effectiveness of the client's internal control. In turn, the auditor must decide the appropriate means to acquire the essential knowledge to verify each element of the financial statements, the type and amount of

evidence to gather, and ultimately, the report to be issued (Solomon and Trotman, 2003).

Research of “auditing school” behavior accounting began in 1970s where a study conducted by Ashton (1974) involved a systematic examination on the quality of auditors’ judgment and the reasons for differences in the quality of their internal control judgment on issues of consensus, cue usage, and consistency. This pioneering study was duly acknowledged by Knechel (2000) and Mock, Watkins, Caster, Pincus, and Edwards (1993), affirming that Ashton's (1974) findings have spurred other researchers to embark on similar studies (see Trotman, 2005). In particular, Ashton’s findings are as follows: (1) there was generally a high level of consensus among auditors compared to experts in other fields, (2) auditors processed the cues independently of the effects of other cues, which was based on cue processing, and (3) differences in the utilization of the six cues were related to the extent of inconsistency among auditors’ judgments.

Later, Ashton (1974) continued his research by focusing on Brunswik’s (1952) Lens Model and Libby's (1975) application of this model in the predictability and stability of loan officers’ judgment. Subsequently, research interest in studying professional audit judgment has gained traction as evident in Libby's (1981) book and Ashton's (1982) monograph, the work of which are highly referred to in reviews of human processing in accounting research. Later, the research focus shifted to behavioral auditing, which is an important area of interdisciplinary research in accounting (cited in Ramamoorti, 1995).

Research in accounting is steadily gaining momentum as highlighted by Solomon and Trotman's (2003) study titled “Experimental Judgment and Decision Research in Auditing: The First 25 Years of Accounting, Organization and Society (AOS)”, which

shows about 670 auditing papers have been published in five scholarly accounting journals between 1976 and 2000. In particular, Nelson et al.'s (2005) study indicates that the number of research focusing on auditors' judgment has been on the rise for the past 25 years, especially those that deal with issues related to the way audits are being performed. With this focus of study, specific and in-depth knowledge would be gained to help auditors understand, evaluate, and improve judgment, decisions, and choices in the auditing setting.

According to Solomon and Shield, (1995), early JDM research in audit primarily addressed two main issues. First, studies reported in the psychology literature had mainly involved generic tasks performed by undergraduate subjects, the results of which might not be replicated if actual tasks were to be performed by practicing auditors. Second, the ability of the auditors to make appropriate audit judgment and decisions. Essentially, according to Shanteau (1989) (cited in Ramamoorti, 1995), there are three types of behavioral auditing studies: (i) replication studies, (ii) adaptation studies, and (iii) problem-driven studies. Replication studies adopt the methods and procedures used in psychology and check whether original findings (e.g., heuristics and biases) are replicable in studies involving actual auditors. On the other hand, adaptation studies examine auditing issues using the methods of behavioral research. In contrast, problem-driven studies are designed to focus on the concerns of auditing behavior, which lead to unique methods and procedures.

In addition, Ashton and Ashton (1995) highlight that JDM research in auditing has evolved, encompassing three phases. First, JDM's research focus is on issues related to auditors' practices and audit policy. Second, this research tends to concentrate on issues pertaining to theories and methods to guide the research. Third, the research deals primarily with efforts to understand the shortcomings of human judgment in accounting

and auditing settings and to eliminate such shortcomings. On the hand, Nelson and Tan (2005) highlight three main issues in JDM research: (i) auditors' perceptions of a given task based on risk assessments, risk model, audit planning, audit evidence, audit evidence evaluation, (ii) auditor's attributes, such as their knowledge, competency, individual characteristics, and cognitive abilities, and (iii) interactions between auditors and clients.

Nelson and Tan's (2005) study provides a detailed account of audit judgment and decision making (JDM) research over the last 25 years. Notably, they categorized JDM research into three focuses, namely the task, the person, and the categorization of interaction. In the same study, they also highlight current research trends, knowledge gaps, and opportunities for further research. By contrast, Solomon and Shield's (1995) study focuses on the theoretical framework and judgment decision evaluation criteria used by JDM researchers. Interestingly, they also discuss five frameworks for effective audit, namely policy capturing, probabilistic judgment, heuristics and biases, cognitive processes, and multi-person information processing.

Essentially, Solomon and Shield's (1995) study comprises three main objective. Their first objective was to provide an overview and an evaluation of studies published during the last 20 years in which experienced auditors formed judgments or made decisions while performing audit tasks. Their second objective was to recommend other researchers to focus on new issues and approaches for future research. Their third objective was to compare the findings of JDM studies with other JDM studies that are unrelated to audit. Especially, the final objective would provide a sound foundation to other researchers in dealing with the issues of knowledge and memory of auditors and the decision aids for auditors in making judgment. Addressing the above objectives is challenging as noted by Solomon and Shield (1995), who state the following concerns:

*“An important choice facing audit JDM researchers is the extent to which their theory development or testing will emphasize: (1) task, focusing on the transferability of generic JDM theory to audit setting or testing the effects of audit tasks/ contexts features on generic JDM; (2) processors, focusing on how experienced auditors make audit judgment or decision compared to other types of JDM or the effects of experience on auditors’ audit; or (3) the interaction of task and processor.”*

Over the last 25 years, JDM study has matured significantly through the adoption of theories, concepts, and techniques from other fields, particularly psychology. In fact, in this period, JDM research has become the most dominant research in auditing (Gibbins, 1992 ; Trotman, 1995), and its contributions to practice have been well documented (Bell and Wright, 1995). However, embarking into JDM study has its fair share of challenges, given the complex nature of human behavior that entails different methodologies.

More importantly, Trotman (1998) states that, after 25 years, JDM study needs to embrace a new imperative by focusing on the generalizability of existing research findings to different practical situations and applying relevant, contemporary theories in new studies. Undisputedly, pursuing such research focus would require the synthesis of knowledge learned from previous studies carried out by Solomon and Trotman (2003), Nelson and Tan (2005), Trotman, Tan and Ang (2011), Bonner (2008), Trotman (1998) and Ashton and Ashton (1995), among others. Essentially, their research findings provide a wealth of knowledge regarding relevant concepts, theories, methodologies, issues, and limitations in JDM research.

Clearly, judgment and decision making research in accounting and auditing is a subfield of behavioral accounting research. This research is mainly concerned with the influence of management control systems on the behavior of organizational participants, the influence of accounting information on internal and external users, and the behavior of accountants themselves as well as auditors. Behavioral research in accounting and auditing is rapidly gaining prominence as it offers a natural and direct means to better understand how accounting influences people and vice versa (see Ashton, 2010). To sum up, Solomon and Trotman's (2003) thought-provoking view of the subject matter underscores the imperative of JDM research in accounting and auditing as follows:

*“The urgency of the need for research on audit judgment and decisions is primarily attributable to the rapid pace of change in how commerce is conducted which, in turn, is dramatically influencing the demand for and production of business measurement and auditing (see Bell, Marrs, Solomon, and Thomas, 1997). For example, some auditing firms have begun to rely heavily on systems thinking (see Richmond, 2000) to develop new ways of thinking about fundamental audit constructs like audit risk and audit evidence. In turn, the nature and types of the judgments and decisions that auditors make are changing, as are the processes of judging and deciding. Such fundamental changes cry out for attention from researchers and create numerous research challenges and opportunities. For example, analytical procedures are evolving substantially under these new audit approaches, both in terms of their nature and the centrality of their role. According to systems-thinkers, knowledge acquisition involving synthesis and diagnosis, which are key features of analytical procedures, is generally thought to be more powerful than knowledge acquisition via decomposition-*

*based activities like sampling. Also, from the systems thinking perspective, it is critically important for an auditor to understand the economic web within which a client organization operates (e.g. including competitors, external forces, how the organization is connected to suppliers, distributors, etc.). In essence, the auditor must develop a very deep and broad mental model of the client organization and be able to run that model (i.e., use mentally simulation) to develop expectations. How and how well auditors perform these activities, how such performance can be improved, and what the appropriate theoretical frame are for investigating these issues, however, largely are unknown at this time. Recent events, like the many earnings restatements and the Enron debacle, highlight the importance of developing answers to questions such as these". (Solomon and Trotman, 2003, p. 408-409)*

#### **2.2.3.2 Judgment from the Islamic Perspective**

In Islam, judgment is defined as a process of forming an *ijtihad*, the literal meaning of which is “striving” or “exerting”. In the jurisprudential sense, the meaning of *ijtihad* is the capacity for making deductions in matters of law in which there is no preceding rule based on an *Ijma* (consensus) (Ali-karamali Shaista and Dunne (1994). Early interpretations of *ijtihad* can be traced back to 1930s where, according to Iqbal (1936) and Ali (1936) (cited in Ali-karamali Shaista and Dunne, 1994), *ijtihad* means the process of forging a view to form an independent judgment on a legal question.

However, in Islamic terminology, *ijtihad* is widely understood as a process of reasoning to formulate Islamic legislation or Islamic law. Performing *ijtihad* would normally involve prominent and qualified scholars, who are able to provide penetrative



elaboration and interpretation of the Islamic rules based on the *Al-Quran* and *As-Sunnah*. Lately, *ijtihad* has emerged as an important development in Islamic jurisprudence in response to many challenging issues resulting from the changing socio-cultural landscape of Islamic nations.

In Islam, protecting the lives of its adherents and followers is not only important but mandatory. Only effective, sound rules and regulations can vouch such protection. In this respect, *ijtihad* plays a central role in formulating the necessary law to bring order to the society (Qadri, 2007). To help perform *ijtihad* effectively, Qadri (2007) elaborates on three types of reasoning as follows:

(i) *Ijtihad bayani* (interpretive reasoning)

This type of reasoning is related to the interpretation of text containing definite meaning. Interpreting the text entails methods that consider the following aspects: particular and general, infinite and finite, realities and figurative. The interpretive *ijtihad* should be conducted by adhering to technical methods of nobleness and interpretation of the *Quran* and *Sunnah*.

(ii) *Ijtihad qayasi* (analogical reasoning)

This type of reasoning is derived from legal analogies to determine the origin or root, subsection or branch, commands and causes of events. The proper method of interpretation, review, and research of the legal responsibility need to be employed to determine the causes and applications of command. Moreover, the discrimination of appropriate, unusual, derived, and transmitted reasons has to be performed to identify the effective commands and the nature of reasoning.

(iii) *Ijtihad istislahi* (conciliatory reasoning)

This type of reasoning is derived from necessity and expediency. To accomplish this type of *ijtihad*, the established jurisprudential principles and rules need to be taken into account, including the principles of appreciative, conciliatory, coalitional, and deductive reasoning as well as usage, law of necessity, and changing time. The person performing *ijtihad* is called a *mujtahid*, who should possess the essential attributes as follows:

- Faithful and firm in belief and actions
- Just and pious
- Knowledgeable in the holy Quran
- Knowledgeable in hadith, principles of hadith, and other related issues
- Knowledgeable in Islamic jurisprudence, principles of Islamic jurisprudence, and other relevant matters
- Competent and skillful in Arabic language and literature
- Knowledgeable in Islamic laws and the commandments
- Knowledgeable in the inference of commandments and the interpretation of texts of the holy Quran and Sunnah
- Knowledgeable in modern problems and their implications
- Familiar with contemporary developments and appraisal of modern terminologies

The basis of Islamic jurisprudence or Islamic law for financial matters is based on the *shariah* principles and concepts, with the aim of respecting and safeguarding public needs, economic freedom, social equity, justice, and accountability in all. Essentially, based on the Islamic worldview, the most important principle is *tawhid*, and the core concept is the unification of concepts related to man, universe and religion, (Chapra,

1992; Haneef , 1997; Hameed, 2000). These basic principle and core concept can be divided further into several sub concepts such as *amanah* (trust), *khalifah* (vicegerent), *ikhtisab* (accountability), *ibadah* (worship), and *adalah* (justice).

Undisputedly, the above concepts would wield a strong impact on Muslim auditors' performance in judgment decision making. Thus, all concerned, especially the Muslim practitioners, should have a clear understanding of the Islamic worldview and the objective of *shariah* or *Maqasid as-shariah* given that Western and Islamic practices are deeply rooted in different perspectives. In particular, individuals who could passionately embrace these concepts would help them attain the status of *insan muttaqun* (pious individual). Such persons would be able to discharge their duties with a greater level of trustworthiness, benefiting the society as a whole. From the financial standpoint, Muslim auditors of such stature would be able to provide sound judgment and decision making. Thus, strict adherence to *shariah* would help guarantee the success of every Muslim's undertaking as underscored by Allah's (SWT) command as follows:

*“Obey God, and obey the Apostle, and those charged with authority among you. If ye differ in anything among yourselves, refer it to God and His Apostle, if ye believe in God and the Last Day: That's the best and most suitable for final determination” (4:59).*

The above commands clearly reinforce the imperative of Muslims to strive to adhere to and uphold *shariah* principles in every decision, judgment, or action that they make. Particularly, good value judgment is important in helping the society to achieve excellence and happiness as asserted by Allah (SWT) in the holy *Quran* as follows:

*“By the soul and the proportion and the order given to it, and its enlightenment and its wickedness and its piety, successful is the one who keeps it pure and ruined is the one who corrupts it” (9: 7-10).*

Arguably, judgment made by internal auditors in IFIs might vary due to the objectives of *shariah* auditing itself, namely to uphold *shariah* principles. More importantly, the system of values (e.g., spirituality and ethics) and belief might influence their *ijtihad* process. In addition, *shariah* auditing practices are deeply rooted in the Islamic worldview – as opposed to conventional wisdom – thus necessitating research on factors unique to the Islamic perspective. Equally important, the criteria of a *mujtahid* (i.e., the individual who perform *ijtihad* process) need to be dealt with in such research as this individual is deemed to be knowledgeable in a wide spectrum of Islamic disciplines, such as Islamic legislation, hadith, and others (Qadri, 2007). Moreover, the *mujtahid* is expected to deliver sound judgment to preserve justice and fairness.

## **2.3 Review of Past Studies on Variables**

This subsection provides a discussion on task complexity, knowledge and memory, and ethics as follows:

### **2.3.1 Task Complexity**

Invariably, auditors will carry out audit tasks of varying complexities ranging from simple chores to complex jobs, thus requiring different levels of knowledge, experience, and ability (Bonner, 1994). As task complexity can have an impact on auditors' performance in audit tasks, this variable has featured quite prominently in the audit judgment and decision making literature (Abdolmohammadi and Wright, 1987; Bonner, 1994, 1999; Nelson et al., 1995; Tan and Kao, 1999; Mohd-Sanusi, Mohd-

Iskandar, and Poon, 2007; Iskandar and Sanusi, 2011). In essence, task complexity is associated with the amount of attention capacity or the cognitive processing that the task requires (Kahneman, 1973 cited in Bonner, 2008). In addition, it also entails task structures, which refers to the level of specification of what is to be done in the task (Simon, 1973 cited in Bonner, 2008).

According to Wood (1986), task complexity has three dimensions: component complexity (number of distinct acts and information cues), coordinative complexity (type and number of relationships among acts and cues), and dynamic complexity (changes in acts and cues and the relationships among them). In brief, task complexity refers to the number of different attributes in a task and the relationships among the attributes. Accordingly, complex tasks may require more personal resources (e.g., attention, information-processing capacity, effort, and persistence) compared with simple tasks (Bandura, 1986; Chen, Casper, and Cortina, 2001). Furthermore, complex tasks may also trigger apprehensions of failure and lower employees' beliefs in their ability to accomplish the tasks. Therefore, to avoid such apprehensions, people would normally use easier, non-compensatory strategies that could lead to low quality judgments and decisions (Bonner, 1994).

A numbers of studies have been conducted to address the above issue. For example, Abdolmohammadi and Wright (1987) found that there were differences in auditor's judgments depending on whether the tasks were structured or unstructured. For instance, Nelson et al. (1995) and Bonner et al. (1996) found that auditors who dealt with an unstructured task tended to make poor judgement than auditors who handled a structured task. Another study by Simnett and Trotman (1989) found that the accuracy of auditors' prediction of bankruptcy was related to the magnitude of the cue output.

Moreover, a study conducted by Tan and Kao (1999) found that task complexity depended on the auditors' knowledge and abilities, especially for low complexity model. Similarly, Tan, Ng, and Mak (2002) found that the auditors' JDM quality declined as task complexity increased. In addition, they also found that knowledge moderated the negative effect of complexity, but not accountability. Therefore, as expected, many audit firms would assign more experienced auditors to handle more complex tasks (Abdolmohammadi and Wright, 1987; Adolmohammadi, 1999). Thus far, research focusing on the influence of spirituality and task complexity on audit judgment performance has been wanting. As such, such research should be carried out to examine the above factors in detail.

### **2.3.2 Knowledge and Memory**

Another important focus of research involves the examination of the impact of knowledge and memory on audit judgment, including the differences in knowledge structures between experts and novices. Such impact is highlighted by Bonner (2008), who states that auditors' judgments and decision making are influenced by auditors' cognitive processing, which largely involves knowledge processing through mental representation. In addition, Bonner (1999) asserts that auditors' knowledge, abilities, and experiences would give rise to their competency. The literature is quite replete with studies focusing on the above factors, such as Abdolmohammadi and Wright's (1987), Bonner and Lewis's (1990), Bonner, Libby, and Nelson's (2011), Bonner and Walker's (1994), Choo and Trotman's (1991), Choo's (1996), Ricchiute's (1984), Tan and Kao (1999) and Tan and Libby's (1997) studies.

For instance, Libby and Luft's (1993) and Libby's (1995) studies provide a sound discussion concerning the role of knowledge and memory in audit judgment. In

particular, they emphasize the relations of the above factors with auditors' experience, which is an important determinant. According to the researchers, embarking on such studies would probably encounter many obstacles due to a lack of understanding of the necessary conceptual models and operational approaches. Thus, they proposed a conceptual model called *Antecedents and consequences of knowledge* to help other researchers to study knowledge and memory. In this model, experience and ability factors influence the acquisition of knowledge, and knowledge determines performance. In addition, their review of studies based on expertise paradigm revealed several important findings. First, they found knowledge was widely investigated in most studies compared with other determinants of performance, which should be task-specific. Second, relevant experience and specific training programs would help facilitate the acquisition of knowledge.

Later, Libby (1995) discusses other pressing issues delving on the kind and level of knowledge and the cognitive processes required for audit tasks. Likewise, Libby also provides a discourse on the role of the auditor's task specific knowledge in problem recognition, hypotheses generation, information search, factors affecting auditors' memory, and the impact of memory on auditors' judgment. Clearly, Libby's discourse reinforces the imperative of examining the above factors in greater details, which seems to concur with Trotman's (1995) contention that the study of knowledge, memory, and their differences between experts (the experienced) and novices (the inexperienced) is important to help practitioners to develop appropriate training and decision aids, which would assist novices to perform like experts.

Knowledge, according to Bonner (2008), is defined as information stored in long term memory, which is relatively permanent. Knowledge content refers to the quantity and specific pieces of information stored in this memory, whereas knowledge structures

refer to the extent to which and the ways in which that information is organized in memory. Normally, research in psychology tends to focus on the types of knowledge possessed by individuals, which can be mainly divided into two types. First, *episodic knowledge*, which is related to personal experiences, and such knowledge includes temporal, spatial, and other sensory features of those experiences. Second, *semantic memory*, which extracts the underlying meaning and reasoning from individual experiences.

Bonner (2008) states semantic memory preserves the meaning in the form of concepts and principles. Therefore, in accounting and auditing, semantic knowledge is deemed important because many accounting and auditing concepts require auditors to have a firm grasp of the underlining reasons for each concept and decision made. Furthermore, semantic knowledge can be divided into two types, namely declarative and procedural knowledge. According to Bonner (2008), declarative knowledge is composed of facts and definitions (e.g., a red light means to stop). By contrast, procedural knowledge consists of rules and steps for performing skilled tasks (e.g., if a stoplight is red, then press the pedals to bring the car to a stop or if a transaction involves an assets account, then debit the account).

Another focus of knowledge research is to examine the views of experts in which specific experiences and training contribute to knowledge construction. For example, Bonner and Lewis (1990) assert that innate ability with relevant experiences would help auditors perform specific audit tasks efficaciously. In addition, they contend that the performance of information processing task depends on level of auditors' experiences and expertise. The same researchers categorized knowledge into three types, namely general domain knowledge, sub-specialty knowledge, and world knowledge.



Later, Tan and Libby (1997) examined the effects of tacit managerial knowledge (knowledge of how to manage oneself, manage others, and manage one's career) on technical accounting and auditing knowledge of auditors. Their findings suggest that the difference in tacit managerial knowledge at all levels is due to knowledge accrued through experiences. The authors also suggest that soft skill, such as personality trait, could enhance auditors' ability to learn from experience and ultimately affect their performance. Besides this skill, non-technical skills could also affect actual performance evaluations at the managerial level.

Apparently, Bedard and Biggs's (1991) studies could be regarded as pioneering research that deals with the above factors. In their studies, they found that auditors with vast manufacturing experiences (e.g., physical inventory, such as wholesale, retails, and manufacturing) or expertise in auditing industries were able to identify errors related to inventory. Likewise, Wright and Wright's (1997) and Solomon, Shields, and Whittington's (1999) studies indicate that additional knowledge would exert a strong impact on industrial specialization.

Of great interest, a case study by Taylor (2000) provides useful insights into the effects of auditors' banking industrial specialization on assertion-level inherent risk assessments of banking organizations. In this study, the financial statement accounts processed by "experienced banking auditor" specialists and "experienced non-banking auditor" specialists were examined to assess inherent risks of material misstatements. The finding suggests that relevant industrial experience (as opposed to only general experience) could help experts make sound audit judgments.

In relation to *shariah* auditing, specific knowledge in Islamic Jurisprudence (*shariah*) and *Fiqh Muamalat*, which concerns commercial and accounting practices, are highly

needed. Having this knowledge would help address the business concerns of IFIs, of which all their transactions need to comply with the Islamic philosophy and *shariah* principles. The concerns of compliancy have to be well managed by IFIs so as to provide the kind of assurance that will satisfy the stakeholders' expectations that IFIs' operations are in line with *shariah* principles (Dusuki, 2007).

In addition, the shareholders expect IFIs to continually improve their products and services to bring them more in line with the precepts of *shariah*. With continual improvement, any stakeholders' or customers' doubts regarding the legitimacy of IFIs' dealings could be readily addressed. Notably, doubts concerning such legitimacy are inevitable given the customers' lack of knowledge in Islamic jurisprudence and *usul-fiqh*, which draws in conflicting views of Islamic financing. For example, a study by Bley and Kuehn (2003) reveals that a majority of IFIs' customers made their decisions not on sound knowledge of the quality and value of the products and services offered, but simply on religious belief, highlighting the customers' poor understanding of *shariah*.

Even more revealing, Kahf (2002) found that the difficulty in understanding *shariah* ruling did not lie with the customers only, but with the bank personnel as well. Thus, in such an awkward predicament, the latter would not be able to counsel the former regarding Islamic financing matters effectively. Unresolved, this problem would lead customers to perceive Islamic banking products and services as similar to the that of conventional banks (Dusuki, 2007; Ahmad and Haron, 2002; Siddiqui, 2001).

Further compounding the above problem, Grais and Pellegrini (2006) assert that the number of scholars who are well-versed in Islamic jurisprudence, *usul-fiqh*, and understanding of modern banking and finance concepts is unfortunately small. In light

of this revelation, it is incumbent on internal auditors to equip themselves with the knowledge of relevant *shariah* principles and *usul-fiqh*, thus enabling them to discharge their duties professionally based on the *shariah* principles (Abdul Rahman, 2008b; Kasim et al., 2009; Kasim and Sanusi, 2013; Shafii et al., 2010; Yahya and Mahzan, 2012).

### **2.3.3 Ethics**

In general, ethics is defined as rules of behavior based on ideas about what is good and bad. For example, Abbas, Ahmad Gondal, Junaid, Ahmad Rana, and Mohamood Aslam, (2012) defined ethics as the principles or standards of human conduct or moral conduct that deal with what is right and wrong. Furthermore, Abbas et al. (2012) proposed two key principles to differentiate goodness in conduct and to consider specific categories of such conduct as being either the conduct itself is good in nature or the conduct is good because of its conformance to specific code of conducts. The epistemology of ethics is inclusive in a branch of philosophy that encompasses a process to understand the norms of human behavior. According to Abbas et al. (2012), there are three principal standards of behavior that reflect ethics and moral conducts: highest good (contentment or desire); obligation, virtue, or responsibility, and excellence (the complete melodious expansion of human potential).

Given their moral importance, research in ethics and moral conduct in relation to work performance and business performance has steadily gaining momentum. Notably, in the literature, research findings indicate that there is a significant relationship between spirituality and ethics. This significant association suggests that spirituality is linked to “ethical cognition”, which is an important factor in determining how individuals perceive the ethics of a situation (Jurkiewicz and Giacalone, 2004). In

particular, these researchers state that individuals' spirituality may shape their perception of business practices as being unethical or questionable, implying that higher spirituality leads to greater ethical concerns.

Apparently, ethical codes of conduct alone cannot vouch for the realization of good ethical behavior nor influence individuals to strictly adhere to codes of conducts, unless they have a strong belief (i.e., spirituality). Therefore, according to Jurkiewicz and Giacalone (2004), “ [an] increasing attention is being placed upon [the] assessment of individual character, personality, and belief systems that may influence ethical cognition as precursors to behavior. One such individual factor that may influence ethical orientation is spiritual well-beings”.

Likewise, McGhee and Grant (2008) assert that allowing and encouraging spirituality in the workplace improves ethical behavior at a personal level and enhances ethical practices within an organization. They contend that individuals' spirituality enables them to form an internalized general regulative ideal, which is based on four common aspects of spirituality identified as *self-transcendence*, *interconnectedness*, *meaning of one's life* and *one's ultimate concern*, which later governs the individuals' perception, valuation, and actions. Practiced over time, these moral values would eventually become highly-prized virtues that would help individuals to contribute significantly to their organization.

In judgment decision making research, efforts have been carried out to investigate the effects of ethical orientation on individual performance, such as Johari, Mohd Sanusi, Abdul Rahman, and Normah's (2012) and Douglas, Davidson, and Schwartz's (2001) studies. However, such studies of ethics and its effects on performance are not well focused, and the findings appear contradictory or inconsistent. For example, in

Johari et al.'s (2012) study, Forsyth's (1980) ethical concept known as "idealism and relativism" was adopted to investigate the effects of students on their audit judgment performance. Their findings indicate that the differences in one's ethical orientation are insignificant to predict their judgment in the auditing context. Interestingly, a study conducted by Douglas et al. (2001) indicate that ethical orientation is related to ethical judgment only in a high moral intensity situation, not in a low moral intensity situation. Given these conflicting, inconsistent findings, research in spirituality, ethics, and their relation and impact on audit judgment would provide new, important insights into the current practice of Islamic financing in Malaysian IFIs.

## **2.4 Overview of the Chapter**

A review of previous literature indicates that a considerable number of studies have been undertaken to investigate the impact of spirituality on individual performance as well as organization performance. Similarly, a large number of studies have been carried out to determine factors influencing external auditors' judgement performance. However, studies focusing on the impact of spirituality and "determinants of performance" factors are virtually non-existent. Thus, in light of this research gap, the present research was carried out to examine the above factors in relation to the Islamic financial institutions practices.

## **CHAPTER 3: THEORETICAL FRAMEWORK AND HYPHOTHESES FORMULATION**

### **3.1 Introduction**

This chapter comprises four (4) sections. The first two sections discuss the theoretical framework adopted in this study based on the synthesis of established frameworks in spirituality and JDM research. Notably, such existing frameworks include policy capturing, probabilistic judgment, heuristics and biases, cognitive process, multi-person information processing, protocol analysis, hypotheses generation, and determinants of judgment performance. For this study, the theoretical frameworks that were adopted are the cognitive process (Solomon and Shield, 1995) and determinants of judgment performance (Trotman, 1995). In addition, these sections also discuss a working definition of spirituality and its impact on individual and organizational performance, leading to the identification of an appropriate theoretical foundation. The third section of this chapter elaborates on the Social Cognitive Theory (SCT), which is related to the theoretical frameworks of determinants of judgment performance (i.e., JDM research) and spirituality research. Using SCT, the impacts of spirituality, task complexity, knowledge, and ethics on internal auditors' audit judgment performance are discussed in detail. The fourth section of this chapter discusses the conceptual framework based on Einhorn and Hogarth's (1981), Libby and Luft's (1993) and Tan and Kao's (1990) works. Essentially, these authors examined the important roles of knowledge, experience, ability, memory, and motivation in the audit judgment process. In particular, Einhorn and Hogarth (1981) and Libby and Luft (1993) strongly emphasize knowledge, ability, and experience as critical factors that would have a huge impact on audit judgment performance. To address such emphasis, the same researchers proposed the "knowledge acquisitions" model to help explain the impacts of the above

factors on audit judgment. This section also provides a discussion on the formulation of the research hypotheses, which is based on the theoretical frameworks discussed in the literature pertaining to spirituality and auditing judgment decision making research (JDM). Figure 3.1 summarizes the flow of discussion of this chapter.



**Figure 3.1 : Structure in Chapter 3**

### **3.2 The Theoretical Frameworks in Spirituality Research**

The discussion on the definitions of spirituality based on the conventional and Islamic perspectives has been dealt with in Section 2.2.2 of Chapter 2. Therefore, this section provides a discussion on the effects of spirituality on individual and organizational performances in the workplace, leading to the conceptualization of the theoretical framework for the present study. In recent years, research on spirituality has received a great deal of attention by many scholars from many disciplines, such as counseling, nursing, stress management, organizational performance, individual performance, job satisfaction, and leadership spirituality. This relatively new focus of research concerning spirituality was spurred after many researchers have begun to realize its impact on people's thought process, which ultimately influences their performances in the workplace (Ashmos and Duchon, 2000; Jurkiewicz and Giacalone, 2004; Petchsawang and Duchon, 2008; Kolodinsky et al., 2008; Nasina and Pin, 2011;

Pawinee Petchsawang and Duchon, 2012). For example, Rulindo and Mardhatillah's (2008) review of studies concerning HIV (Litwinezuk and Groh, 2007), cancer and heart disease (Bekelman et al., 2010), and counseling (Corey and Callanan, 2007) suggests that spirituality can bring in a number of positive effects, such as improving patients' mental and physical health, and promote strong physical and emotional wellbeing.

Moreover, several studies have highlighted the positive impact of spirituality on leadership, satisfaction, and commitment as well as performance of individuals in organizational setting, thus improving the overall quality of their lives. The above findings seem to concur with Ali's (2005) proposition, which states "spiritual and mental needs strengthen the quest for perfection and actualization of one's potential in serving the community and organization, while pursuing his [or] her activities". Likewise, having a strong sense of spirituality would have a positive influence toward one's life in terms of desirability and moral goodness as well as feeling of connectedness to others and increase their job competencies (Van Dierendonck, 2012).

Apparently, studies on the influence of spirituality on work performance have attracted many scholars and practitioners alike. For instance, Petchsawang and Duchon (2012) examined the findings of studies by Burack (1999) on Hewlett-Packard, Toms of Maine, and Ford Motor company; Laabs (1995), the World Bank; and Cavanagh (1999), Chase Manhattan Bank, DuPont, and Apple Computer. They found that these multinational companies reaped great benefits from their in-house training programs that aimed to enhance their personnel's spirituality, which led to better quality in their work performance. More specifically, Burack (1999) (cited in Petchsawang and Duchon, 2012) found that Hewlett-Packard nurtured a strong sense of spirituality among its personnel by passionately embracing a philosophy that puts a high premium



on trust and mutual respect. And, as a result, the cooperation and the sense of belonging among its personnel improved markedly.

Spirituality in the workplace can be interpreted as being meaningful at both the individual and organizational levels based on Kolodinsky et al.'s (2008) analysis. At the individual level, spirituality would engender effective and cognitive experiences. This means that the feeling of connectedness between an individual and an organization can influence his or her actions. More precisely, Kolodinsky et al. (2008) assert that spirituality relates positively with intrinsic, extrinsic, and total work rewards satisfaction. In fact, Emmons (1999) claims that an individual's striving for spirituality would become his or her personal goals and ultimate concerns, of which they would serve as a bridge linking to his or her levels of motivation, spirituality, and intelligence.

At the organizational level, spirituality can be considered as a reflection of an organization's noble cultural values that influence its managerial conduct, decision making, and resource allocation (Kolodinsky et al., 2008). Thus, such values would exert a huge impact on the organization's state of affairs because spirituality can help transcend individuals' commitment or loyalty beyond normal expectations as they have greater compassion toward others and profound inner consciousness in the pursuit of meaningful work (Petchsawang and Duchon, 2012). In fact, Petchsawang and Duchon (2012) found a significant positive relation between spirituality and actual work outcome. The latter refers to an individual's work performance, which was measured at the organizational level.

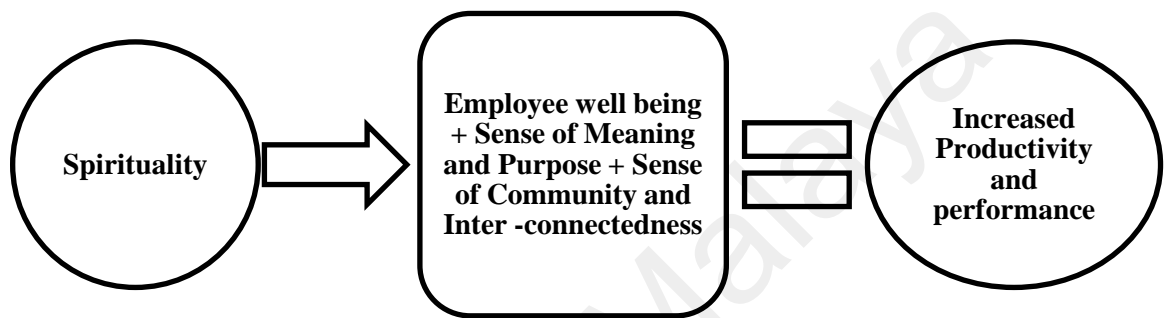
In addition, two studies that had been carried out at a large food and baking company in Thailand (a country with a strong Buddhist-centric culture) found that workers who regularly practiced meditation had higher workplace spirituality scores

than those who did not engage in or seldom perform any form of spirituality practices in the workplace. Interestingly, the former, who were more spiritual, attained better work performance than the latter. To put it boldly, only those with higher spiritual values would perform better than those with relatively lower spiritual values (Petchsawang and Duchon, 2012).

In addition, employees with high spirituality may reach their full potential in terms of work effectiveness and efficiency. As cited in Nasina and Pin Pin (2011), Turner (1999) highlights that practicing spirituality in the workplace would have a huge impact on an organization because its main purpose is to develop a humanistic environment where employees can achieve their full potential. Logically, if employees are at liberty to bring their physical, intellectual, emotional, and spiritual attributes to their workplace, certainly they would become more productive, effective, efficient, creative, and satisfied. On the other hand, in the absence of such liberty, the reverse would be true where the company would suffer from poor morale among its staff, poor attendance, higher staff turnover, stress, and non-committal attitude (Nasina and Pin Pin, 2011). Therefore, spirituality at both the personal and organizational levels needs to be nurtured to achieve a meaningful and rewarding relationship, thus benefitting all concerned (Kolodinsky et.al., 2008).

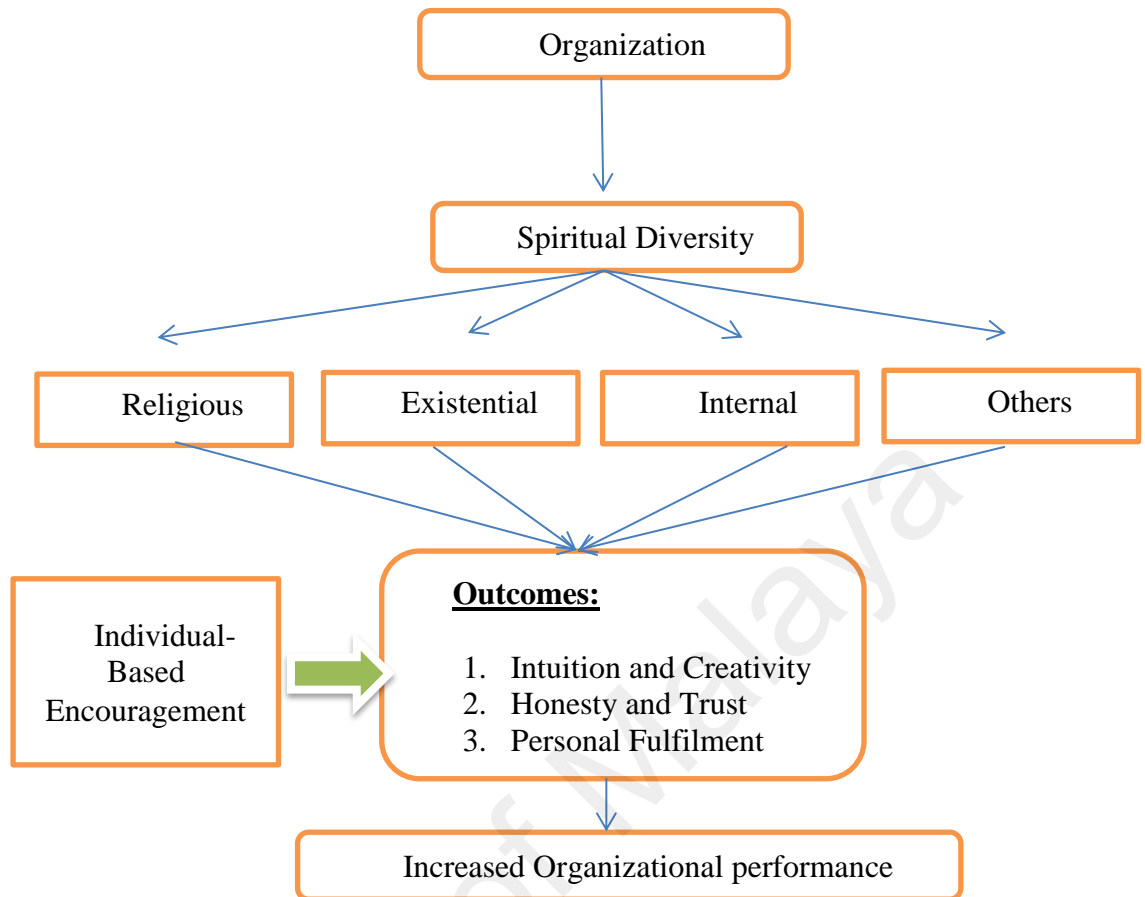
Karakas (2010) reviewed about 140 articles relating to workplace spirituality and its impact on an organization and its employees. More importantly, he introduced three different integrative views of how spirituality affects the performance of an organization. He asserts that spirituality can lead employees to experience a strong sense of well-being, meaningfulness, and purpose of life as well as a sense of interconnectedness. In particular, spirituality enhances the general wellbeing of employees by increasing their morale, commitment, and productivity. Spirituality can

also influence employees to be more creative and loyal, and to develop a strong sense of belonging and purpose of work. Furthermore, it can decrease stress, burnout, and workholism in the workplace. As such, by embracing these spiritual attributes, ultimately employees can contribute to the betterment of their organization through improved productivity and performance as summarized in Figure 3.2.



**Figure 3.2 : Three Perspectives of Spirituality and Performance  
(Karakas, 2010, p.92)**

Research by Krishnakumar and Neck (2002) explored the impact of spirituality on organizational performance based on previous studies. They found that spirituality in the workplace had led to many positive outcomes, such as improved creativity, honesty and trust, personal fulfillment, and commitment – factors that would lead to better organizational performance. Thus, organizations that encourage spiritual practices would help improve their organizational performance and profitability. In addition, their study also involved the examination on the different perspectives in the definition of spirituality and approaches to inculcate spirituality-based culture within an organization, leading to the development of a theoretical framework as shown in Figure 3.3. In essence, this framework highlights the effect of an individual's spirituality on the organizational performance.



**Figure 3.3 : Individual – Based “Spiritual Freedom” Model for Incorporating and Encouraging Spirituality among Today’s Diverse Workplace**  
(Krishnakumar and Neck, 2002, p 162)

Thus, in unison, Karakas’s work (2010) and Krishnakumar and Neck’s (2002) theoretical framework serve as a sound basis for the present study to examine the effects of spirituality on individual performance by integrating the determinants of performance (i.e., knowledge and task complexity) into judgment decision making research.

According to Hawa (2004), Muslims who strive to embrace Islamic spirituality in all aspects of their lives would help transform them into “complete” Muslims, who will always follow Allah’s (SWT) commands and serve their society with kindness. This contention runs parallel with Ali’s (2005) postulate that spiritual people are motivated to indulge in good deeds, which leads to “complete satisfaction” and “self-actualization”.

As discussed in Chapter 2 (see section 2.2.1), the Islamic worldview is concerned with the way a Muslim sees and explains the world and his or her surrounding (Al-Faruqi, 1982). Chapra (1992), on the other hand, defines worldview as a set of implicit and explicit assumptions about the origin of the universe, the nature, and the purpose of life. Whereas, Hoque and Choudhury (2003) state that worldview is the unified comprehension of the universe and all of its subsystems. More profoundly, principles deriving from *Al-Quran* and *As-Sunnah* strongly underpin the Islamic worldview, which emphasizes spiritual development among its adherents.

To help deal with such emphases, many scholars have carried out a number of studies focusing on Islamic spirituality. For example, Kamil, Hussain Al-Kahtani, and Sulaiman's (2012) studied the effects of Islamic spirituality on the workplace from the Islamic management perspective. They also conceptualized the “Islamic spirituality constructs”, namely ritual (*Ibadah*), forgiveness and repentance (*Al-a'fw*), belief (*Iman*), and remembrance of Allah (SWT) (*Dhikrullah*). Interestingly, they found that all the above constructs were significant in shaping the workers' attitudes, values, and behaviours, the impact of which would greatly benefit their organization.

Given these promising findings, research on spirituality is becoming more and more prominent in the academia, covering a wide range of disciplines including business, management, mental health, and psychology. Nonetheless, research focusing on this construct from the Islamic standpoint is lacking, thus requiring more effort by scholars and practitioners of Islamic financing industry. Arguably, such undertakings would have to carefully consider the different objectives and approaches of *shariah* auditing, which strongly stresses on internal auditors to uphold Islamic principles, especially spiritual values, such that they would be able to make better judgment when discharging their duties.

### **3.3 The Theoretical Framework in Judgment Decision Making (JDM) Research**

Judgment Decision Making (JDM) research has a long history that can be traced back to the 1960s and, to date, a great deal of studies have been reported in the literature. The first study that systematically examined auditor judgment was carried out by Ashton (1974), who investigated the impact of consensus, stability, and cue usage on the quality of auditors' judgment. Later, the focus of research shifted to studying the impact of knowledge and memory. In fact, the changes in the research focus have been highlighted in Trotman, Tan, and Ang's (2011) review of JDM articles, spanning a period of 50 year, which shows the continual development and improvement in this field. In this undertaking, the researchers found that a number of theoretical frameworks have been proposed and used in many JDM studies.

For instance, Shield and Salomon (1995) identified five frameworks that were commonly used in JDM research: policy capturing, probabilistic judgment, heuristics and biases, cognitive process, and multi-person information processing. Whereas, Trotman's (1995) monograph provides the details of several frameworks based on policy capturing, heuristics and biases, information search and hypotheses generation, protocol analysis, and determinants of judgment performance. Clearly, the differences between the frameworks based on Shield and Salomon's (1995) and Trotman's (1995) works are minimal. Furthermore, Trotman's (1995) monograph also includes a discourse on the determinants of judgment performance involving several categories, such as knowledge and memory, group decision making and review process, design support systems, and other environmental and motivational factors.

On the other hand, Nelson and Tan's (2005) study provides a classification of audit theoretical frameworks covering three main areas, namely the audit task, the auditors'

attributes, and the interaction between auditors and other stakeholders, which when taken together would influence the task performance. More importantly, they examined the effects of spirituality, knowledge, task complexity, and ethics on the internal auditor's judgment performance. Given the relevancy of theoretical classifications as highlighted by Trotman's (1995), the framework adopted for this study is "Determinants of Judgment", which focusses on the impacts of knowledge, task complexity, and other external factors (i.e., motivational factors) on judgment performance. Using such framework, efforts to explain the impact of internal auditors' knowledge (which consists of several levels) and their ability (based on task complexity) on judgment performance would be greatly facilitated. In addition, this framework enables the examination of the impacts of spirituality and ethics (i.e., external, motivational factors) on internal auditors' judgment. Such impacts need to be carefully addressed as exemplified by Ashmos and Duchon (2000), who state that "spirituality makes people experience a sense of purpose and a sense of connectedness to one another and to their workplace". Thus, the above framework is both appropriate and effective to guide the investigation of external factors on judgment performance.

Trotman (1995) proposed an equation to help explain performance as a function of several determinants, such as ability, knowledge, environment, and motivations, as illustrated in Figure 3.4. In fact, this equation unifies the external factors of Einhorn and Hogarth's (1981) and Libby's (1983) formulations, making the newer equation more comprehensive and appropriate. Relevant dimensions for each factor, which are related to the current study, are also discussed in the section on conceptual framework and hypotheses development (see Section 3.4). The explanation for these determinants is based on discussions by Libby and Luft (1993), Libby (1995), and Trotman (1995), who thoroughly elaborate on existing relevant theoretical frameworks.

### 3.3.1 The Effects of Judgment Performance Determinants

As formulated by Trotman (1995), judgment performance is a function of a group of determinants. Figure 3.4 summarizes this function based on four determinants, namely ability, knowledge, environment, and motivation. The identification of the four determinants is based on earlier works by Einhorn and Hogarth (1981) and Libby (1983). “**Ability**” as the first determinant refers to the human capacity to process information and perform tasks that contribute to problem-solving ability. The term “abilities” (Carroll 1993 cited in Bonner, 2007) refers to talents that are relatively fixed once people reached adulthood. Unlike knowledge, abilities tend not to change in individuals with learning opportunities; however, abilities do vary across individuals, including accounting practitioners.

$$\text{PERFORMANCE} = f(\text{ABILITY, KNOWLEDGE, ENVIRONMENT, MOTIVATIONS})$$

**Figure 3.4 : Determinants of Judgment Performance  
(Einhorn and Hogarth , 1981 and Libby, 1983)**

In particular, Bonner (2007) provides a classification of abilities as follows: (i) verbal abilities that include talents that are related to reading comprehension and spelling, (ii) reasoning abilities that include deductive and inductive thinking abilities, as well as talents related to reasoning with quantitative and mathematical concepts; and (iii) spatial abilities that refer to the capacity to identify and comprehend patterns in visual stimuli, as well as the ability to manipulate visual patterns. Taken together, these three types of abilities reflect individuals “general intelligence” (Bonners, 2007).

On the other hand, from the accounting standpoint, Libby and Luft (1993) defined abilities as the capacity to complete information encoding, retrieval, and analysis task



that contribute to audit problem solving. In addition, Libby and Luft (1993) asserts that, like knowledge, abilities are unobservable internal state and their existence is normally inferred from accuracy and speed on psychometric tests.

A number of studies examining the effects of abilities on users' judgment decision making have been reported in the literature, including Abdolmohammadi (1991), Bonner and Lewis (1990), Tan and Libby (1997), Bonner and Walker (1994), Bierstaker and Wright (2001) and etc. For example, Bonner and Lewis (1990) examined the effects of auditors' reasoning abilities on audit task complexity. They predicted that reasoning abilities would be important only in complex tasks involving explanation for ratio fluctuations and accounting irregularities. Their result showed reasoning abilities were only important for ratio analysis.

Later, Tan and Libby (1997) extended Bonner and Lewis's study by examining the effect of knowledge on reasoning abilities, which in turn would affect performance. The former predicted that abilities would have positive relation with the knowledge needed for the ratio analysis task, the irregularity task, and another task requiring understanding of interest rate swaps but not the knowledge needed for an internal control evaluation task. Interestingly, their findings were found to be consistent with Bonner and Lewis's (1990) results.

Subsequently, Tan and Kao (1999) studied the relations of knowledge, problem solving abilities, and task complexities with accountability and auditors' audit judgment performance. They predicted that auditors' knowledge and abilities would be fixed at certain times, but they would change when the auditors realized that they would be measured. Specifically, the researchers adopted an IQ test based on Thurstone's (1957) and Sternberg's (1988) tests to assess their subjects' ability. They detected three-way

interactions among knowledge, problem solving abilities, and accountability. Notably, they found that accountability improved performance when both knowledge and problem-solving ability were high, but not when only problem-solving ability was high.

Unlike abilities, “**knowledge**” is defined as information stored in human memory, which consists of two types of memory, namely “episodic memory” and “semantic memory”. Episodic memory refers to any information stored in memory based on particular experiences; whereas, semantic memory refers to information concerning concepts, meanings, and relations. Moreover, Libby (1995) asserts that knowledge is an internal state in which its characteristics cannot be directly observed. As such, models of the contents and organizations of memory and retrieval processes related to learning are treated as “metaphors”, which can only be tested indirectly.

The level of knowledge for each individual is different, and knowledge is determined by three factors, namely ability, experience, and motivation (Trotman, 1995). Furthermore, Libby and Luft (1993) state that experience would influence the level of an individual’s knowledge. For example, specific experiences provide individuals with opportunities to acquire specific knowledge that would affect performance. In fact, a number of studies, such as Weber's (1978), Abdolmohammadi and Wright's (1987), Bonner and Walker's (1994), Hamilton and Wright's (1982), Robert and Frederick's (1990) and Wright and Wright's (1997) studies, found that experienced auditors could recall more internal controls than their inexperienced counterparts. Likewise, experienced auditors could generate more correct financial statement errors in a ratio analysis task than inexperienced auditors (Robert and Frederick, 1990). Thus, the former were able to make better judgment about the frequencies of financial statements errors than the latter.

To further explicate the concept of knowledge, Bonner and Lewis (1990) and Trotman (1995) proposed three general categories of knowledge such as world knowledge, general domain knowledge, and sub-specialty knowledge. More importantly, Bonner and Lewis (1990) contend that at least three types of knowledge and one type of ability would serve as potential determinants of performance in various auditing tasks. First, auditors should possess the general domain knowledge, which refers to the basic accounting and auditing knowledge, including all standards. Second, auditors must have adequate sub-specialty knowledge related to specialized industries or unique business environments, the knowledge of which is acquired from industrial experiences or specialized training. This type of knowledge, according Bonner and Lewis (1990), is less likely to be acquired through general instruction or experiences, thus, explaining the lack of auditors with such required knowledge. Third, auditors are expected to possess the world knowledge, which takes fruition through the complex interactions among diverse socio-cultural factors. Thus, auditors are likely to possess a wide range of levels in this type of knowledge, which are based on their environments, conditions, or state of affairs, especially their business culture.

The “**environment**” determinant includes factors that may influence auditors’ judgment and decision making, such as judgment guidance and technological aid, hierarchical group settings, accountability relationships, multi-period tasks, level of task complexity and incentives (Libby and Luft, 1993). In fact, Bonner (2008) asserts that these environmental factors metaphorically “engulf” auditors while they perform auditing tasks. Moreover, Bonner (2008) contends that these environmental factors are not mutable to any specific tasks, but to the prevailing surrounding. Bonner (2008) provides some examples of the environmental variables, such as monetary incentives, feedback, group characteristics, team effects, and rules and regulations. In particular, the

last factor as imposed by regulators on certain policies may greatly influence individuals' judgment performance.

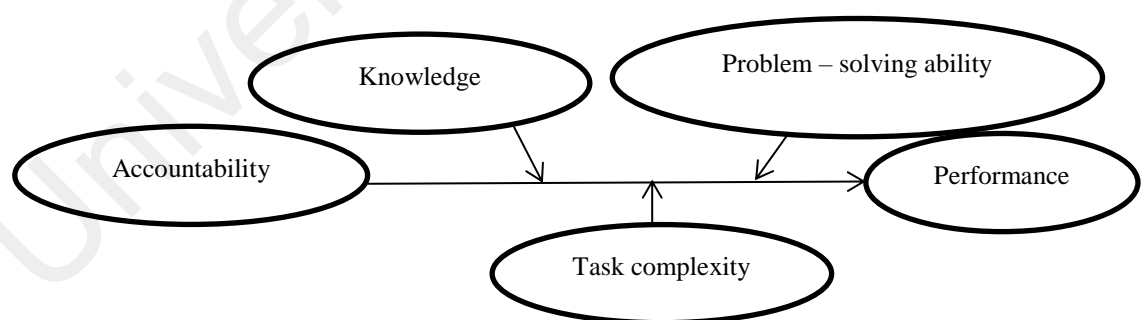
**“Motivation”** is defined as an internal state of an organism that impels or drives it to action (Reber, 1995 cited in Bonner, 2008). Furthermore, the environmental factors or determinants (e.g., monetary incentive and accountability to auditors' tasks or superiors) strongly influence motivation (Bonner, 2008). Likewise, the above factors can also help develop people's internal needs, drives, and motives. These needs or motives can be defined as “intrinsic motivation”, which can also be influenced by external factors, including monetary incentives, accountability demands, and goals (Bonner, 2008).

For instance, an individual would be more motivated if his or her surrounding provides better rewards, such as monetary rewards, bonuses, or titles. Similarly, internal factors, such as human recognition, self-satisfaction, and motives would also motivate such individual. In fact, a number of studies have found that motivation was positively related to the setting of specific and difficult goals, as opposed to having easy or no goals at all (Locke and Latham, 1990 cited in Bonner, 2008). In addition, self-efficacy is another factor that may influence the impact of motivational effort on judgment decision making (Bonner, 2008). Research on motivational effects on judgment performance and work performance include Tan and Kao's (1999), Chen, Casper, and Cortina's (2001), Mohd-Sanusi's et al.(2007), Iskandar, Sari, Sanusi, and Anugerah's (2009) and Iskandar and Sanusi's (2011) studies.

**“Performance”** is defined as the correspondence of the judgment to a particular criterion. Typically, the criteria for assessing performance of judgment are based on an environmental event or outcome, which includes business failure, a statistical norm (Bayesian probability) or other judgment criteria (e.g., professional standards and expert

opinions) (Libby, 1995). Moreover, performance can be measured through specific task performed by auditors (Tan and Kao, 1990). For example, the auditor's ability to perform a particular task and to apply knowledge in its finest detail would help determine the effects of knowledge and task complexity on performance (Gibbins, 1992). Alternatively, the measurement of performance in terms of effectiveness and efficiency can be carried out through consensus and accuracy of knowledge generated by those auditors.

To help explain the determinants of judgment performance, Bonner (1994) proposed a conceptual model that describes the relation between task complexity and skills as well as the relation between task complexity and motivation. Later, Tan and Kao (1999) extended this model to help them elaborate on how the components of skills (i.e., knowledge and ability) can separately influence performance and how these separate skill components jointly interact with accountability and task complexity to affect performance as depicted in Figure 3.5. Clearly, this model highlights several moderator variables that moderate the relation between accountability and performance, namely knowledge, task complexity, and problem-solving skill.



**Figure 3.5 : Tan and Kao's (1999) Conceptual Model**

In Tan and Kao's (1999) study, they found that there was three-way interactions involving the three moderator variables, indicating that accountability improved performance when both knowledge and problem-solving ability were high, but not when only problem-solving ability was high. More revealingly, and interestingly, accountability improved performance when knowledge and problem-solving ability were both low. Thus, these researchers argue that if auditors lack knowledge and problem-solving ability, accountability may induce increased effort but not improved performance. In such a situation, it may be more appropriate to support auditors with decision aids or to replace them with other competent individuals. Alternatively, these auditors can be re-assigned to tasks, which fit with their knowledge and ability.

In judgment decision making (JDM) research, several researchers have proposed a number of theoretical frameworks to explain the mechanism of JDM process among auditors and accountants. Albeit having reasonable theoretical underpinnings (as discussed in the previous section), the frameworks have not thus far adopted an amalgam of related theories to make them more holistic or comprehensive for JDM research. By far, the theoretical aspects used to explicate the dynamic of JDM are derived from the behavioral decision theory and human information processing theory (Solomon and Shield, 1995; Trotman, 1996), and theories that are related to economy and psychology (Birnberg, Luft, and Shields, 2007). In fact, Trotman et al. (2011) state that there has been a significant growth in JDM research utilizing cognitive, psychological, and social theories to investigate and understand the behaviors of auditors, accountants, and managers.

As highlighted previously, the JDM's research objectives include evaluating the quality of judgment of auditors, preparers, and users of accounting reports, describing the process of how judgments are made, determining factors that impact these

judgments, developing and testing theories of the underlying cognitive process by which judgments are made, and improving the judgments process (Trotman, 1996; Trotman et al, 2011). Given the importance of these objectives, the present researcher conceptualized the relevant theoretical framework that was synthesized from several theoretical aspects found in spirituality and JDM research. In particular, this framework helped the researcher to investigate the association between spirituality and audit judgment performance as framed in the Social Cognitive Theory (SCT).

### **3.3.2 Spirituality and Determinants of Performance: A Product of Social Cognitive Theory**

The SCT was derived from the social learning theory (SLT), which was espoused by Albert Bandura in the 1960s. In essence, the former refers to a psychological model of behavior emphasizing that learning occurs in a social context, and that much of what is learned is gained through observation (Bandura, 1986; Bandura, 1989; Wood and Bandura, 1989). That being the case, the SCT posits that people are neither driven by inner forces nor automatically shaped and controlled by the environment. In other words, this theory emphasizes social influence, external or internal social reinforcement as well as individual factors. More specifically, this theory conceives that individuals acquire and actualize their behaviors based on the social environment in which they live. To further explicate this theory, Bandura (1989) made several basic assumptions about learning and behavior.

First, the theory assumes that *triadic reciprocity*, or the view that personal, behavioral, and environmental factors influence each other bi-directionally. In addition, Bandura (2003) defined the modes of human action as a *personal agency*, which essentially means that an individual's actions are the product of continuous

interactions among cognitive, behavioral, and contextual factors of his or her surroundings. Therefore, based on the internal auditing perspective, there are certain factors within the internal auditing environment that would influence the process of learning among internal auditors.

Such influences are realized through auditors' personal experiences or reinforcements accorded by their superiors and team members. Alternatively, the theory suggests that the learning process is affected by the individual's own thoughts, self-beliefs, and professional framework. In this context, Bandura (1986) asserts that expectations, beliefs, self-perceptions, goals, and intentions shape and direct one's behavior. This contention is well encapsulated in Bandura's (1986) statement: "What people think, believe and feel, affects how they behave".

As emphasized earlier, the interpretation of internal auditing or Islamic (*shariah*) auditing is closely related to its pre-determined objectives. In fact, internal auditing or *shariah* auditing in IFIs embodies a different kind of objectives, which exert strong emphasis on adherence to *shariah* principles and *shariah* compliance. Therefore, the different expectations, beliefs as well as different types of knowledge (e.g., knowledge on IBF and *shariah*) would influence internal auditors to work and react based on their thoughts patterns and personal emotions. Particularly, an individual's thoughts patterns and emotions are developed by social influences, which would convey information and activate reactions through modelling, instructions, and social persuasion (Bandura, 1986).

Second, SCT assumes that individuals have proxy *agency* or an ability to influence their own behaviors and the environment in a purposeful, goal-directed manner. In such instance, individuals turn to proxy agency by influencing others, who have resources,



knowledge, and means to act on their behalf to secure the outcomes they desire (Bandura, 2003). Individuals, through their forethought, self-reflection, and self-regulatory process would exercise substantial influence over their own outcomes and the environment intensely. In the spiritual context, individuals would acknowledge the spiritual aspect of their lives by having a strong sense of “meaning seeking” and social connectedness to something greater than themselves. Therefore, the influence of high spirituality would create positive values that permeate their workplace, thus benefitting all concerned. According to Bandura (2003), social modelling operates within a larger set of distinctly human attributes and personality, which would provide the capacity for individuals to become more spiritual beings. Hence, individuals would be able to improve their capabilities through social modelling such as symbolization, abstract vicarious learning, forethought, self-regulation, and self-reflection.

The third assumption of SCT is *collective agency*, which refers to the act of individuals to utilize their knowledge, skills, resources, and their environment to shape their future (Bandura, 2003). The individual learning process involves not just the acquisition of new behaviors, but also the retrieval of individual knowledge from their surroundings, cognitive skills, concepts, rules, values, and other cognitive constructs. In essence, individuals would be able learn, but they may not be able to practice what has been learned if they lack motivation. Therefore, in view of this contention, internal auditors’ knowledge, skills, and ethics are expected to influence their judgement process and performance substantially. Coupled with high spirituality, internal auditors would then be able to engage in a meaningful, realistic judgement process.

The effects of spirituality on job performance would lead to the development and personality grooming of an organization’s workforce. According to Tesser (1988), spiritual practice at work helps develop and improve knowledge, skills, abilities, talents,

and personality of employees at work, leading to self-actualization and self-enrichment. The above factors, notably knowledge, skills, and experience, are important determinants of expertise in auditing judgment decision making. Thus, internal auditors would be able to improve their judgment ability by observing and learning from others and exposing themselves to positively influential environment and behaviors.

Undisputedly, all IFIs require competent, expert internal auditors with specific knowledge and skills, to meet the former's objectives, which are based on *shariah* principles and precepts. Coombs (1984) (cited in Bandura, 1989) asserts that, based on the SCT, individuals would draw on their experiences and turn to their well-informed colleagues for support in their quest to develop their cognitive competencies. Furthermore, internal auditors' judgment performance may also be influenced by the requirements imposed by relevant IFIs. For example, such requirements may directly influence one's self-system, enforcing internal auditors to exercise control over their thoughts, feelings, or actions.

However, the acquisition of specialized cognitive competencies relies on modelled expertise due to the increasing complexity and rapid growth of knowledge. Thus, inexperienced, less capable individuals need to refer to highly knowledgeable, skilled personnel to help the former gain the required knowledge and reasoning strategies to make sound judgment. In this regard, the development of cognitive competencies can be accelerated by symbolically modelling the reasoning strategies for particular domains in systematic, highly informative ways (Coombs, 1984 cited in Bandura 1989). Using this model, internal auditors would be able make conjectures about their actions without any threats, thus making them more motivated to learn to enhance their judgment acuity.

### 3.3.2.1 Core Concepts of the SCT

Essentially, the social cognitive theory (SCT) consists of five central concepts, namely *Observational learning (Modelling)*, *Outcome expectation*, *Perceived self-efficacy*, *Goal-setting*, and *Self-regulation*. The elaboration of these concepts is as follows:

#### (i) Observational Learning (Modelling)

Observational learning, which is also called *vicarious learning* or *modelling*, is one of the core principles of SCT, which implies that people learn through observations. As people are inclined to create a model to follow and imitate, they would naturally observe and watch others' behaviors and the ensuing consequences, thus helping them to learn. To highlight this concept, Bandura (1986) proposed a few types of models as follows: (i) mastery modelling for demonstrating skills, (ii) coping modelling for dealing with struggles and mistakes before attaining proficiency. (iii) abstract modelling for transferring acquired knowledge and skills indirectly, and (iv) cognitive modelling for verbalizing one's thoughts when he or she is demonstrating a particular skill.

#### (ii) Outcome Expectation

The concept of outcome expectation reflects an individual's belief about what consequence is most likely to be expected if particular behaviors are performed. This concept is important because it determines the decisions people make about what actions to take and which behaviors to suppress. Thus, according to Bandura (1986), individuals will frequently perform actions or indulge in behaviors when the expected outcomes are valued, whereas behaviors resulting in unfavorable or irrelevant outcomes will be avoided.

### **(iii) Perceived Self-efficacy**

Self-efficacy has emerged as a prominent, influential concept in the SCT. Essentially, self-efficacy refers to an individual's belief in his or her ability to organize and execute the course of action at a given level of a particular task in order to attain a certain level of achievement (Bandura, 1989). More importantly, the SCT recognizes self-efficacy as a central cognitive force that serves as a sub-skill of self-regulation. Additionally, in JDM research, high self-efficacy has been reported to result in better performance (Iskandar and Sanusi, 2011). Thus, individuals with high self-efficacy would have the ability to perform better on a variety of tasks when they accommodate available choices, become more persistent, and use more effective strategies (Bandura, 1989). Furthermore, the ability to control oneself is heavily influenced by his or her view of himself or herself. Given this inherent view, individuals with low self-efficacy tend to avoid tasks and situations that they believe are beyond their capabilities

In auditing, the work of an auditor involves a myriad of judgmental activities, in which reasons and motivation from others would help him or her to make the right judgement. Particularly, in the *shariah* context, internal auditors should have strong faith to guide them partake in the judgmental process that fulfils the requirement for Islamic compliance. Indirectly, efforts to meet such Islamic requirements would help motivate internal auditors to make right judgement. Furthermore, internal auditors need to believe that they have relevant, sufficient capabilities, such as sound knowledge in Islamic banking and finance as well as *shariah* knowledge, when performing Islamic auditing. With such belief, internal auditors would be able to actualize their full potential, which helps improve their judgment decision making (Bandura, 1989). Put simply, internal auditors must know what to do and how to do it, which would lead to better judgement.

#### **(iv) Goal Setting**

Goal setting is another important concept of the SCT that reflects the cognitive representation of anticipated, desired, or preferred outcomes (Bandura, 1986). Therefore, goals can be exemplified as a motivational factor for individuals to not only learn but to use forethought in envisioning the future, identifying desired outcomes, and generating effective plans of action to achieve certain objectives. In this context, goals are intricately intertwined with internal auditors' outcome expectations and perceived self-efficacy. Setting goals is an important factor for self-regulation because it provides a clear objective for internal auditors and serves as a benchmark of the judgement process. In brief, to explain this concept relating to this study is by understanding the role of spirituality in providing a better relationship between an individual with his environment and the society as a whole. Having a high spirituality for internal auditors is believed to promote better performance in the workplace and to attain self-fulfilment.

#### **(v) Self- regulation**

Self-regulation, which is dependent on goal setting, helps internal auditors manage their thoughts and actions to reach particular outcomes. Essentially, self-regulation comprises three principal sub-functions: (i) *Self-observation* refers to individuals' ability to monitor or keep tract of their own behaviors and outcomes, (ii) *Self-judgement* refers to the process through which individuals evaluate the effectiveness of their actions that would help achieve specified goals, and (iii) *Self-reaction* pertains to individuals' responses to the evaluation they have made to enable them to modify, reward, or discontinue their behaviors. In unison, these three sub-functions would wield a tremendous impact on the judgmental process, of which may involve the assessment of their personal standards, individual referential performances (i.e., standards norms,

social comparisons, self-comparisons and collective comparisons), and individual valuation process of their behaviors and performance

Furthermore, Bandura (1991) asserts that one's self-regulation would help him or her embrace and practice good moral conduct. In the moral dimension, the evaluative standards are more stable, the judgmental factors more varied and complex, and the affective self-reactions more intense. Given these unique characteristics, spirituality and ethics would exert a profound impact on an individual's self-regulation. Hence, based on the SCT, both the internal and external factors (e.g., knowledge, task complexity, spirituality, and ethics) would forge the type of behavior and cognitive thinking to be performed by individuals. Such behaviors and cognitive thinking are well articulated by Ford (1994) (cited in Emmons, 1999) as follows:

*“four pre-requisites for effective functioning within human beings are: motivation, which determines the content of goal directed action; skills, which produce the desired consequences of movement towards goals; biological architecture, which supports the motivational and skill components; and a supportive environments (or at least one that is non-hindering), which facilitates progress toward the goal. Intelligent behavior, then, requires “a motivated, skillful person whose biological and behavioral capabilities support relevant interactions with an environment that has the informational and material properties and resources needed to facilitate goal attainment”.*

Arguably, the adoption and application of the five core concepts of SCT would help examine the impacts of the critical variables (i.e., spirituality, task complexity, knowledge, and ethics) on judgement performance in finer details based on the

cognitive perspective. More importantly, such application of the five concepts in judgment decision making research would further dissect the intricacy of the internal and external factors and their relations, allowing the researcher to gain greater insights into the role of spirituality within the framework of social cognitive theory. Figure 3.6 summarizes the conceptual framework adopted in this study.

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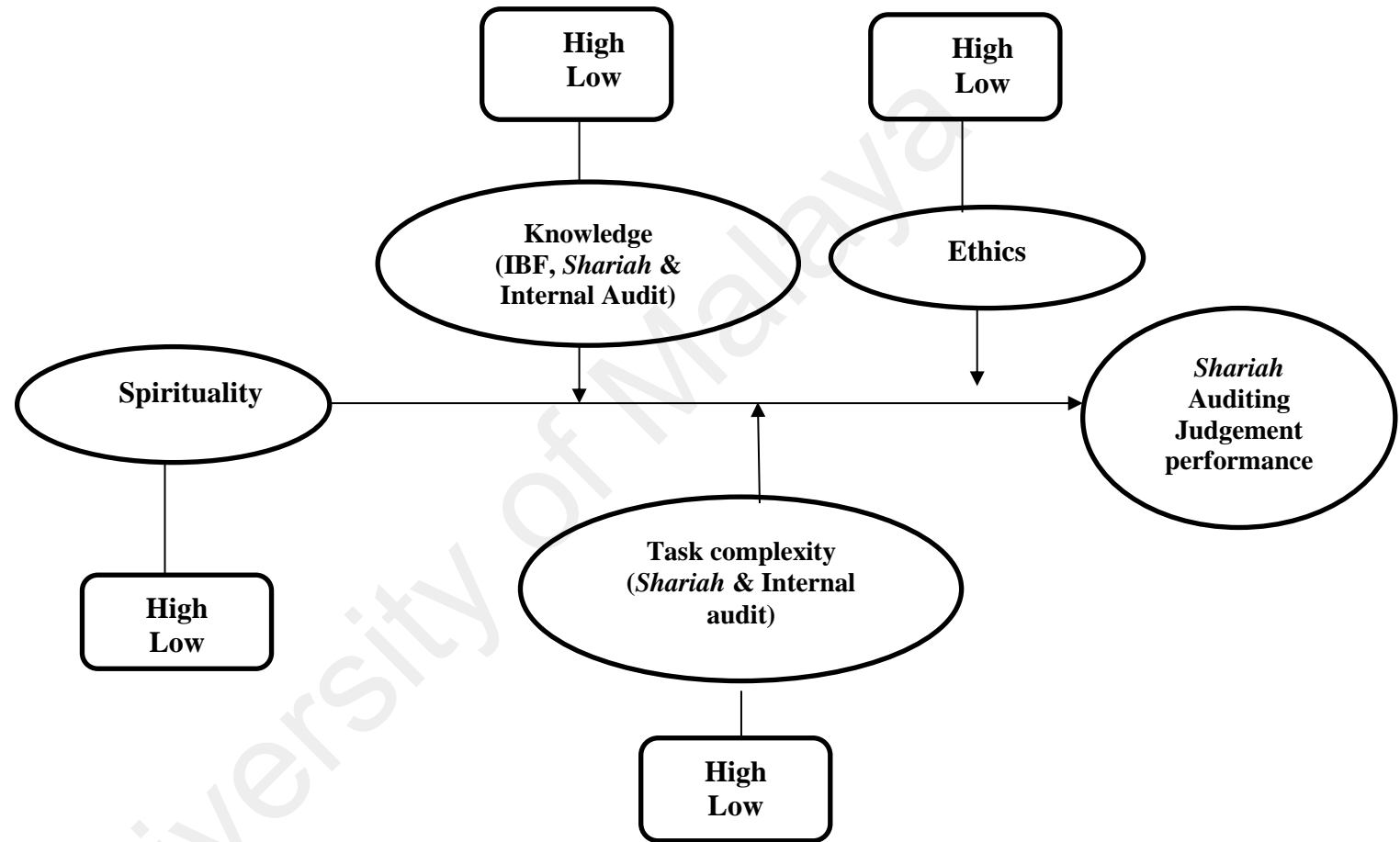


Figure 3.6 : The Conceptual Framework



### 3.4 Conceptual Framework and Hypotheses formulation

The conceptual framework of the present study was adopted and refined from an earlier framework proposed in Tan and Kao's (1999) study. In their study, they examined the relation between accountability and performance and the moderation effects exerted by task complexity, knowledge, and problem-solving ability. They found that accountability did not improve performance for low-complexity task. Furthermore, they observed that the individual who performed the medium-complexity task lacked the requisite knowledge, and the individual who performed the high-complexity task lacked either requisite knowledge or problem-solving ability. Based on their findings, accountability serves as a motivational factor in conceptualizing the model of the determinants of performance (Einhorn and Hogarth, 1981; Libby and Luft, 1993).

In contrast, the present study examined three factors, namely task complexity, knowledge, and ethics that might moderate the relation between spirituality and internal auditing performance. In fact, these three factors also correspond to previously identified determinants of performance (Einhorn and Hogarth, 1981; Libby and Luft, 1993). Thus, understanding spirituality as one of the critical determinants that would affect internal auditing performance in IFIs is important to address the different objectives of the Islamic financing operations. More specifically, the present study sought to examine the combined impact of internal auditors' intrinsic (i.e., spirituality and ethics) and extrinsic (i.e., knowledge and task complexity) values on judgment performance when they carry out the auditing task.

Naturally, auditing practices based on *shariah* would draw a great deal of attention where researchers and scholars alike debate the effectiveness and efficiency of *shariah* auditing and *shariah* compliance. Such debates tend to focus on the definitions of

*shariah* auditing, its unique objectives, the needs of *shariah* auditing, the challenges of *shariah* auditing as well as the competency requirements of internal auditors. In particular, SGF 2010 stipulates stringent prerequisite for appropriate level of knowledge and competency of internal auditors to ensure they could deal with *shariah*-related issues of Islamic banking products and operations professionally.

In principle, internal auditors would be deemed competent if they have two important capabilities to help them carry out their audit task effectively. First, they must have substantial knowledge in auditing; second, they must have the ability to apply that knowledge (Moore, 1970 cited in Hassall et al., 1996). Furthermore, for Islamic banking and financing needs, internal auditors of IFIs need to have specialized industrial knowledge. For the present study, three types of knowledge were examined, namely Islamic banking and finance knowledge, *shariah* knowledge and general internal audit knowledge.

In JDM research, Taylor (2000) examined an auditor's industrial specialization to determine the effects of assertion-level on inherent risk assessment. Specifically, Taylor's (2000) research involved a case study in which a hypothetical banking client's financial statements were mailed to an experienced *banking* audit specialist and an experienced *non-banking* audit specialist to assess any inherent risks of material misstatements. The findings indicate that industrial experience would translate into better audit performance, and not general experience. In view of the above revelations, internal auditors of IFIs should have sufficient Islamic banking and finance knowledge, internal audit knowledge, and *shariah* knowledge to help them perform *shariah* auditing successfully. Having the above knowledge is not enough as internal auditors also need to apply these types of knowledge skillfully and articulately in varying organizational

contexts (Maclure and Norris, 1992 cited in Hassall et al., 1996). Thus, the researcher proposed the following hypotheses:

**H1: The three most important knowledge required to perform *shariah* audit are Islamic Banking and Finance Knowledge, Internal Audit Knowledge and *Shariah* Knowledge.**

### **3.4.1 Adapting spirituality in JDM**

Although many studies have examined the effects of spirituality on various types of performances, such as work performance, individual performance, organizational performance, little research has thus far focused on evaluating the effects of spirituality on the performance of audit task and audit judgment performance. Nonetheless, past studies provide evidence on the positive impact of spirituality on work performance as this construct would be able to motivate individuals to perform better (Ashmos and Duchon, 2000; Giacalone and Jurkiewicz, 2003; Nasina and Pin Pin, 2011; Neck and Milliman, 1994; Petschawang and Duchon, 2009). Moreover, evidence indicates that investigating spirituality as an independent dimension would provide interesting insights into the understanding of its relation with organizational outcomes (Hernandez Lopez, Ramos Ramos, and Ramos Ramos , 2009).

Individuals with high spirituality are able to appreciate and consider a host of conditions (especially those that are related to their working environment and their ability) to make better judgment. From the socio-cognitive perspective, such highly spiritual individuals would be able to cope with challenges and persist in their endeavors given their strong sense of self-efficacy, self-regulation, and goal orientation, among others. With these attributes, they would be able evaluate and revise their

strategies by weighing in their own capabilities and other social factors, thus resulting in better judgment. In contrast, individuals with low spirituality lack the above attributes, rendering them ineffective in their task. Apparently, these individuals would not push themselves for perfection to serve their organization and community (Ali, 2005).

In addition, Bandura (2003) asserts that social factors involving human attributes and personality enhance the capacity of an individual to become a more spiritual being. This notion is further reinforced by Emmons (1999), who asserts that spirituality is an important aspect of human intelligence that provides rationality and a sense of purpose concerning one's life with his or her creator. Particularly, Emmons (1999) posits that spirituality is a set of capacities or abilities that enable people to solve problems and attain goals in their lives based on five components of spirituality intelligence as follows:

**Table 3.1: Core Components of Spiritual Intelligence and its Effects**  
**Emmons (1999)**

Capacity for transcendence	Ability of an individual to relate with the ultimate divine being or going beyond our physical state to affect a heightened awareness of ourselves. As a result, it enables an individual to synchronize their life to develop a connection with other human beings.
Ability to enter into heightened spiritual state of consciousness	Skills of awareness of an ultimate reality that takes the form of sense of oneness or unity in which all boundaries disappear and objects are unified in totality.
Ability to invest everyday activities events and relationships with a sense of the sacred	Represent a spiritual striving that are intentional states that represent ultimate concerns in a person's life which imbued the sense of sacredness in an individual. Positive results indicate people to experience a sense of meaning, fulfilment and personality unification.
Ability to utilize spiritual resources to solve problems of living	Ability to utilize spiritual resources to solve problems in living in terms of revise and re-prioritize of goals, induced stress and more positive towards life.
Ability to engage in virtuous behaviour (to show forgiveness,	Spirituality encourages people to engage in virtuous behaviour that leads to effectively manage their

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to express gratitude, to be domain of life and other people.  
humble, to display compassion)

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The discussion on the definitions of spirituality and the theoretical frameworks in spirituality research have been dealt with in detail in Section 2.2.2 and Section 3.2, respectively. Clearly, based on the Islamic financial perspective, a different focus of research, as opposed to the previous ones, is entailed to examine factors that would exert an impact on the judgment performance of *shariah* auditing. The different research focus is needed to address the different objectives, approaches, and processes of the Islamic financial auditing as the fulfilment of the *shariah* principles is of paramount importance. Thus, the researcher hypothesized the following:

**H2: Spirituality of internal auditors affects judgment and performance of *shariah* auditing.**

#### **3.4.2 Performance Determinants (Task Complexity, Knowledge, and Ethics) and Audit Judgment Performance**

Understanding spirituality and determinants of performance is important because spirituality can bring about meaningful, affectional experiences to individuals, in which they feel a strong connection with other people and their organization. This sense of connectedness would in turn influence their actions (Kolodinsky et. al., 2008). In some studies, evidence suggests that spiritual practices in the workplace would result in enhanced individual creativity, increased honesty and trust, and increased commitment to organizational goals (Krishnakumar and Neck, 2002; Neck and Milliman, 1994). Thus, it is conceivable that spirituality could also influence internal auditors' performance of *shariah* auditing in IFIs.

However, from the JDM perspective, whether spirituality can influence performance is currently not clear. Albeit the extensive research of spirituality and performance (Beheshtifar and Zare, 2013; Giacalone, 2004; Jurkiewicz and Karakas, 2010; Krishnakumar and Neck, 2002; Kolodinsky et al., 2008; Petchsawang and Duchon, 2012), not a single study was devoted to investigating spirituality, determinants of judgment performance and relevant frameworks in JDM research. Thus, such research gaps need to be addressed because spirituality plays an important role in motivating individuals to strive for excellence through better performance. Their striving for such attainment is driven by their sense of strong accountability to their fellow human beings and surroundings (Ashmos and Duchon, 2000).

In certain cases, spirituality relate to religious values imbued in the religious beliefs and teachings (Hawa, 2004; Sawatzky et al., 2005; Rulindo and Mardhatillah, 2008; Gall, Malette, and Guirguis-Younger, 2011; Kamil et al., 2012). In other words, spirituality is associated with the feeling of “connectedness” of individuals with others, the universe, their surroundings, and the supreme power. As such, spirituality could influence individuals to be more accountable in their actions. By being accountable, in the auditing context, internal auditors would become more energetic and meticulous in discharging the duties, thus enabling them to make appropriate judgment or decisions. Accountability as one of the determinants of judgment performance is classified under environmental variables (Bonner, 2008; Libby and Luft, 1993; Libby, 1995; Trotman, 1995; Tan and Kao, 1999). For example, Bonner (2008) describes accountability as “the implicit or explicit expectation that may be called to justify one’s belief, feelings, and actions toward others”.

Even though accountability and spirituality have been studied quite extensively in JDM research, examinations of their relations with the determinants of performance are

still lacking. In the present study, the factors knowledge, task complexity, and ethics were treated as determinants of judgment performance as espoused by Einhorn and Hogarth (1981) and Libby (1983). Furthermore, the researcher examined the moderation effects of these determinants on the relation between spirituality and audit judgment performance. In this study, knowledge was proxied by technical knowledge, which specifically tested internal auditors' knowledge of Islamic banking and finance as well as internal audit knowledge; environment and spirituality and ethics were proxied by task complexity and motivation, respectively. In addition, the researcher adopted the approach used by Bonner and Lewis (1990), who examined the effects of auditors' reasoning abilities on audit task complexity. Using this approach, the researcher tested the "ability factors" based on IBF tasks and internal audit tasks questions, which helped determine and measure the determinants of performance. Essentially, answers to these questions helped the researcher to probe the internal auditors' reasoning process that was needed to judge whether or not *shariah* compliance had been fulfilled.

Audit research pertaining to the above determinants of performance has a long history, culminating in many important insights provided by several leading scholars and researchers, which include Bonner and Lewis (1990), Bonner and Pennington (1991), Libby (1995), Abdolmohammadi and Wright (1997), Tan and Libby (1997), Tan and Kao (1999), Solomon et al. (1999), Mohd-Sanusi et al. (2007), and Iskandar and Sanusi (2011). For example, Bonner and Lewis's (1990) study involved the examination of the interaction effect between knowledge and task on auditors' expertise. For knowledge, they further classified it into three types, namely general knowledge, world knowledge, and sub-specialty knowledge. In their study, they predicted that unstructured tasks would indirectly affect performance, especially when auditors' knowledge was acquired in a poor learning environment. In their study, they

found several important findings that further enrich the relevant body of knowledge. First, the relation between general knowledge and specific expertise was conditional based on the auditors' level of experience and the task demands. Second, and in particular, the impacts of ordinary managers' expertise on performance of specific tasks and other general tasks did not differ significantly. In contrast, for the senior managers, such impacts differed markedly based on the tasks that placed different problem-solving ability.

On the other hand, Libby and Tan (1997) examined the effects of tacit managerial knowledge (i.e., knowledge of how to manage oneself, others and one's career) on technical accounting, auditing knowledge as well as the ability of auditors. They also investigated a variable of determinants of performance using actual performance evaluation to classify experts. Their findings suggest that the difference in tacit managerial knowledge at all levels is due to the knowledge accrued through experience. The authors also suggest that a set of soft skills, such as one's personality trait, may enhance auditors' ability to learn from experience, ultimately affecting their auditing performance. In addition, they assert that non-technical skills are an important part of the actual performance evaluation at the managerial level.

For the present study, the conceptual framework developed is based on an earlier study by Tan and Kao's (1999), in which they examined the main effect of accountability (as a motivation factor) on auditing performance and the interaction effects of determinants of performance (i.e., knowledge, task complexity, and problem-solving ability). Similarly, in this present study, spirituality was treated as a motivation factor (like other determinants of performance) that might introduce a moderation effect on their performance. Arguably, for high task complexity, the effect of spirituality on audit judgment performance would be correspondingly high, and a similar argument is



true for low task complexity. Clearly, task complexity would moderate the effect of spirituality on judgment performance.

Primarily, in relation to the SCT, spirituality is a crucial self-regulatory factor that influences performance. Thus, spirituality would influence individuals to maximize their efforts to achieve desired outcomes and to remain steadfast in facing difficulties or setbacks, which is a reflection of their self-efficacy (Bandura, 1997). In the same vein, internal auditors need to be prudent in performing their auditing tasks in the IFIs, the industry in which adherence to Islamic compliance and principles is extremely important.

Like task complexity, knowledge would also moderate the relation between spirituality and judgment performance. More precisely, the moderation effect of knowledge would result in several outcomes, such as high spirituality would lead to improved performance only when internal auditors' knowledge (to help them perform audit tasks) is sufficient. In other words, internal auditors should possess high spirituality, sufficient knowledge, and high ethics to enable them deal with tasks of high complexity effectively, which would lead to better audit judgment performance. On the contrary, the reverse would be true for internal auditors with low spirituality, low knowledge, and low ethics. This contention is in line with the findings of spirituality research and judgment decision-making research involving these performance determinants.

Moreover, the association between task complexity and knowledge is expected to be significant. Essentially, task complexity is a measure of the content knowledge possessed by internal auditors and their ability to apply such knowledge in appropriate contexts. In fact, *shariah* objectives, audit process, and existing conditions contextualize

the situation in which internal auditors need to analyze and make judgment regarding the *shariah* compliance of IFIs' business operations. Thus, utilizing appropriate knowledge in the right context would help internal auditors to perform audit tasks with greater accuracy. Furthermore, task complexity consists of two levels of complexity, namely "high and low" Islamic audit task complexity, and "high and low" internal audit task complexity.

Additionally, researchers are also concerned with the influences of ethics and moral conduct on work and business performance. Moreover, spirituality and ethics are becoming a common theme in recent research. Emerging evidence from such research suggests that spirituality helps improve ethical cognition, which is an important factor in determining how individuals perceive ethics in a particular situation (Jurkiewicz and Giacalone, 2004). Guided by this spiritual proclivity, highly spiritual auditors would be more circumspect about approving business practices, unless they have painstakingly scrutinized the practices in minute detail. Their strong sense of heedfulness, which reflects their firm religious belief, helps improve the audit judgment process. In fact, without strong spirituality, ethical codes of conduct alone cannot eliminate unethical behaviors and influence individuals to adhere to the codes.

In the related literature, several studies pertaining to the effect of ethics orientation on individual performance have been reported, such as Douglas et al.'s (2001) and Johari et al.'s (2012) studies. Despite these commendable efforts, the findings are inconclusive and, on several occasions, inconsistent. For example, Johari et al. (2012) found that the differences in their subjects' ethical orientation were not significant to predict their judgment in the auditing context. In contrast, Douglas et al. (2001) found that ethical orientation was significantly related to ethical judgment only in a high moral

intensity situation, but not in a low moral intensity situation. In view of the deliberated aspects, the researcher proposed the following hypotheses:

**H 3: There are significant moderating effect of task complexity, knowledge and professional ethics on the relationship between spirituality and *shariah* auditing judgement performance.**

**H 3 (a): There is a moderating effect of task complexity categorized as High and Low on the relationship between spirituality and *shariah* auditing judgement performance.**

**H 3 (b): There is a moderating effect of Knowledge categorized as High and Low on the relationship between spirituality and *shariah* auditing judgement performance.**

**H 3 (c): There is a moderating effect of professional ethics - (High and Low) on the relationship between spirituality and *shariah* auditing judgement performance**

### **3.5 Overview of the chapter**

This chapter provides the discussion of theoretical framework applicable in spirituality and JDM research. In particular, the appropriate theoretical framework, which is based on the social cognitive theory, for the present study was proposed involving all relevant factors or variables, namely spirituality, auditing judgment performance, and determinants of performance (i.e., knowledge, ethics, and task complexity). It was hypothesized that spirituality would wield a strong impact on *shariah* auditing judgment performance among internal auditors in IFIs. Furthermore, it was hypothesized that internal auditors' knowledge, ethics, and task complexity would moderate such an impact.

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

The purpose of this chapter is to discuss the research method used in the study to address the research objectives as stated in Chapter 1. This chapter also links the literature review and theoretical development presented in the previous chapters to the research findings presented in Chapter 5 and Chapter 6. Essentially, research methods are not simply tools but methods to help researchers in envisioning and examining the connection between different viewpoints in social reality (Bryman and Bell, 2007). Accordingly, Oliver (2004) states that “the term methodology is used in a general sense to refer to both theoretical and practical aspects of the conduct of the research” (p. 121). More specifically, the use of research methods helps facilitate the process of collection and analysis of data (Hart, 1998).

The selection of a research method and an approach to conduct research is an important issue that needs to be deliberated wisely by all researchers as it will greatly affect the outcomes of the research (Sekaran, 2003). An appropriate research method is also important to provide a valid conclusion and inferences that may be drawn from the research findings (Ryan, Scapens, and Theobald, 2002). In this chapter, the researcher discusses several theoretical and practical issues, such as philosophical paradigms, methods, and approaches. The following section further elaborates on the procedures used for data collection adopted to address the research questions of this study. In the present study, the researcher identified three (3) main research objectives and formulated three (3) corresponding research questions accordingly. The remaining

discussion of this chapter deals with the types of research, research paradigms, ontology and epistemology, ontology, logic, and rhetoric.

**Table 4.1: Summarizes the Research Objectives, Research Questions and Hypotheses of this Study.**

<b>Research Objective and Question:</b>	<b>Descriptions</b>
<b>Research Objective (RO) - 1</b>	To examine the knowledge requirements of internal auditors to perform <i>shariah</i> audit in Islamic financial institutions (IFIs) in Malaysia.
<b>Research Questions (RQ) - 1</b>	What kinds of knowledge are needed by internal auditors to perform <i>shariah</i> audit in Islamic financial institutions (IFIs) in Malaysia.
<b>Hypotheses 1</b>	The three most important knowledge required to perform <i>shariah</i> audit are Islamic Banking and Finance Knowledge, <i>Shariah</i> Knowledge, and Internal Audit Knowledge
<b>Research Objective (RO) - 2</b>	To examine the impact of spirituality on internal auditors' <i>shariah</i> audit judgement performance.
<b>Research Questions (RQ) - 2</b>	Does spirituality affect internal auditors' <i>shariah</i> audit judgement performance?
<b>Hypotheses 2</b>	Spirituality of internal auditors affects judgment and performance of <i>shariah</i> auditing
<b>Research Objective (RO) - 3</b>	To examine the moderating effects of task complexity, knowledge and professional ethics on the relationship between spirituality and internal auditors' <i>shariah</i> auditing judgement performance.
<b>Research Questions (RQ) - 3</b>	Do task complexity, knowledge and professional ethics moderate the relationship between spirituality and internal auditors' <i>shariah</i> audit judgement performance?
<b>Hypotheses 3</b>	There are significant moderating effect of task complexity, knowledge and ethics on the relations between spirituality and <i>shariah</i> auditing judgement performance.

## 4.2 The Research Methodology

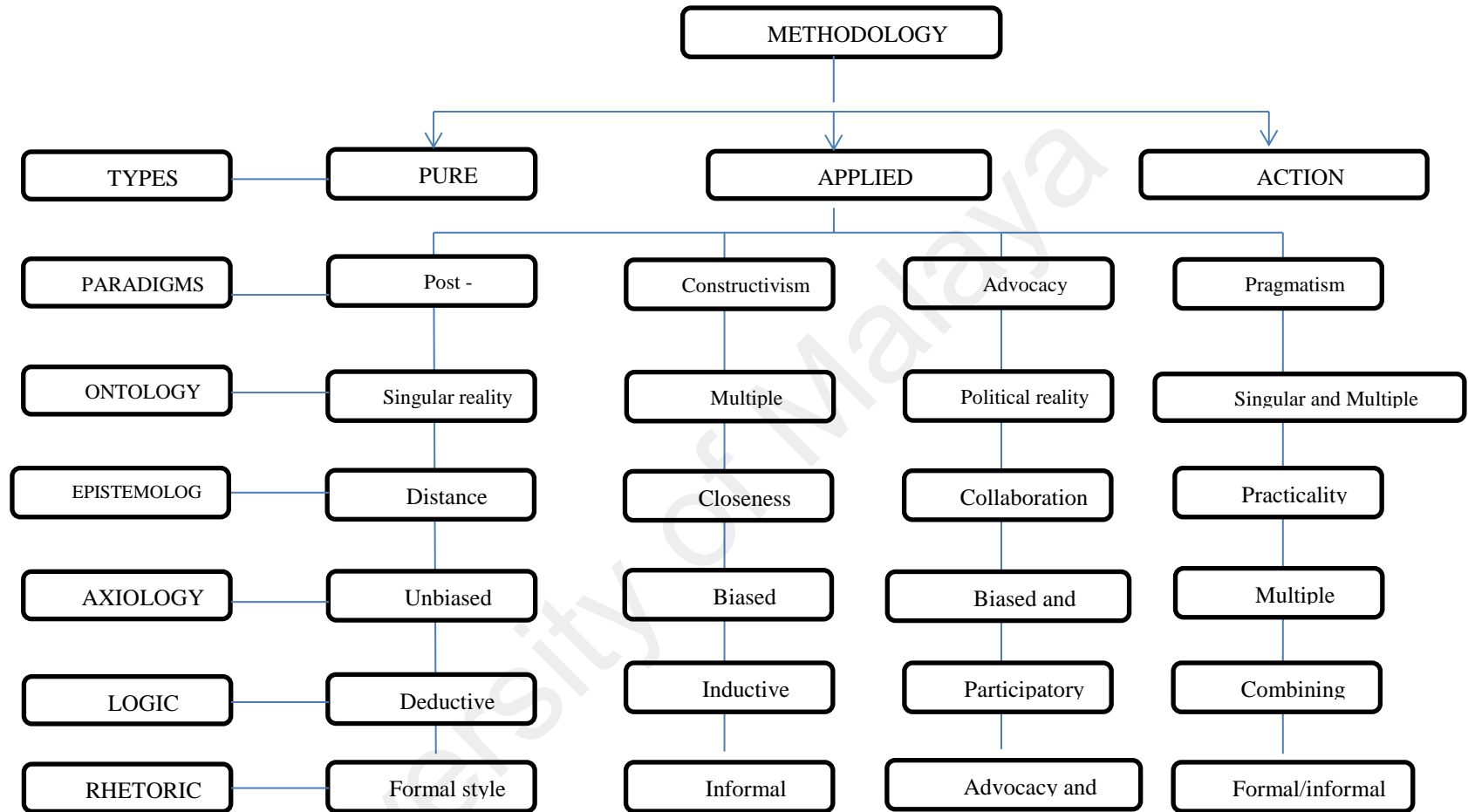
The chapter highlights the research methodology used by researchers to guide them to achieve the research objectives, to validate the research findings as well as to enhance the reliability of the findings. However, before selecting the appropriate research methods, researchers need to familiarize with the background of their research and to have sufficient knowledge in the specific area of research so as to establish a strong

foundation. In other words, researchers should examine and understand the relevant philosophical concepts or worldviews, which shape their reasoning. In this regard, Van Manen (1990) (cited in Creswell and Clarks, 2007) argues that methodology “consists of a philosophical framework and the fundamental assumptions of research” . In support of the above argument, Ryan et al. (2002) contend that the selection of appropriate research methods is based on several assumptions as follows:

*“The assumptions which the researcher holds regarding the nature of the phenomenon’s reality (ontology), will affect the way in which knowledge can be gained about that phenomenon (epistemology), and this in turn affects the process through which research can be conducted (methodology). Consequently, the selection of an appropriate research methodology cannot be done in isolation of a consideration of the ontological and epistemological assumptions, which underpin the research in question. Also relevant to note that methodology is concerned with the process of doing research and such, it has both ontological and epistemological dimensions”* (p. 35 and 36).

As such, the researcher also discusses the approach and methodological position of this study. Likewise, the researcher also elaborates on the philosophical approach used in this study based on Creswell and Clark’s (2007, p. 24) work pertaining to the common elements of worldviews and their implications for practices as shown in Figure

4.1.



**Figure 4.1 : The Common Elements of Worldviews and their Implications for Practices**  
 (Source: Adapted from Creswell and Clark , 2007;p.24)

#### 4.2.1 Types of Research

In the realm of research, there are many types of research used by researchers and scholars. Nonetheless, the types of research can be classified into three types of research, namely pure research (also known as basic research), applied research, and action research (Easterby - Smith, Thorpe, and Lowe, 2002). More importantly, selecting the appropriate research type is critical to researchers' efforts to address their research objectives, which lead to specific research outcomes. The same researchers provide clear explanations regarding the three categories of research as follows:

(i) **Pure research** (basic research) is the type of research that aims to develop new theories with or without any practical implications. Its main purpose is mainly to seek understanding and gain knowledge about particular subject matters, and it may not have specific objectives other than uncovering new things. Under this category, there are three forms by which the theoretical development may take place as follows: (a) Discovery – merging new ideas from the research, (b) Invention – generating new techniques, methods or ideas deal with particular problems, and (c) Reflection – applying existing theories, techniques, and ideas in different situations and contexts.

(ii) **Applied research** is research that basically starts with specific objectives and often involves practical implications to address or to provide answers to real-world problems. It is more specific and structured in nature compared to pure research. However, theories may have a part to play in applied research by investigating the effects of theories in practices. In essence, Hart (1998) states that the aim of this type of research is to take theoretical insights and apply them in real-world situations.

(iii) **Action research** is an inquiry process, which involves active participation by researchers within the environment being researched. The main premise of action



research is that in order to understand a phenomenon, the researcher should try to change it and experience an involvement with members of an organization. Bryman and Bell (2007) defined action research as “an approach in which the action researcher and a client collaborate in the diagnosis of a problem and in the development of a solution based on the diagnosis” (p. 427-428).

Given the specific aims of this study and its implications for auditing practice, the researcher carried out the investigation based on the applied research methodology, in which factors or concepts being examined were derived from existing theories. In particular, the aims of the research were to understand the current practices of *shariah* auditing and knowledge requirements, and to examine the impacts of spirituality and determinants of performance on *shariah* auditing judgement performance in Islamic financial institutions (IFIs). In addition, the lessons learned from this study would enrich the body of knowledge concerning spirituality and Islamic banking and finance as well as internal auditing and judgement decision making. Furthermore, the findings of this study would help improve the current practices. For example, relevant finance regulators, such as the Bank Negara Malaysia (BNM) would be able to revise existing policies or introduce new regulations to further improve *shariah* auditing process in IFIs. Likewise, important agencies, such as the Institute of Internal Auditors of Malaysia (IIAM), would be able to improve or strengthen the role of internal auditors in ensuring effective, efficient internal control in the internal audit department of IFIs. The following section provides a discussion on the research philosophy adopted in this study and the choice of specific research paradigms, together with their justifications.

#### **4.2.2 Research Paradigms and Worldviews**

Bryman and Bell (2007) defined paradigm as “a cluster of beliefs which dictates scientists in a particular discipline to influence what should be studied, how research should be done, (and) how results should be interpreted” (p. 240). Literally, good research needs a sound foundation for its inquiry, and inquirers need to be aware of the implicit paradigm they bring to their studies. The understanding of research paradigm is vital due to the assumptions that researchers must have the ability to identify the right way of how knowledge is obtained, to determine the methods to gain such knowledge, and to use the right process in interpreting the reality. In general, there are two types of research paradigms in the research process, namely “positivism” and “constructionism” (also known as “interpretivism”). For the first, the main premise of positivism is that the social world exists externally, and the process to understand the environment should be measured objectively, rather than being inferred subjectively through sensation, reflection, or intuition (Easterby-Smith et al., 2002). Normally, positivist research is empirical and quantitative in nature as the objective world exists independently of the researchers’ perspective. Based on the positivist paradigm, such research will involve the process of hypotheses development and deduction by which specific observations will be used to demonstrate the veracity or falsity of the hypotheses.

On the other hand, the constructionist or interpretive paradigm differs markedly from the positivist philosophy. Essentially, constructionism stems from the view that “reality” is not objective and exterior, but it is socially constructed and given meaning by people, which explains why this paradigm is widely used in social research. (Easterby - Smith et al., 2002). Typically, the constructionist researcher is part of what is being observed, which actively incorporates a particular stakeholder’s perspective.

From these two basic philosophies, several other philosophies have emerged to guide the research process (Creswell and Clark, 2007) as summarized in Table 4.2.

**Table 4.2 : The Four Paradigms of Research (Creswell and Clark, 2007)**

<b>Worldviews</b>	<b>Post positivism</b>	<b>Constructivism</b>	<b>Advocacy and Participatory</b>	<b>Pragmatism</b>
<b>Nature</b>	<ul style="list-style-type: none"> <li>▪ Determination</li> <li>▪ Reductionism</li> <li>▪ Empirical observation and measurement</li> <li>▪ Theory verification</li> </ul>	<ul style="list-style-type: none"> <li>▪ Understanding</li> <li>▪ Multiple participant meanings</li> <li>▪ Social and historical construction</li> <li>▪ Theory generation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Political</li> <li>▪ Empowerment and issue oriented</li> <li>▪ Collaborative</li> <li>▪ Change oriented</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consequences of action</li> <li>▪ Problem centred</li> <li>▪ Plurastic</li> <li>▪ Real – world practice oriented</li> </ul>
<b>Approach</b>	Quantitative	Qualitative	Qualitative	Mixed Methods

*(Source: Compiled from Creswell and Clark, 2007)*

“Post-positivism” is a modification of positivism (Fox, 1990) involving theory recognition, hypotheses development, and data analysis, the latter of which is to reject or to accept the theory. Post-positivism is regularly associated with the quantitative approach. In addition, researchers’ claims for knowledge are based on determinism or “cause and effect” thinking. On the other hand, reductionism is the nature of narrowing and focusing on selected variables to inter-related detailed observations and measures of empirical variables as well as testing theories that are continually being refined.

By contrast, “constructivism” is a philosophy that requires researchers to work from induction of theory using their subjects’ views to build broader themes. Creswell and Clarks (2007) state that constructivism is a philosophy that is shaped by an individual’s perspective relating to his or her participants and finally relating to the theory. This philosophy covers a wide range of positions that are indistinguishable by post-positivist approach as opposed to relativist position. In reality, constructivist paradigm advocates

multiple, socially constructed realities which “when known more fully, tend to produce diverging inquiry” (Lincoln and Guba, 1986). In other words, this philosophy views that the study of realities cannot be examined in pieces or as variables but only in a whole and in a context. To emphasize this view, Lincoln's (1990) opinion articulately explains the ontology of constructivism as follows:

*“... reality is a social, multiple construction and the aim of constructivist science is to create idiographic knowledge, usually expressed in the form of pattern theories expressed as working hypotheses, or temporary, time and place bound knowledge.”*  
(p.77).

Thus, based on the above ontological description, constructivism is more associated with the qualitative approach by which researchers need to understand a particular phenomenon obtained from their observations among the participants or their subjects. In certain circumstances, researchers may be interested to study and understand their social values. As such, their research should be based on the “advocacy and participatory” worldview, the perspective which “holds that research inquiry needs to be intertwined with politics and a political agenda” (Creswell and Clarks, 2007). Therefore, there is a specific objective and a specific agenda for this type of study, which is to reform and to bring in benefits to societies as a whole. Particularly, studies using this framework would typically deal with prevailing social issues “such as empowerment, inequality, oppression, domination, suppression, and alienation” (Creswell and Clark, 2007).

As stated previously, the main objective of this type of research is to encourage the society to change for a better future. To achieve such changes, researchers would work collaboratively with their participants, and not marginalize them. This type of research

offers a voice to the participants and gives them the ability to form an agenda for reform. In other words, the participants may help design questions, collect data, analyze information, or reap the rewards of the research. This paradigm also refers to a critical theory that addresses political concerns (Johnson and Duberly, 2000). In essence, carrying out this research would use the qualitative approach rather the quantitative one.

“Pragmatism” is normally associated with mixed-method research as it involves multiple methods of data collection – which is aptly described as “paradigm soup” (Creswell and Clarks, 2007). In essence, pragmatism involves pluralism in methodology, drawing in quantitative and qualitative principles (Creswell and Clarks, 2007). Being pluralistic in methodology, this paradigm is best positioned in a wider context of understanding, discouraging rigid adherence to epistemological positions. Particularly, this paradigm places greater emphasis on research questions and findings over research methods. In addition, pragmatism encourages a more pragmatic approach, which means “to do whatever is necessary as long as it can address the research questions” (Creswell and Clarks, 2007). Of late, pragmatism is getting popular in organizational research, as it does not confine to any philosophies and realities.

In the present study, the research questions centre on factors affecting *shariah* auditing judgement performance of internal auditors in IFIs. Providing relevant answers to this type of questions entails a rich mix of data, which relies on multiple methods of data collection. Essentially, the thrust of such research is primarily to gather information using the qualitative approach by which a specific research theme representing a particular phenomenon will emerge. Hence, there is a need to first explore the phenomenon qualitatively, which would lead to the discovery of the underlying problems and the formulation of relevant research questions.

Thus, the researcher used the most appropriate research paradigm for the present study – the pragmatist paradigm. As such, interviews were conducted to investigate existing *shariah* auditing practices among internal auditors by focussing on their objectives, framework, process, practices, limitations, and challenges. The respondents were first given a series of structured statements (which was developed based on the BNM's *shariah* governance framework and other researchers' recommendations) using email to help them familiarize with the type of questions before the face-to-face interviews. During the face-to-face interviews, the respondents were given ample time to explain their understanding, share their experience of *shariah* auditing practices, and express their concerns on the best practice of *shariah* auditing. In other words, this type of interview provides respondents with greater leverage to “perceive, think, and feel” (Saunders, Lewis, and Thornhill, 2000). Using the pragmatist paradigm, the finding of qualitative measures were then used to conceptualize the appropriate quantitative measures, variables or theoretical constructs, namely “spirituality”, “judgment performance”, and “performance determinants”.

In the interviews, a majority of the respondents stated that *shariah* auditing requires different objectives and approaches given its emphasis on religious principles, especially the Islamic *shariah* principles. For example, one respondent (a member of the Chief Internal Auditors, CIA), succinctly stated that “the quality of *shariah* auditing performance lies in the approach taken by certain individuals to help them understand their role as a servant of god or Allah (from the Islamic standpoint), and thus their actions would be accountable and answerable to god and society – in essence, they are the *khalifah* (vicegerents) of God in this world”. Furthermore, another respondent (a member of the *shariah* committee) stressed the importance of intrinsic values of staff working in the Islamic banks when he said the following:

*“in our bank, we are planning to conduct more training on intrinsic values of our staff so as to make them to be more responsible and more spiritual. Having these values will deter our staff from committing any wrongdoings. Our bank is a full-fledged Islamic bank, therefore it is important for our staff to portray and practice good attitudes to preserve our reputation. To date, we have visited a bank branch to conduct an usrah (a religious discussion to instil and share good values)”.*

Furthermore, all the respondents strongly agreed that knowledge in Islamic banking and finance as well as *shariah* principles is extremely important for *shariah* auditing process. Findings from the interviews also revealed that most of the internal auditors of IFIs have some experience in conducting *shariah* audit based on their audit assignments dealing with Islamic related-products and Islamic banking operations

In addition, it is also important to investigate the level of competency and knowledge of internal auditors involved in *shariah* auditing process based on the experimental method. Using an experimental study, the researcher was able to gather empirical data and supporting evidence to determine the internal auditors' competency and knowledge with greater precision compared to archival data or survey data. Moreover, the experimental study enabled the researcher to carefully design and use appropriate research instruments to measure the internal auditors' intrinsic values as well as their cognitive process or reasoning. Thus, based on the above arguments, the researcher adopted pragmatism as the most relevant philosophical paradigm – the paradigm that guides research by combining qualitative and quantitative methods, adopting single and multiple realities, and addressing the practicality of data collection.

In essence, all the four paradigms have some common elements, but they take different approaches, perspectives, ontologies, and epistemological positions. However,

the selection of a particular paradigm must be on “what is the best or ultimate research objective” that researchers want to achieve. Given this contention, apparently pragmatism is the most suitable paradigm to help guide the researcher to fulfil the research objectives of this study.

Table 4.3, which is based on Tashakkori and Teddlie's (1998) work, summarizes the four important paradigms used in social and behavioural sciences and their respective assumptions.

**Table 4.3: Summarization of Four Paradigms and Assumptions**

<b>Assumptions/ Paradigms</b>	<b>Positivism</b>	<b>Post-Positivism</b>	<b>Constructivism</b>	<b>Pragmatism</b>
<b>Ontology</b>	Naive realism	Critical or transcendental realism	Relativism	Accept external reality. Choose explanations that best produce desired outcome. Based on research objective
<b>Epistemology</b>	Objective point of view. Researcher and participant are dualism	Modified dualism. Findings probably objectively true	Subjective point of view. Researcher and participant are inseparable	Both objective and subjective points of view
<b>Methodology</b>	Quantitative	Primarily quantitative	Qualitative	Quantitative + Qualitative
<b>Logic</b>	Deductive	Primarily deductive	Inductive	Deductive + Inductive
<b>Axiology</b>	Enquiry is value free	Enquiry involves values but they may be controlled	Enquiry is value bound	Values play a large role in interpreting results
<b>Causal Linkages</b>	Real causes temporally precedent to or simultaneous	There are some lawful, reasonably stable	All entities simultaneously shape each other. It's	There may be causal relationship, but never be



	with effects	relationships among social phenomenon. These may be known imperfectly. Causes are identifiable in probabilistic sense that change over the time	impossible to distinguish causes from effects	able to pin them down
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*Source : Tashakkori and Teddle (1998, p. 23)*

#### **4.2.3 Ontology and Epistemology**

Epistemology is a general set of assumptions that people make to understand the reality of a phenomenon or subject being researched (Easterby-Smith et al., 2002). P. Johnson and Duberly (2000) state that the word epistemology is derived from two Greek words: “episteme” which means knowledge or science and “logos” which means knowledge, information, theory or account. Taken together, these two words reflect how epistemology is usually understood as the knowledge about a particular knowledge in a discipline.

On the other hand, ontology is an assumption that researchers make about the nature of reality in a number of ways. First, the researchers make assumptions from singular reality, which is commonly applicable in the post-positivism paradigm, where they can either reject or not to reject certain hypotheses. Second, the researchers establish assumptions based on multiple realities, which is typically associated with the constructivism paradigm, by which they accommodate the different perspectives and thoughts among the research subjects. Third, the researchers draw assumptions based on political reality, which is related to the advocacy and participatory paradigm, where they negotiate the findings with the research subjects so as to reduce the inequalities in the

society. Forth, the researchers make assumptions based on the combination of single and multiple realities, which is applicable to pragmatism, by which the researchers establish and test hypotheses and provide evidence from multiple perspectives to support the findings.

Subscribing to a particular epistemology and ontology will directly influence the researcher's beliefs about the world and underlying assumptions when choosing the research methodology. In this study, qualitative data from the interviews highlighted the research themes, regularities, and causal relations of factors that served as the focus for the experimental study based on the quantitative approach. In particular, the themes were then used to develop a set of unstructured and structured experimental instruments by which the research subjects' answers and responses were measured in a controlled environment. Such answers included the timing and frequency of their interactions in the audit tasks.

#### **4.2.4 Axiology, Logic, and Rhetoric**

Axiology, according to Creswell and Clark (2007), refers to the role of researchers in interpreting and understanding the research findings based on their biased or unbiased orientation. In this study, the discussion of findings includes biased and unbiased values, which are in line with the nature of pragmatism. The discussion of qualitative measures, which were derived from the respondents' perceptions and their experiences as well as the researcher's interpretation, might naturally include biased elements. On the other hand, the discussion of quantitative measures, such as the audit performance, is unbiased given their discrete measurements.

Logic is the discussion of methodological selection between the deductive and the inductive approaches. The deductive approach commonly involves the identification of

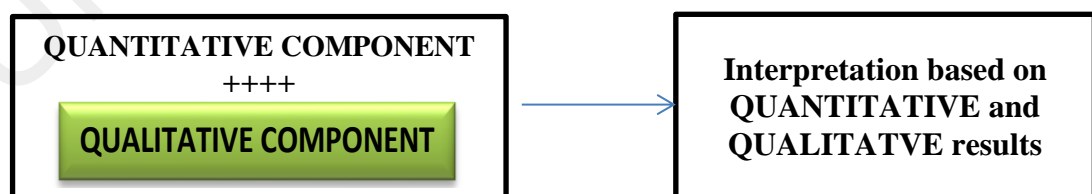
theories, development of hypotheses, and data collection. Distinctly, the deductive process is linear in nature as one step follows the others in a clear, logical sequence (Bryman and Bell, 2007). Briefly, the deductive process starts with a theory and is then followed by the data collection process. In contrast, the inductive approach, on the other hand, starts with the data collection and is then followed by the development of a theory. Bryman and Bell (2007) explain that the inductive approach is an approach in which researchers infer the implications of their findings on the theory that prompted the whole exercise. Normally, the researchers will be actively involved during the data collection process to help them analyse the results meticulously, which will lead them to generating a theory. However, in this study, the data gathered from the interviews by means of the inductive process were used to identify and understand prevailing patterns as well as the subject matter, which were then explored to gain further insights. This notion is articulately explained by Saunders et al. (2000) who state researchers who are “particularly interested in understanding why something is happening rather than being able to describe what is happening, it may be more appropriate to adopt the inductive approach than the deductive approach”

Choosing the inductive approach as the first method in this study involved conducting a series of interviews, which were based on a interviews guidelines. The interview questions or statements to guide the interviews in this study were derived from several sources, namely previous research findings that highlight the gaps in *shariah* auditing and Islamic banking and the guidelines issued by the regulating body (i.e., the BNM). Subsequently, the study then employed the deductive approach using the experimental research method. Therefore, in line with the pragmatism and mixed method approach, the study also involved the testing of the research hypotheses using relevant statistical analyses on the empirical data of experiments. “Rhetoric” refers to

the language of research whether formal or informal. As the present study adopted the pragmatism approach, the reporting of the research findings uses a mixture of styles, including the rhetorical style, given the different methods and stages of the data collection.

#### 4.3 Mixed Method Research Design and Its Justifications

This study used a mixed method approach using both quantitative and qualitative methods, which consisted of a series of interviews and a series of experiments based on the '*factorial experimental design*'. Such methodological approach enables researchers to have access to diverse information or data to help address multiple research questions. Succinctly, Creswell and Clark (2007) defined this approach as an "embedded design research method", which is one of the types of the mixed method design, in which a particular data set is used to support or supplement other data sets deriving from other means. They contend that the embedded research method is required because a single data set is not sufficient to explain the findings of a study comprehensively. Furthermore, they argue that the embedded design is useful when the researcher is attempting to develop and implement a treatment in an experiment in order to examine the process or mechanisms of an intervention relating to the variables of interest as highlighted in Figure 4.2.



**Figure 4.2 : Illustration of Embedded Design (Creswell, 2009, p. 210)**

In light of the different research questions formulated based on the deductive and inductive approaches, each of the questions entailed a different treatment and different set of data. Thus, this study embedded a qualitative component (i.e., interviews) in a quantitative component (i.e., experiments). This approach helped the researcher to achieve a better understanding of *shariah* auditing practices in Malaysian IFIs, to examine the practices of *shariah* auditing empirically, and to enhance the validity of the study. Particularly, a series of interviews was conducted to elicit nuanced information regarding *shariah* auditing.

The data collection of this study began with in-depth interviews, which is discussed under the first phase (Phase 1) of the research methods. The main objectives of these interviews were to achieve a deep understanding of the *shariah* auditing practices in Islamic banking and finance institutions in terms of the frameworks used, objectives, process of *shariah* auditing, time frame of *shariah* auditing, and corporate governance of *shariah* auditing. In this subsection, the choice of themes of the interview guidelines, the administration of interviews, and the analysis of interview data using a structured matrix format are discussed.

The main objective of the interviews was to determine whether or not spirituality, knowledge, and ethics had significant impacts on auditors' judgment in *shariah* auditing process. The respondents recruited were important members of high level internal audit management teams, such as chief internal auditors and seniors managers of internal audit departments. Using this approach, the researcher was able learn firsthand the mission, objectives, and perception of *shariah* auditing from the top level internal audit management representatives as their views of the *shariah* auditing processes in their organizations were deemed more credible.

For the second phase of the research, a series of experiments was conducted on a group of internal auditors from various IFIs in Malaysia. According to Trotman et al. (2011), such empirical method can help researchers to examine the effects of conditions that do not presently exist in current practices, such as proposed new standards and new audit methods. Typically, an experiment is entailed to address key issues pertinent to a particular study by asking questions regarding possible effects of variables, their relations, or the conditions in which such effects took place. A major benefit of experiments is that researchers can set up the appropriate environments for such experiments. Furthermore, researchers can manipulate the independent variables of their choice and examine the effects of these variables on the dependent variable while controlling any potential confounding factors. In the auditing context, such experiments can help researchers to measure intervening variables (including information search and cue usage) and the knowledge of participants. Moreover, in such experimental setting, the researchers can also disentangle interwoven factors to help examine factors that significantly cause a change in the dependent variable (Ng and Tan, 2007).

In the present study, collecting the relevant data pertaining to spirituality and other moderator variables, such as knowledge and types of task complexity through survey questionnaires, interviews, and archival data was not possible given the lack of information available. Thus, conducting experiments was more viable and practical to gather the required data and information. Using experiments, the researcher was able to investigate the emotional state of the internal auditors, namely their spirituality, and to explore other internal factors, such as knowledge, task complexity, and ethics, which would affect *shariah* auditing performance within a controlled environment.

Understanding the relation between spirituality and *shariah* auditing performance is important due because the former is believed to exert strong influence on *shariah*

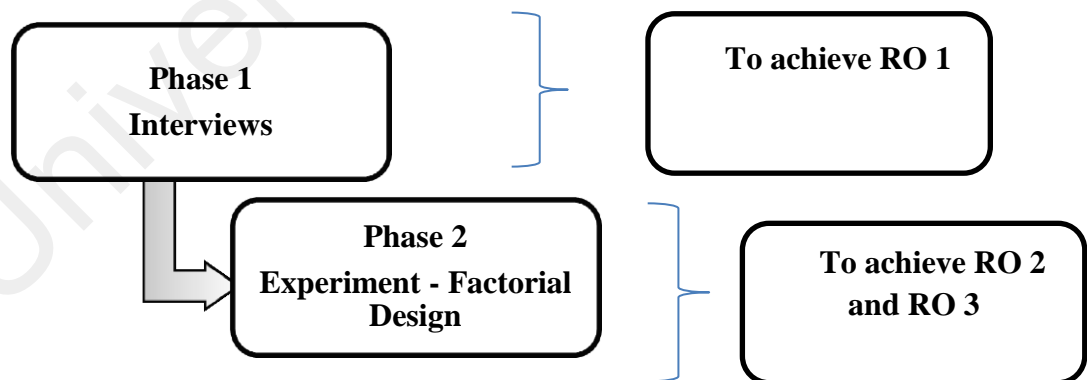
auditing performance, as the nature of *shariah* auditing itself requires different objectives and approaches. These different objectives are to achieve *Maqasid al-shariah*, to fulfil the requirements for *shariah* knowledge, and to identify and understand the effects of *shariah* non-compliance on Islamic transactions. More importantly, the *shariah* auditing process is conducted in organizations (i.e., Islamic financial institutions that strictly adhere to religious precepts) that conduct their business quite differently from the conventional process. As the objectives of these organizations are premised in the Islamic context, the role of auditors of IFIs is different compared with the role of auditors of conventional entities as the former needs to abide to Islamic values and principles (Khan, 1985). Succinctly, Khan (1985) states that “auditing principles for Islamic business transactions have been derived from the values deemed important in the Islamic society and *shariah* principles”. Thus, it is vital to investigate the impact of such values on *shariah* auditing performance.

In JDM research, studies have been carried out based on tests or examinations using a set of questions or case studies to examine factors affecting internal auditor’s performance and the judgment process, namely task complexity and knowledge (Bonner and Lewis, 1990; Bonner and Pennington, 1991; Wright and Wright, 1997; Solomon, Shields, and Whittington, 1999). This method allowed the researchers to test respondents’ understanding with the latter retrieving the relevant information stored in their memory. The process is also known as the cognitive process, which is based on individuals’ psychological function which will enable them to process information they receive, apply their knowledge, and to give justifications for any preferences and choices given. In this regard, Libby (1995) states that knowledge and analysis of task involve an internal state in which the characteristics are directly unobservable. He also asserts that the models of contents, organization of memory, and the related learning

and retrieval process are merely useful as metaphors (not as physical representations or realizable representations).

For the present study, using such questions allowed the researcher to retrieve important information regarding the internal auditors' level of knowledge and competency in terms of the adequacy of Islamic banking and finance knowledge, internal audit knowledge as well as *shariah* knowledge. Having these types of knowledge is important because they help internal auditors to assure the effectiveness and efficiency of the internal control in upholding *shariah* principles and to evaluate matters concerning *shariah* non-compliant issues.

Six experiments were conducted involving 16 internal auditors of Islamic banks to elicit their actions and responses on factors affecting their *shariah* auditing performance. In total, 146 internal auditors participated in the experiments. Figure 4.3 shows the research methods and design adopted in this study to address the research objectives and to answer the research questions accordingly.



**Figure 4.3 : The Research Methods and Research Objectives of the Study**



#### 4.4 Data Collection

Adopting the pragmatism paradigm requires a study to link with singular and multiple realities. For example, such study helps maintain a distance between the researcher and the research based on the practicality of using both unbiased and biased values, combining deductive and inductive approaches, and employing a formal reporting style for some part of the findings and an informal style for other findings. As such, the framework that guided the design for this study was based on a mixed-method case study. The data collection involved two phases, which employed qualitative and quantitative data collection methods to gather relevant information from the primary sources. The procedures and approaches used are discussed in the following section.

##### 4.4.1 The First Phase of the Research Methods: In-depth Interviews



**Figure 4.4 : Structure of the In - Depth Interviews**

The two main processes involved in collecting data in this phase are the designing of the interview questions and the administration of the interview. Under the theme of interview administration, the discussion involves three subsections, elaborating on the respondents of this study, the checklist to guide the interviews, and the duration and location of such interviews. Finally, the researcher discusses the process of analyzing the interview transcripts by using the thematic meta-analysis (See Appendix D, for sample of meta-analysis table). The interview stage was particularly important to achieve the first research objective which was “to examine the knowledge requirements of internal auditors to perform *shariah* audit in IFIs in Malaysia” as well as to

investigate the current practices of *shariah* auditors in Islamic financial institutions in terms of their objectives, scope, and framework. Therefore, in-depth interviews were conducted with selected individuals involved in the *shariah* audit process. The main objective of the interviews was to shed further light on the knowledge requirements of internal auditors, current practices of *shariah* auditing, and understanding of those who are involved in *shariah* auditing. Clearly, these interviews provided the researcher a practical means to investigate whether *shariah* auditing process would require internal auditors to have objectives, types of knowledge, approaches, actions and thoughts that are different compared to the conventional auditing process.

The practicality of interviews has been demonstrated by Easterby – Smith et al. (2002) to be appropriate to address research objectives that aim to understand a construct from the basis of respondents' opinions and perceptions on a particular issues as well as to develop a sound understanding of the researchers' domain. Therefore, conducting interviews was vital as emphasized in previous studies indicating the influential role of *shariah* auditors in upholding Islamic values or *shariah* principles (see Khan, 1985 and Abdel Karim, 1990). Furthermore, in the SGF (2010), the BNM stipulates that *shariah* audit should be conducted separately from the conventional internal audit by all Islamic banks in Malaysia. In addition, according to Sekaran (2003), the advantage of conducting interviews is that a particular discussion helps researchers to probe thoroughly issues more penetratingly, thus providing greater insights. Essentially, interviews allow the interviewers to clarify certain views and to gauge issues from the respondents' perspective on how the latter conceptualise and prioritise related issues. In this respect, Easterby-Smith et al. (2002) asserts that interviews can be considered to be one of the most important qualitative methods in research.

In-depth interviews can also serve as a pilot study by exploring the current practices of practitioners and related issues in *shariah* auditing. In addition, such interviews can provide additional, supplementary data for an experimental study. According to Saunders et al. (2003), a pilot study is regarded as one of the means to maximize response rates as well as to improve the validity and reliability of the collected data. With interviews, researchers will be given greater flexibility as they can control or manipulate the wording of questions, ordering of questions, and designing of the letter of introduction (Oppenheim, 2001).

#### **4.4.1.1 Designing the Interview Questions**

The interviews conducted comprise a series of semi-structured interviews, containing questions that had been designed using the guidelines as shown in Appendix A. These interview guidelines had been designed based on the *Shariah* Governance Framework (2010), which was issued by the BNM, and the review of related literature (as discussed in Chapter 2). As cited in Zain (2005), the use of semi-structured interviews is appropriate for exploratory studies such that an in-depth discussion can lead to greater understanding of the subject matter (Kidder and Judd, 1986).

Statements instead of questions were developed so respondents would have to explain further, why they chose certain answers. Drafting the statements began in Jan 2012, starting with the mind mapping of the relevant factors related to research questions and objectives and followed by focussing on issues highlighted in the review of SGF (2010) and related literature. At the initial stage, many short questions were developed to itemise the issues that needed further explanation by focussing on two main themes. The first focused on the definition of *shariah* auditing from the

individuals' perspectives, and the second focused on the investigation of the current practices of *shariah* auditing, which was then divided into seven groupings as follows:

- (i) The scope and extent of *shariah* auditing.
- (ii) The current framework adopted by IFIs.
- (iii) The relation between *shariah* review and *shariah* committee.
- (iv) The governance and reporting line of internal auditors.
- (v) The competency and knowledge requirements.
- (vi) The challenges and limitations.

The above groupings allowed greater explanation from the respondents and avoided the risk of mixing up issues that could result in missing information and facts during discussion. The groupings of the statements also provided a more structured means in analyzing and interpreting the respondents' statements. The guidelines of the interviews were emailed to the respective respondents one week before the interview sessions to help the respondents familiarize with the purpose and objectives of such interviews.

#### **4.4.1.2 The Administration of the Interviews**

The respondents were recruited using the purposive sampling technique. The purposive sampling technique allows researchers to select a sample based on the nature of the research objectives by determining the appropriate elements that need to be included in the sample. In other words, this technique allows researchers to sample those who are only relevant to the research questions and objectives (Bryman and Bell 2007). Thirty potential candidates were contacted comprising 18 *shariah* committee members and 12 practitioners using emails and phone calls. The key criterion of the selection was based on the candidates' knowledge and experience with the *shariah* auditing process and procedures. Out of the 30 candidates contacted, only 15 agreed to

participate in the interviews; whereas, the remainders declined to participate due to heavy working commitment or inability to re-schedule their appointments. The sample of the 15 candidates who had agreed comprised individuals from various backgrounds as summarized in Table 4.4. To protect the confidentiality of these respondents, only their job designation and the types of banks in which they are employed were revealed. Based on the above categories, this sample comprised three chief internal auditors, one head of department of *shariah* audit department, three senior managers, two managers, four *shariah* committee members, one BNM's *shariah* advisor committee, and one executive director of external audit firm were recruited.

**Table 4.4 : List of Respondents**

<b><u>Respondents</u></b>	<b><u>Job designation</u></b>	<b><u>Organizations</u></b>
R 1	Chief Internal Auditor	Full Fledged Islamic Local Bank
R 2	Chief Internal Auditor	Full Fledged Islamic Local Subsidiaries Bank
R 3	Chief Internal Auditor	Full Fledged Islamic Local Bank
R 4	Head of <i>Shariah</i> Audit	Full Fledged Islamic Local Bank
R 5	Senior Manager, Internal Audit Department	Full Fledged Islamic Local Subsidiaries Bank
R 6	Senior Manager, Internal Audit Department	Islamic Subsidiaries Foreign Bank
R 7	Senior Manager, <i>Shariah</i> Internal Auditor	Full Fledged Islamic Local Subsidiaries Bank
R 8	Manager, <i>Shariah</i> Internal Auditor	Full Fledged Islamic Local Subsidiaries Bank
R 9	Manager, <i>Shariah</i> Internal Auditor	Islamic Subsidiaries Foreign Bank
R 10	<i>Shariah</i> Committee	Islamic Subsidiaries Foreign Bank
R 11	<i>Shariah</i> Committee	Islamic Subsidiaries Foreign Bank
R 12	<i>Shariah</i> Committee	Full Fledged Islamic Local Bank
R 13	<i>Shariah</i> Committee	Development Financial Institutions (DFIs)
R 14	Member of <i>Shariah</i> Advisory Council (SAC)	Bank Negara Malaysia - Regulators
R 15	Executive Director of External Audit Firm	External Auditor

The participants' diverse background was to ensure the study could investigate the overall practices of *shariah* auditing more comprehensively by involving personnel of various levels of expertise, who were working in full-fledged Islamic banks and Islamic bank subsidiaries. The study also managed to obtain the views from the members of *shariah* committees on the practices of *shariah* auditing in their IFIs. All the participants reported that they had at least two years of experience in *shariah* auditing. The interviews were conducted at the participant's respective organizations. The interviews were recorded on tape, with each interview lasted for approximately two hours.

Before the interviews, all the respondents were briefed about the nature and objectives of the study. They were also assured of the voluntary and confidential nature of their participation. Thus, the data from the interviews would not reveal, in specific detail, about a particular person or a particular organization. All participants appeared to be confident and seemed to have a very good understanding of their organizations' background, and the structures and process of *shariah* auditing. In addition, prior to the commencement of the interviews, each respondent was provided with interview guidelines via email (see Appendix A) to elucidate the themes or issues that would be discussed during the interview sessions.

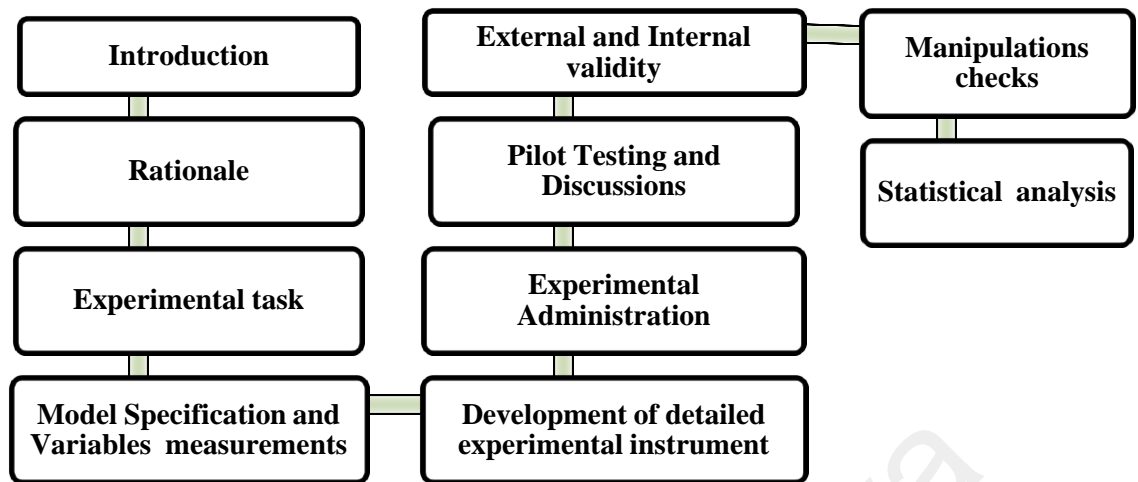
The recorded interviews were then transcribed and coded using the key themes related to the main research objectives and subsequently rechecked for errors in the classification of themes by reviewing them and reaching a consensus before the coding process, the practice of which has been adopted from Zain (2005) and Patton (2002). Later, the interview responses were presented in the form of a matrix framework or meta-analysis table (as per Appendix D) to help compare the responses across the 15 interviews that had been conducted. Such matrix format draws attention to the presence

or absence of consistency and consensus across different respondents, which acts as a useful tool for identifying commonalities and differences in the research themes (Miles and Huberman, 1984; Martin and Meyerson, 1988 cited in Zain, 2005). Detailed discussion is addressed in Chapter 5, which compares and contrasts the current practices of *shariah* auditing based on two themes as mentioned above.

#### **4.4.2 The Second Phase of the Research Methods: Experimental Research Method – Factorial Design**

##### **4.4.2.1 Introduction**

This section discusses in detail the experimental method used in the study by first focusing on the justification for such method and noting its ability to address the research objectives. Then, this section discusses the experimental research design by reflecting on previous studies and literature, especially in the judgment decision research area as well as detailing the procedures, development of instruments, and measurement of the dependent variables, independent variables and moderators variables by noting their appropriate use in the JDM research. The section elaborates on the pilot testing, threats to internal and external validity, and steps taken to address those threats. Finally, this section includes a discussion on the statistical analysis of data.



**Figure 4.5 : Structure of Discussion in the Experimental Research Method**

#### **4.4.2.2 The Rationale for Experimental Research Method**

The experimental research method was employed to address the research objectives of the study, which was to investigate factors that would affect internal auditors' *shariah* auditing performance by focusing on the determinants or factors established in the judgment decision making research, namely task complexity and knowledge, and in the behavioral research, notably spirituality and ethics. The rationale for the experimental research for the second phase of the study was due to the lack of research on *shariah* auditing in real practices.

To date, research focusing on actual *shariah* auditing practices and operations in internal auditing has been lacking. Thus, experiments allow researchers to examine important factors in a controlled experimental setting that represents a certain phenomenon or practice, the results of which will help researchers gain a better understanding compared to conducting surveys or analyzing archival data. For experimental research, the research instrument can be designed to include relevant



questions to probe research subjects' opinions of certain factors, such as spirituality and ethics, more deeply that they think will have an impact on their judgment and decision.

Study on spirituality and its effects on the *shariah* auditing performance and judgment process is important because spirituality is strongly believed to wield a huge impact on *shariah* auditing performance. From the Islamic perspective, the research on *shariah* auditing will require a different approach given its different objectives to help realize *Maqasid al-shariah*, which may entail a new focus on factors, such as spirituality, *shariah* knowledge, and Islamic banking knowledge, to help internal auditors examine the effects of these factors on Islamic transactions.

Furthermore, the results of the interviews concerning the intrinsic elements or values will provide insights into the process of *shariah* audit, with the main objective to help ensure the effectiveness and efficiency of the internal control in preventing *shariah* non-compliant activities. As stated in the introduction chapter, *shariah* compliance of IFIs' business operations can only be accomplished by upholding the Islamic *shariah* principles, which are one of the core values in Islam. Hence, intrinsic values, such as spirituality and ethics, of internal auditors need to be investigated as these factors will have a huge impact on *shariah*-compliant activities.

The study was also motivated by the findings from the in-depth interviews that had been conducted indicating the competency and level of *shariah* knowledge of internal auditors are major factors that contribute to the effectiveness of *shariah* auditing performance. Moreover, the need to have competent internal auditors is emphasized in the SGF (2010), stipulating that *shariah* audit should be performed by internal auditors who have acquired adequate *shariah*-related knowledge and training. However, such stipulation is quite vague as the level of *shariah* knowledge has not been further

elaborated and quantified by the BNM. Currently, no specific study has yet been conducted to measure the level and types of internal auditors' knowledge, task-complexity ability and problem-solving ability in performing *shariah* auditing in IFIs. In light of this research void, the effectiveness of *shariah* auditing in IFIs is open to debate.

Research data are mainly derived from primary sources, and they are typically quantitative in nature. In the context of *shariah* audit, the primary data will be provided by the practitioners themselves, notably internal auditors, working in the IFIs in Malaysia. In this regard, this study used primary data, which had been derived from the participation of professional groups who are expert and knowledgeable in the *shariah* auditing process, namely the internal auditors. As highlighted, this study was exploratory in nature, thus entailing one of the relevant methods to investigate the subject matter by conducting a series of experiments.

Essentially, an experimentation is a method of inquiry in which the researcher randomly assigns the research subjects in several groups within a controlled setting in which the researcher reproduces a phenomenon, actively manipulates that phenomenon, and then makes various observations (e.g. measurement) of or related to the phenomenon (Solomon and Trotman, 2003). In fact, Bonner (1999) affirms that the experimental research method allows the researcher to control any alternative explanations for results through random assignment of subjects to treatments based on factorial design. Based on this design, the researcher can learn better the causal relations between independent variables and JDM performance (Bonner, 1999). Similarly, Trotman (1998) contends that the most relevant methodology to be adopted in JDM studies is by using a controlled experimental setting, which allows the researcher to remove any confounding factors that threaten the validity of a research finding. More

specifically, by abstracting and controlling potentially influential variables, the researcher can infer causal effects and test the effects in a specific condition that does not yet exist in practice. To create a realistic experimental setting in this study, the researcher used detailed background materials, engaged senior staff and academicians related to IFIs to review experimental instruments, and provided some incentives for the participants.

Furthermore, Solomon and Trotman (2003) have identified experiments as the most popular and effective research method used in JDM studies. They also argue that this method will continue to be a viable means of testing and refining theories of auditor's behaviors due to its high internal validity. This argument is supported by Peecher and Solomon (2001) who note that using experiments will allow the researcher to examine a phenomenon that may not be able to be examined in a natural setting. Even though most of the experiments in JDM research have been conducted in the external auditing environment, Bonner (2008) assert that such method can also be applied in the internal auditing environment because both external and internal auditors share the same nature of work and behaviors. For example, they need to make judgments under certain conditions with uncertainties, thus entailing strong beliefs or appropriate preferences. In such situation, auditors will be exposed to the rational choice of theories within a set of preferences and beliefs (Mellers et al., 1998).

Recognizing the importance of knowledge and memory in the decision-making process, many studies have been carried out to gain a better understanding of knowledge acquisition, memory (in which knowledge is stored), and the implications of knowledge for performance. Some examples of previous studies that examined the above factors are Abdolmohammadi and Wright's (1987), Bonner and Pennington's (1991), Bonner and Walker's (1994), Nelson et al. 's (1995), Choo's (1996), Tan and Libby's (1997),

Tan and Kao's (1999), Peecher, David Piercey, Rich, and Tubbs's (2010), and Johari et al.'s (2012) studies. The above studies have been reviewed in Libby and Luft's (1993) study, which provides a thorough discussion on the interactions between determinants of performance by focusing on the cognitive process and abstraction based on the related theories and task analyses employed in such studies.

In addition, Libby and Luft's (1993) review indicates that most of the previous studies are "one piece of the puzzle" at a time, with some of them concentrating on a general measure of experience related to either performance or knowledge. For example, Bonner and Lewis (1990) examined the relations among experience, abilities, and knowledge and their effects on performance. Meanwhile, Tan and Kao (1999) studied the relations among knowledge, abilities, motivational factors (e.g., accountability) and environment (e.g., task complexity). In addition, Bonner and Walker (1994) investigated the effectiveness of various combinations of instructions and experience (i.e., practice and feedback) in producing knowledge.


In essence, this study was influenced by Libby and Luft's (1993) model called "Antecedents and Consequences of Knowledge" to examine the relations among knowledge, experience, abilities, motivational factors, and environment and their effects on the auditors' performance in a different environment than before, namely internal auditing in Islamic financial institutions. The study employed experimental field research by utilizing research instruments, which have been used in previous studies (Bonner and Lewis, 1990; Tan and Kao, 1999). Using these instruments enabled the researcher to analyze the level and types of auditors' knowledge, such as on domain knowledge, sub-specialty knowledge, and world knowledge (based on a Bonner and Lewis's study in 1990), and knowledge and task complexity competency of *shariah* auditors (based on Tan and Kao's study in 1999). Likewise, the same instruments

helped the researcher to examine the impact of spirituality on internal auditors' judgment, where spirituality is considered as a motivational factor based on Libby and Luft's model (1993) (see Section 3.3 in Chapter 3 for the detail of the conceptual framework).

#### 4.4.2.3 The Experimental Design

The experiment used the four-way (2 x 2 x 2 x 2) factorial design, with all within-subject variables. All the respondents received the same packet of experimental instruments or materials and manipulation was conducted within the levels of each variable. The main independent variable was spirituality, and the three moderator variables were task complexity, knowledge, and ethics. The spirituality variable was manipulated by categorizing it into two levels, namely high- and low-level spirituality. Likewise, task complexity was manipulated by having the respondents to perform two types of tasks, namely *shariah* (Islamic) audit task and internal (conventional) audit task based on two levels of task, namely high- and low-complexity tasks. Then, the respondents' knowledge was manipulated by having them to apply two types of knowledge, namely Islamic banking and finance knowledge and internal audit knowledge. Lastly, the ethics variable was manipulated by categorizing it into two levels, namely high- and low-level ethics. Figure 4.6 summarizes the experimental design of the present study.

EXPERIMENTAL CONDITION				
	Spirituality	Task complexity ( <i>Shariah</i> auditing vs Internal auditing)	Knowledge (Islamic banking and finance knowledge vs Internal auditing knowledge)	Ethics
Low	X	X	X	X
High	X	X	X	X

**SHARIAH AUDITING JUDGEMENT PERFORMANCE** 

**Figure 4.6 : The Experimental Design of the Study**

There are several advantages of using the within-subjects design in dealing with the design issues in JDM experiments. For example, Trotman (2001) states that there are three advantages associated with within-subjects designs. First, the number of subjects (e.g., respondents) need not be excessively large. Second, the results will have greater statistical power. Third, such designs are highly effective in examining certain types of research questions, such as learning effects and cue usage. For the present study, the use of between-subjects designs was impossible as the independent variables and moderator variables were “abstract variables”. Nonetheless, the within-subjects design used was acceptable as most researchers who have used quasi-experimentation caution the use of experiments that have no control group as a basis for comparison (Shadish, Cook, and Campbell, 2002). However, in the present study, the experiments did involve manipulation of the independent variable within the experimental groups without a control group.

Spirituality can be considered as an intrinsic element, originating from one’s inner self. For example, Krishnakumar and Neck (2002) emphasize spirituality as a concept or a principle that originates from the “inside” of an individual. If the main objective of the study were to investigate the changes of spirituality level among individuals, then, it would be appropriate for the study to have a between-group design to stimulate different treatments, such that one group will receive a treatment (by attending a spiritual talk) and the other group will not receive any treatment. The importance of having task complexity and knowledge in the within-group designs was brought to light based on the information gathered during the in-depth interviews with CIAs, managers of internal audit department, and *shariah* committee members. All of the respondents (from the first phase of research method) informed that the internal auditors of their banks were required to perform *shariah* auditing when the latter were assigned to audit Islamic

banking products and operations portfolio. In addition, respondents revealed that most of the Islamic financial institutions did not establish any dedicated units for *shariah* auditing in their internal audit department.

In the experiment, the respondents were required to complete six sections of the research instrument, which consists of various designs and approaches, namely case studies, multiple-choice questions (MCQ), and survey questionnaires. In total, the research instrument comprises 24 pages of information that the respondents were required to read and respond accordingly (see Appendix B for the sample of research instrument). Each of the sections contains relevant information pertaining to the independent variable and moderators variables of the study. Each task required the respondents to express their opinions, judgment as well as the perception of their knowledge on *shariah* auditing, Islamic banking and finance knowledge and internal audit knowledge.

There are several reasons for using such task and approach. First, it was appropriate for the study to investigate the competency level of the internal auditors in performing Islamic or conventional internal audit process. As highlighted, the results from the interviews indicate that *shariah* audit needs to be performed by a group of internal auditors of the IFIs. Essentially, the internal auditors are responsible to conduct *shariah* audit whenever they are assigned with an audit portfolio of Islamic banking products and operations regardless of their job specifications. Invariably, those responsible individuals could be the internal auditors who are working in the credit unit, treasury unit, compliance unit, IT unit, or commercial banking unit. Second, the use of such task can help reduce internal validity threats, such as mortality and maturation.

The *shariah* auditing performance is the dependent variable (DV) in this study. The number of correct responses from the task complexity section measured *shariah* auditing performance. Other research that have adopted this similar approach are Bonner and Lewis's (1990), Bonner and Pennington 's (1991), Solomon et al.'s (1999), Tan and Kao's (1999) studies. For the complexity task factor (levels: high and low; types: Islamic and conventional), the number of correct answers and justifications listed by the subjects were counted. The justifications listed were those that correctly stated the violations of *shariah* principles or internal audit code of ethics as well as the justifications of non-violation of the principles.

Meanwhile, the measurement of knowledge was based on the number of correct answers from the MCQ questions (i.e., Islamic banking and finance questions and Internal audit questions). Data from the measurement were coded or rated by the researcher and an independent coder who has vast accounting and auditing experience. To prevent any biases, the research hypotheses were not revealed to the coder, and he was only provided with the answer scheme. The reason behind the appointment of this independent coder was to increase the consistency of the process of coding and marking of the measurements using the research instrument. Any disagreements between these two raters (i.e., the researcher and independent coder) were resolved through discussions.

#### **4.4.2.4 The Development of Detailed Case and Components of Experiment**

A detailed experimental case was developed using the initial information obtained from experts in Islamic banking and finance and *shariah* auditing field (in the case of task complexity and knowledge section). In addition, the research instrument developed by Wheat (1991) in testing Human Spirituality Scale (HSS), and a standard of conduct



of IIA Code of Ethics of internal auditors which has been tested by Ziegenfuss and Singhapakdi (1994), was adopted in this study.

Determining the proper questions regarding the level of knowledge and task complexity entailed the researcher to elicit relevant feedback from the practitioners. Several key figures of relevant agencies were contacted through emails, involving two CIAs, three internal auditors, and five members of *shariah* committee, and one regulator from the BNM. Their feedback indicated that the types of knowledge that internal auditors should at least possess were basic *shariah* knowledge, Islamic banking and finance knowledge, basic level of internal auditing knowledge as well as moderate task complexity. Such feedback from these important individuals helped guide the researcher in formulating questions that are not only appropriate but valid based on the actual auditing practices in IFIs.

HSS (Wheat, 1991) and IIA code of ethics (Ziegenfuss and Singhapakdi, 1994) are well-established instruments, which have been extensively used in research. The HSS has been used by researchers in numerous studies of spirituality over the last ten years (Young, Cashwell, and Woolington, 1998; Belaire and Young, 2000; Cashwell, Cashwell, and Belaire, 2001; Pollock, 2007). This reliability of HSS is high as attested by Young et al. (1998), who in a study has found that its Cronbach's coefficient alpha was 0.81, rendering this instrument effective in psychometric testing in spirituality and counselling research (Cashwell, personal communication, July 3, 2006 – as seen in Pollock, 2007). Likewise, IIA is also deemed highly reliable given its high Cronbach's coefficient of 0.88, which has been confirmed by Ziegenfuss and Singhapakdi (1994). To ensure that the HSS scale is reliable and acceptable in the Malaysian context, a pilot study was carried out involving 60 undergraduates from one public university in Malaysia. The computed reliability measurement of this instrument was high as

indicated by the Cronbach's coefficient alpha of 0.92, thus confirming the reliability of the HSS measurement.

Prior to data collection, a group of experts comprising lecturers from the Islamic banking and finance, *shariah* committee members, practitioners, and regulators were randomly selected to review the research instrument to determine its relevancy to the *shariah* auditing process. Thirty emails were sent to this group of experts to invite them to share their views on the research instrument. Later, each of the experts were contacted individually by phone calls to secure their participation as well as to arrange appointments to discuss the objectives of this review and to help validate the material. Only nine experts agreed to review the research instrument, but later the number dropped to eight as one of them, who is a *shariah* advisor committee of BNM, had to withdraw due to last-minute commitments.

After getting their confirmation, a meeting was held at their respective places. Most of the experts requested to have about two to three weeks for the reviewing process. A follow-up telephone calls and emails were made to keep track of the reviewing process. The expert reviewing process spanned five months, starting October, 2012 till February, 2013. The experts were requested to review the research instrument in terms of realism, clarity, and appropriateness of questions to be tested on the internal auditors. This request was vital as some parts of the research instrument contain new items. Thus, securing such expert judgment helped validate the research instrument and reduce potential instrumentation threat. The result of the reviewing process indicates that the task and background information were both valid and appropriate for internal auditors.

The validity of any research instrument has to be established first before its use in research. Thus, opinions of experts are sought to help validate such instrument in terms

of its content. According to Creswell (2012) and Sekaran (2003), content validity is defined as the extent to which items of a research instrument collectively measure the content accurately. In this respect, Sekaran (2003) affirms that a panel of judges or experts need to be recruited to attest the content validity of a research instrument. Thus, in this study, a group of experts was secured to review the appropriateness of the research instrument by taking into account the diverse background of the internal auditors. Having the research instrument validated helped the researcher to develop task items that were legible and reliable in the measurement of the relevant construct. On the other hand, instrumentation threat is associated with an assessment of performance by unreliable measures.

After the completion of the reviewing process, the researcher managed to gather useful, constructive comments from the experts (see Appendix E). For instance, some of the comments indicate the need to change the questions as the level of difficulty was not reflective of the actual practices. Accordingly, several modifications have been made to the research instrument based on these expert comments. Some of the comments from the experts regarding the appropriateness of questions to be tested on internal auditors are as follows:

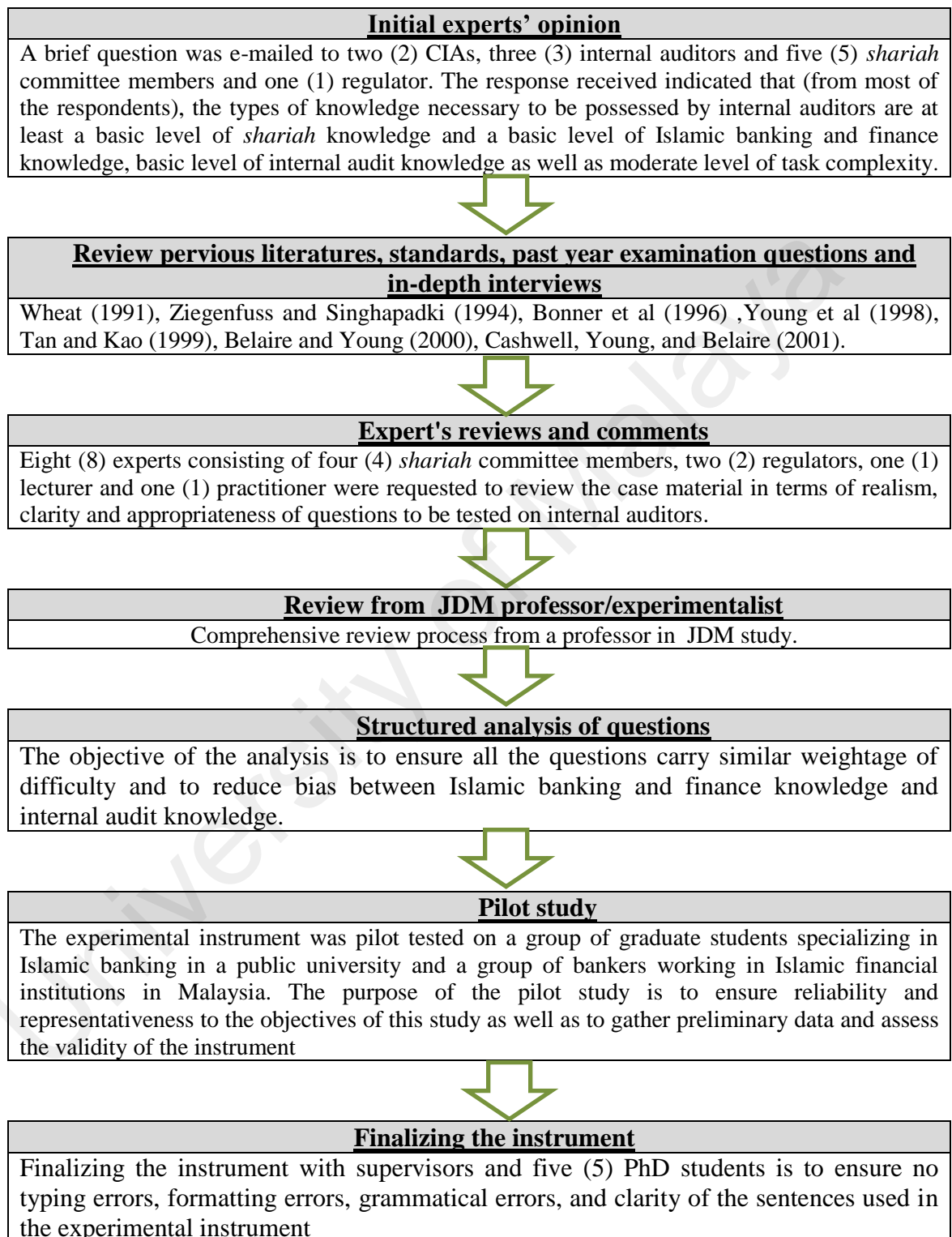
- “For Component 1(a), I believe it is reasonable and reliable”.
- “Component 2 (a) should include a few more questions, say around five, of high level of difficulty assuming that the respondents only have basic knowledge of *shariah*”.
- “The questions only cover simple products or concepts of Islamic contract. In reality, the products are much more complicated. The questions, however, do not capture that aspect properly”.
- “Questions to be tested seem reasonable and appropriate.”

The final stage of development of the research instrument involved a review process by a JDM professor, who a visiting professor at one of the public universities in Malaysia. In fact, the study was initially supervised by the professor for about two years, who helped explain the process in conducting judgment decision making (JDM) research and the process of developing, arranging, and structuring questions, among others. The professor's comments and suggestions helped the researcher to develop the appropriate research instrument. For example, he suggested that questions for internal auditors must be conveyed using the same weightage such as, if an Islamic banking question asks about Islamic deposit products, questions for conventional practices should also be related to conventional deposit products. Formulating such questions would help ensure equal measurements of the internal auditors' performance based on the two different practices, which could minimize instrumentation threat.

The professor also recommended that the title for each section should not be disclosed to avoid any biases. To measure their level of spirituality, the professor recommended a case study in the task complexity section, which could encourage them to use their feeling of spirituality when expressing their judgment and justifications. In addition, he also suggested the use of a structured analysis for each question to ensure all the questions would carry similar weightage of difficulty (see Appendix F for the detailed analysis). The final review process by the professor was conducted for about two weeks.

The final stage of the development of experimental instrument involved a pilot test (see Section 4.4.2.8 for detailed discussion). The finalization of the instrument was carried out with supervisors and five doctoral students. The purpose of this final stage of development was to eliminate any typing errors, formatting errors, grammatical errors,

and to improve the clarity of the sentences used in the experimental instrument. Figure 4.7 summarizes the process of the development of the experimental instrument.



**Figure 4.7: The Process of the Development of the Experimental Instrument**

The developed experimental instrument comprises six sections by taking into account the conceptual framework and experimental research design used in the study.

**Section 1** - Task complexity is divided into two categories as follows:

(1) High level (*Shariah* audit/Islamic audit vs. Internal audit)

The questions to test internal auditors' ability in identifying and developing *shariah* audit objectives and conducting the auditing process on Islamic deposit product (commercial banking) are based on *Mudharabah* principles. Conventionally, internal auditors are required to formulate the objective of internal audit, audit process, and other related documents pertaining to the current deposit product. The objective of this question was to investigate whether the internal auditors were able to design appropriate audit objectives and procedures commonly performed by them. The question was formulated based on an initial draft of a *shariah* auditing framework for Islamic financial institutions (2011) issued by the International *Shariah* Research Academy for Islamic Finance (ISRA). Based on the Islamic deposit product, a conventional current deposit product was designed for the study, which was verified by a banker in terms of the flow and terms used in this product.

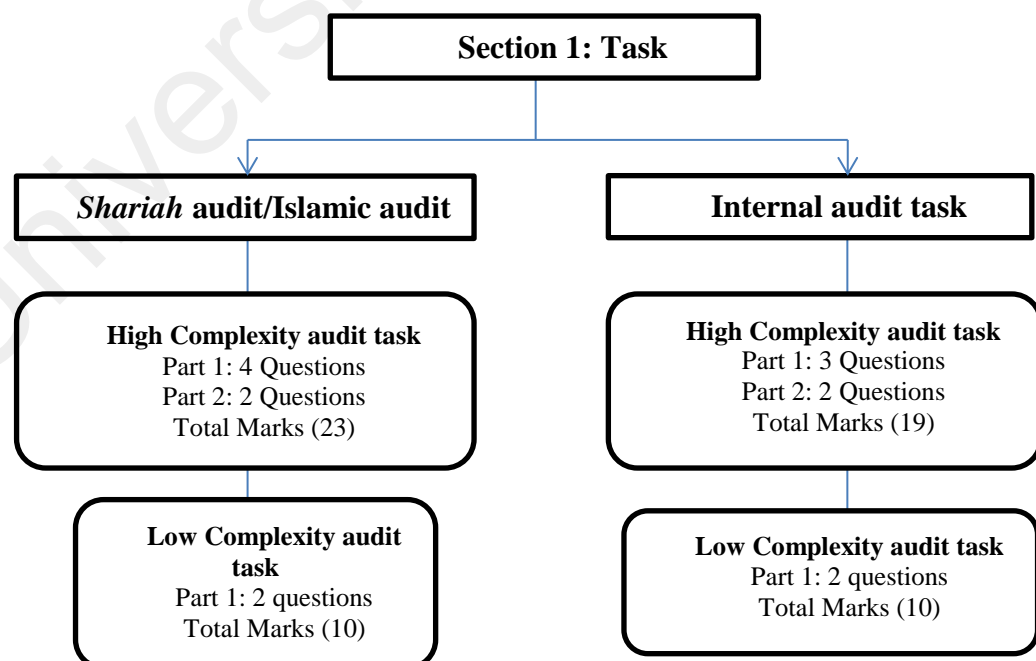
In this section, which deals with *shariah* audit complexity task and internal audit task, the subjects were provided with one short case study to elicit their judgment and justification to either report to *shariah* committee (or audit committee) or to just discard the findings. Respondents were instructed to give their comments on any transactions that appeared to be *shariah* non-compliant after the completion of the audit process. These questions also help to retrieve information with regard to the respondents' sense of spirituality, which might influence their judgment and justification.

Essentially, the high level *shariah* audit (Islamic audit) complexity test comprises parts (a) and (b), which contain four questions on *shariah* audit task for part (a) and two questions for part (b). The high level internal audit complexity test comprises parts (a) and (b), which contain three questions on internal audit task for part (a) and two questions for part (b).

## (2) Low level (*Shariah* audit or Islamic audit vs. Internal audit)

The objective of this question was to elicit judgment from the internal auditors on *shariah* compliance issues. The questions were derived from a textbook issued by ISRA entitled “Islamic financial system – Principles and Operations” with a few modifications. The purpose of this modified question was to investigate whether the internal auditors were alert and aware of any violations of *shariah* principles when performing the audit review process. This question was then verified by Dr. Mustafa Omar Muhammad from the International Islamic University Malaysia (IIUM), who is a *shariah* expert and an academician specializing in *Fiqh Muamalat* (i.e., Islamic principles). Under this subsection, two Islamic products were tested, which were Islamic Home Financing (BBA) and Islamic credit card. To differentiate internal auditors’ understanding of the Islamic products and conventional products, the study also provided two questions pertaining to the conventional banking products, which have similar weightage. The two conventional banking products tested were on conventional housing loans and conventional credit cards. The questions for the conventional products were formulated based on the Bank Negara Malaysia’s (BNM) guidelines under Minimum Audit Requirement for Financial Institutions. All the internal auditors were required to answer these two related sections.

In JDM research, Wood (1986), as cited by Tan and Kao (1999), categorizes task complexity as follows: (i) Component Complexity, which refers to the number of information cues to be processed and steps to be executed, and (ii) Coordinative Complexity, which refers to the amount of coordination required to perform the task that increases when the step in one part of the task depends on the previous steps or when several related steps must be performed all at once. Studies focussing on task complexity have been carried out given their importance in judgment decision making. For example, Wright (1995) examined two elements of complexity based on the amount of information needed to make a “loan collectability judgment” and the clarity of that information. Likewise, Tan and Kao (1999) investigated task complexity as one of moderation effects on auditing performance. Later, Solomon et al. (1999) investigated the impact of knowledge on specialist auditors’ performance, who worked in the financial and health industry. Figure 4.8 shows the breakdown of the questions in Section 1 of the research instrument, which deals with the task complexity.



**Figure 4.8 : The Breakdown of the Questions Pertaining to Task Complexity**



**Section 2** – Knowledge test is divided into two categories, which are as follows:

**(1) High and Low level of Test on Islamic Banking and Finance Knowledge and *Shariah* vs. Internal Audit Knowledge**

In the *Shariah* Governance Framework (SGF) (2010), which was issued by BNM under Section VI - *Shariah* Compliance And Research Fund, Para 7.8, stipulates that the *shariah* audit should be performed by an internal auditor who has adequate *shariah* knowledge and training. However, the exact level of knowledge has not been adequately defined by the BNM. As such, the researcher hypothesized that internal auditors who need to perform *shariah* auditing should have sufficiently high knowledge in Islamic banking and finance, *shariah* principles, and internal audit knowledge such that their performance will also be correspondingly high. Ten questions concerning Islamic banking and finance as well as *shariah* principles have been identified and formulated based on the review of past year examination questions from the following programs:

- Master of Islamic Banking and Finance program (which is offered by the IIUM's Institute of Islamic Banking and Finance),
- MBA specialization in Islamic Banking and Finance (which is offered by the Graduate School of Management, IIUM)

Furthermore, the identification of the types of Islamic banking and finance knowledge that should be designed and tested on internal auditors was validated by expert judgment. Thus, the opinions of practitioners (e.g., CIAs and internal auditors) and *shariah* committee members on the types and levels of knowledge that are essential to guide internal auditor in conducting *shariah* auditing were sought. Several questions were emailed to two CIAs, three internal auditors, and five *shariah* committee members, and their opinions suggest that internal auditors should have at least basic

shariah knowledge and Islamic banking and finance knowledge. The following are some of their comments received by emails:

*“They should possess, at minimum, basic knowledge in shariah framework and shariah contracts at the intermediate level. These elements are the essence of the instruments and products of the Islamic finance. Too basic knowledge may not be sufficient, as some of the products are quite complicated and sophisticated in nature. Understanding Islamic finance at the intermediate level allows the auditor to understand the basic contracts, the application of fiqh and shariah, as well as the overall operational framework from the shariah perspective, taking into consideration of the legal framework of the implementation of the Islamic finance. If the auditor knowledge is at the advance level, then it is better. However, in my view, that is not a “MUST” for every auditor. The auditor may be assisted, when necessary, by the shariah advisors, who are the experts. To me, the advance level of knowledge refers to the ability of someone to make sound decisions or rulings on Islamic finance. But, the auditor is not doing so. I think that is the substance of the SGF that places strong emphasis on adequate knowledge of internal auditors” – Shariah committee member.*

And;

*“My opinion is that shariah auditors should at least have basic knowledge of the shariah terms and contracts, and shariah process. Of course, this depends on the position of the shariah internal auditors, where a higher position should entail higher knowledge and experience of internal auditors in dealing with various shariah contracts, the latest developments, and the process flow and recording, ” – Manager of internal audit department in Islamic financial institution.”*

And lastly;

*“My understanding from this research – and Allah (SWT) knows best – is that an auditor should possess the basic knowledge. Furthermore, this knowledge, which is inter-related with others, can help internal auditors to understand the "Framework of Islamic Banking", "Framework of Takaful", BNM's documents on Istisna', Mudharabah, Musharakah, Ijarah, etc. Having this basic knowledge should also assist*

*the internal auditors to understand the procedure of drawing conclusions for certain shariah issues raised by the shariah committees, among others". – An academician specializing in Islamic banking and finance area.*

As such, all the ten questions in this section were formulated such as to measure the basic and intermediate levels of the internal auditors' knowledge in Islamic banking and finance and *shariah* principles. All these questions had been verified earlier on by Dr. Mustafa Omar Muhammad in terms of their appropriateness and clarity of information.

Furthermore, the research instrument also contains ten basic and intermediate questions related to the internal audit to be tested on the internal auditors. All the questions were derived from Gleim's (2008) examination study material, namely part (I) one for internal audit basic and part two (II) for internal audit practices. Questions were duly delineated based on the Islamic banking and finance and conventional internal audit, which invariably have some similarities. For instance, the first question of the Islamic banking and finance questions is related to *shariah* objectives, while the first question of the internal audit questions is related to internal audit objectives. Questions 8, 9 and 10 in both sections consist of a short case study related to banking operations and products.

Such formulation of the questions was to avoid any potential biases, especially experimenter bias, which might also introduce instrumentation validity threat. Wilmort (2009) asserts that the experimenter bias is a preference bias<sup>3</sup>, which occurs when a

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<sup>3</sup> Wilmort (2009) states preference bias consists of three types of biases namely:

- (a) Biased in experimental design – denote to the design of studies made is unlikely to detect any effects e.g. use different intervention and manipulation before or after experiments.
- (b) Biased in interpretation of outcomes – signify when the outcome is declared irrelevant due to a speculative alternative cause or being declared insufficient for the validation of a decision conclusion.
- (c) Biased in communication or dissemination of results – occurred when the researcher tend to disclose or publish favorable results. For instance, experiments or trials with significant outcomes are much more likely to be published than such with null or weak results

researcher unduly reflects his or her preference for favorable results over other possible results. Furthermore, Wilmort (2009) cautions that preference bias works in a more subtle way, thus increasing the likelihood of a preferred outcome rather than by bluntly fabricating it. Therefore, relevant steps were performed in this study to reduce such bias, which could influence the respondents to perform well only on certain knowledge tests or sections.

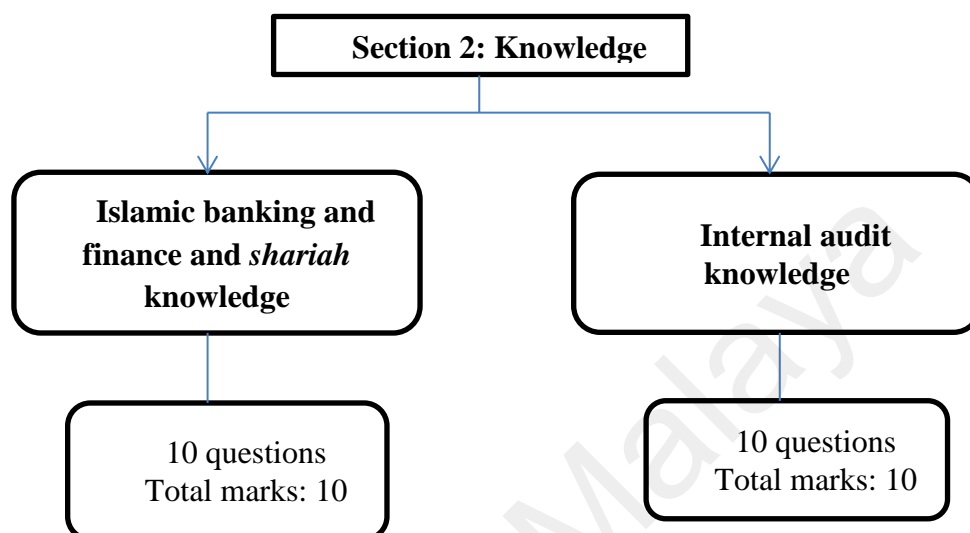
As highlighted in JDM research, Tan and Kao's (1999) designed their knowledge test consisting of 16 multiple choice questions to test respondents' knowledge of compliance (5 questions), substantives test (4 questions), financial statement errors (3 questions), and ratio analysis (4 questions). In this study, six (6) questions were adapted from Bonner and Lewis's (1990) study and the rest were from CPA questions. In particular, Bonner and Lewis (1990) designed their knowledge test to investigate three (3) types of knowledge, namely general domain knowledge, sub-speciality knowledge<sup>4</sup> and world knowledge. Essentially, their instrument consists of a combination of problems that they had developed themselves and problems based on the CPA exams, auditing textbooks, and prior research reports.

Arguably, specific measures of knowledge or task specific experience and training will often provide the best explanation of expertise. For example, Taylor (2000) examined an auditor's industrial specialization to determine the effects of assertion-level inherent risk assessments. In his study, an audit case of a hypothetical banking client was mailed to "experienced banking" audit specialists and "experienced non-banking" audit specialists to assess their judgment on the inherent risks of material

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<sup>4</sup> Defined as knowledge that related to specialized industries or client, acquired by person who has experience by specific audit clients, with certain industries, and/or firm training in those specialized area.

misstatements for two financial statement accounts. The results showed that industrial experience, not general experience, had significant positive impact on audit judgment. Figure 4.9 depicts the arrangement of questions in this section.



**Figure 4.9 : Summary of Questions in Section 2: Knowledge**

\*\* High and low knowledge of respondents were measured based on the median score of the correct answers for the knowledge questions. The categorization method was adopted from Tan and Kao's (1999) study.

### **Section 3 – Spirituality measurement**

To measure spirituality of the internal auditors, the study adopted the Human Spirituality Scale (HSS – 20 items), which was developed by Wheat (1991). This personal human spirituality scale is considered as a personal global measure for spirituality (Young, et al., 1998). The HSS has been used in numerous studies by researchers of spirituality over the last ten years (Young et al., 1998; Belaire and Young, 2000; Cashwell et al., 2001; Pollock, 2007). In fact, its reliability is considered to be extremely high as evident from Wheat's (1991) study that showed high Cronbach's alpha of 0.89. Furthermore, this instrument has been demonstrated to be able to

distinguish groups that differ in the level of spirituality, thus supporting the construct validity of the HSS. The reliability of HSS was further confirmed by other studies by Belaire and Young (2000), Giacalone and Jurkiewicz (2003), and Kolodinsky et al. (2008), indicating a Cronbach Alpha reliability coefficients of 0.86, 0.90 and 0.85 respectively. Thus, the consistency of the computed reliability coefficients affirms the use of HSS scale in the present study to measure the internal auditors' personal spirituality.

Wheat (1991) defined spirituality as "... the personal valuing, experiencing or behavioral expression, which comprises aspects related to *larger context*, *awareness of life*, and *compassion*". Larger context is the premise in which to view the events of one's life which includes aspects such as altruism or selflessness, truth, justice, morality and meaning of life. Awareness of life refers to the aspects of personal growth and wholeness, connection with other lives, sacredness or significance of life, and a connection with other life dimensions. Compassion refers to the aspects of sacredness or significance of life and awareness of pains and sufferings. The measurements of the aspects *larger context*, *awareness of life*, and *compassion* will be based on 10, 6, and 4 statements respectively.

In total, 20 statements, consisting of 19 positive statements and one negative statement, have been developed by Wheat (1991). The spirituality dimension has been discussed by Wheat (1991), covering most of the key factors or aspects in spirituality. The compilation of various concepts discussed in Wheat's (1991) study can be found in Der Walt's (2007) work. Der Walt (2007) asserts that the HSS (Wheat, 1991) contains a thorough, encompassing, and workable definition of spirituality. Table 4.5 summarizes the compilation of important factors or aspects in human spirituality as quoted from Der Walt (2007).

**Table 4.5 : Compilation of Important Factors in Human Spirituality  
(Der Walt, 2007)**

<b>Personal valuing</b>	refers to the individual perceptions on the principles, standards or qualities which viewed as worthwhile or desirable, and it may be transformed in their beliefs, behavior and normative expressions.
<b>Inner experience</b>	refers to how an individual perceives and receives the events of living including thought, emotion and sensational experiences.
<b>Behavioral expression</b>	refers to the manner in which an individual may demonstrate or communicate thoughts, emotions, needs and desires (verbally or non-verbally) as well as overt behavior.
<b>Oneness or unity</b>	refers to an individual's connection with others and with all of life, being an integral part of a universe in which all parts are sacred or significant, a personal responsibility for other living things, as well as a sense of personal wholeness and mutual fulfillment.
<b>Larger context or structure</b>	refers to an individual's perspective of life as being greater in scope than just the personal experience of daily events, which also includes concepts of abiding truth, compassion, social justice and moral relationship. It also includes awareness of accommodation of the reality of pain and suffering which refers to the preference for the non-material over material concerns.
<b>Meaning and purpose in life</b>	refers to the individual being able to make sense of life and the world at large

As such, based on the above discussion, the adoption of HSS (Wheat, 1991) is reasonable and appropriate as the factors focus on the importance of justice, equality and social welfare. It is expected that spiritually will greatly influence internal auditors as they need to conduct *shariah* auditing based on the distinctive features and objectives of *shariah* auditing itself. In *shariah* auditing, preserving *shariah* principles is vital in Islamic finance industry, especially to achieve the *shariah* objectives or otherwise known as *Maqasid-as-shariah*, which emphasizes the significant position of Islamic teaching and practices, in which all believers have to observe such practices entirely, not partially, which encompasses their complete way of lives (Kamali, 2008). Therefore, individuals who understand and embrace this concept will make them responsible, caring, and affectionate, the impact of which they will always be mindful of the deeds or actions. For example, these individuals will act fairly, avoid disputes,

ensure stability, promote *maslahah*, avoid harm, promote transparency and accountability, and uphold and promote justice in acquiring wealth.

The internal auditors are also expected to be independent, objective, truthful, and honest to serve the stakeholders' interests by making well-informed judgment. Hence, it is interesting to envisage the concept of "good practices of spirituality" that will directly affect the performance of *shariah* auditing. The measurement of the main independent variable (spirituality) was based on a 7-point Likert scale, instead of the 5-point Likert scale based on Wheat's (1999) instrument. The former scale provided greater flexibility for the respondents to express their perceptions more accurately.

For judgment decision making research, spirituality can be considered as one of the motivating factors that has a huge impact on internal auditors' judgment and actions. Reber (1995) defined motivation as "an internal state of an organism that impels or drives it to action". Motivational factors serve as performance incentives comprising two dimensions, internal motivation and external motivation. Internal motivation is shaped from within an individual; whereas, external motivation is imposed on an individual by external parties and situations. Using the expertise paradigm framework, Libby and Luft (1993) articulate that motivation is one of the important factors that may affect auditors' performance. In fact, they claim that the motivating and environmental factors will change other factors in the "expertise paradigm", namely task complexity and knowledge due to the changes of amount or allocation of effort that auditors or decision makers are willing to employ based on what they have perceived.

Specifically, based on Libby and Luft's (1993) observations, most studies have focused on four environmental factors that may affect auditors' judgment process and performance, namely technology, group processes, prior involvement, and



accountability. Bonner (1994) also asserts that auditors' ability to cope with different situations and to make good judgments is an outcome of their own effort to improve performance, which could be influenced by certain motivating factors (Bonner, 1994). In light of Tan and Kao's (1999) research on the effects of accountability on auditors' performance, the researcher viewed accountability as an important factor that is related to spirituality. Tan and Kao (1999) considered accountability as part of motivation when they examined the effects of accountability from the perspective of auditors when the reviewer's preferences are known or unknown. From the Islamic point of view, accountability and spirituality are inseparable, reinforcing the faith of Muslims in Allah, which can help achieve the main objective of *shariah* audit or *maqasid as-shariah*.

As such, this study hypothesized that spirituality is part of motivation by being an intrinsic value that may affect internal auditors' judgement. Hence, in this study, spirituality was treated as an important construct to reflect the distinctive objectives of *shariah* audit, which is to uphold *shariah* principles and prevent non-compliant activities, thus requiring a different approach and understanding. Such different approach is emphasized by Khan (1985), who conceives the role of an auditor in the Islamic economy is to interpret *shariah* audit as religious audit. The same emphasis is echoed by Abdel Karim (1990) and Hood and Bucheery (1999), stating that the *shariah* auditor is very much influenced by moral and intrinsic values, whereas the external auditor is largely affected by economic factors.

The development of spirituality measurement involved a review of past studies with the objective of identifying and selecting the most appropriate instrument to measure the main variable of the study. Additionally, a pilot survey of HSS was conducted to assess the validity of the instrument, especially in the Malaysian context. For the survey, a sample consisting of 60 undergraduates from a public university was recruited. Analysis

of the survey data revealed Cronbach's coefficient alpha of 0.92, thus establishing high reliability of the HSS instrument.

#### **Section 4 – Ethics measurement**

To measure the ethics of internal auditors, the study adopted the approach used by Ziegenfuss and Singhapadki (1994), in which 11 standards of professional code of conduct of internal auditors stipulated in the IIA code of ethics were used. The above researchers' objective was to determine the influence of the 11 codes of professional ethics on the ethical perceptions of internal auditors. Their instrument for measuring these codes of professional ethics was found to be highly reliable, as attested by the computed Cronbach's coefficient alpha index of 0.88. Findings from previous studies suggest that ethical values can significantly influence an individual's performance and an organization's performance<sup>5</sup>. Thus, the same 11 codes of professional ethics were used in this study, which were rated accordingly by the respondents. A 7-point Likert-type scale, ranging from "1" (not at all important) to "7" (extremely important), was used to measure their responses. The IIA code score was computed by adding all 11 items together, which revealed a high score indicative of the respondents' high ethics

#### **Section 5 – Respondents' Demographic**

This section required respondents to provide all the general information about themselves and their banking practices. For instance, the respondents were asked to provide information regarding their positions, such as the number of years they have been working in the financial institutions, their present positions, and the number of years they have been working as internal auditors, their experience in *shariah* auditing

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<sup>5</sup> Please refer chapter 2 section 2.3.3 for further discussion on ethics and performance.

as well as their academic background, and professional and *shariah* qualifications. In addition, the respondents were also asked about their religious denominations and the importance of religion from their perspectives.

## **Section 6 – Manipulation Check (Post Task Questionnaires)**

In the final section, the study required the respondents to state their opinions that best correspond to their feelings and perceptions, which need to be appraised by a manipulation check or post task questionnaire. This check or test was important in the experimental study to help examine whether the respondents perceived the experiment to be a reflection of what was intended and to rule out any alternative explanations. In other words, the function of the manipulation check is to ensure that the experimental instrument is able to tap into the specific causes and effects of constructs that are specified by the theory (Shadish et al., 2002). In addition, the manipulation check is also important in determining the construct validity. To develop a reliable research instrument, a study may use the manipulation check to see whether a variable (usually the independent variable) is working in the way as intended by the study. Such check is often built right into the experimental design (McBurney and White, 2010).

In this study, the manipulation check or a post-task questionnaire consisting of closed ended questions was established to evaluate the respondents' emotional state and to measure their sense of spirituality associated with other moderator variables. The respondents were asked to rate the statements according to 7-point Likert-type scale, ranging from "1" (*not significant/least important/very little effort*) to "7" (*very significant/very important/a great deal of effort*). The post task questionnaire for manipulation check also contains several questions to measure the respondents' judgement on the complexity level and types of complexity in the task complexity

section. In this section, the respondents were asked to rate their mental effort needed for each type of task complexity based on 7-point Likert-type scale, ranging from “1” (*not at all complex*) to “7” (*extremely complex*). For mental effort, the respondents were asked to rate using the same scale, ranging from “1” (*very little effort*) to “7” (*a great deal of effort*). The objective of this manipulation check was to verify that the tests assigned were relevant in terms of complexity measurement.

#### **4.4.2.5 The Administration of the Experiment**

Six sessions of experiments were conducted at pre-determined venues, such as seminar rooms and meeting rooms, located at several selected hotels in Kuala Lumpur, Malaysia. The respondents for this research are internal auditors working in the Islamic banking institutions. The internal auditors were selected as the respondents in view of their experience in *shariah* audit, which has to be carried out periodically at least once a year as imposed by the BNM’s *Shariah* Governance Framework, under Section VI (*Shariah* Compliance and Research Function) Principle 7, Para 7.8.

One of the effective ways to secure the participation of the internal auditors was by conducting a simple survey of the total population of internal auditors working in the financial institutions as the total number of internal auditors in each bank varies. The experiments were conducted at several hotels near the internal auditors’ workplace so as to ease their movements to these locations. It was found that about 788 internal auditors were working in several IFIs. The information was gathered by contacting several chief internal auditors or internal audit departments via emails and phone calls. At present, according to the BNM’s latest list, there are 16 banks that operate as Islamic banks in Malaysia (see Appendix C for details).

Attracting the internal auditors to participate in the experiments was challenging. As such, several workshops (which lasted for two hours) focusing on *shariah* auditing issues were held to attract these internal auditors. Prominent scholars in *shariah* auditing were invited to be the speakers for these workshops. The topics of these workshops were determined based on the recommendations of some of the CIAs and internal auditors. To reduce the history and testing threats in this method, the duration of each workshop was strictly monitored and observed. Furthermore, the selected topics of the workshops are not related to the experimental questions so as to prevent the respondents from becoming familiar with the outcome measures. Two research assistants were recruited to monitor the experiments process to prevent any discussion among the respondents and to prevent them from taking the experiments more than one.

To promote the workshops and experiments, the researcher sent several invitation letters to the internal auditors through their chief internal auditors. The cover letter explains the objectives of the study and the confidentiality of its findings. In addition, sent emails were to selected internal auditors requesting them to disseminate the information to their colleagues. Table 4.6 summarizes the dates of the workshops, the logbook of total experimental instruments collected, and the topics discussed during the workshops. After three or four weeks, a follow-up telephone call was made and email sent to each bank. All the workshops were conducted spanning three months (i.e., from April to June, 2013).

**Table 4.6 : Date and Topics of Experiments Conducted**

No. of experiment	Date of experiments being conducted	Total experimental instruments collected	Topics of workshop	Speakers
1	23 April 2013	26	Role of <i>Syariah</i> Audit in Enhancing Accountability And	Prof. Dr. Abdul Rahim Abdul Rahman

			Integrity in IFIs	
2	30 April 2013	22	Aligning <i>Shariah</i> Audit to IPPF and COSO ERM	Pn. Nurhayati Baharuddin
3	7 May 2013	25	<i>Maqasid As-Shariah</i> in Islamic Banking Operation – Roles of Internal Auditors	Ust. Azizi Seman
4	8 May 2013	10	Essential <i>Shariah</i> Ruling : Points to Ponder in <i>Shariah</i> Audit Practices Process	Assoc. Prof. Dr Asyraf Wajdi Dato' Dusuki
5	8 May 2013	13	Essential Knowledge on Financial Reporting of Islamic Financial Institution Aligned to MFRS	Puan Mas Sukmawati Abu Bakar
6	4 June 2013	50	Essential Knowledge on Islamic Financial Contracts for Internal Auditors	Assoc. Prof. Dr. Rusni Hassan

In total, there were one hundred and forty six (146) internal auditors from 16 IFIs in Malaysia participated in the experiment. The demographic information of the respondents are as follows:

**Table 4.7 : Demographic Information of the Respondents**

	Frequency	Percentage (100%)
<b><i>Designation:</i></b>		
Deputy CAE/Vice President	4	2.7
Manager	36	24.7
Asst. Manager	37	25.3
Senior Auditor	17	11.6
Audit Executives	37	25.3
Not IA - Others	7	4.8
<b><i>General Working Experience</i></b>		
More 20 yrs.	14	9.6
10-20 yrs.	49	33.6
5 -10 yrs.	35	24.0
1-5 yrs.	35	24.0
Less than 1 yr.	5	3.4

<b><i>Religious Denominations</i></b>		
Buddha	15	10.3
Christian	11	7.5
Hindu	4	2.7
Islam	105	71.9
Others	1	0.7

Seven respondents, who were not internal auditors, were also included in this group of respondents for analysis. Despite their indirect role in the *shariah* audit process, they nevertheless had sufficient experience in the *shariah* audit process and procedures. Most of the respondents in this group were *shariah* review officers and risk officers. Moreover, more than half (67.2 %) of the respondents had working experience exceeding five years in internal auditing.

All respondents received the same materials consisting of six sections of the questions as summarized in Table 4.8.

**Table 4.8 : Summary of Experimental Instrument**

<b>Sections</b>	<b>Descriptions</b>
<b>1</b>	Two types and levels of audit task as (a) <i>shariah</i> audit task - low and high level audit tasks and (a) Internal audit task – low and high level of audit tasks
<b>2</b>	Two types of MCQ knowledge test as (a) Islamic banking and finance knowledge test and (b) Internal audit knowledge test
<b>3</b>	A set of spirituality questionnaire
<b>4</b>	A set of ethics questionnaire
<b>5</b>	A set of debriefing questionnaires containing background information
<b>6</b>	Manipulation check / post-experiment questionnaire

The instruments were distributed to the respondents after they had finished listening to the *shariah* audit talk so as to prevent them from reading the materials and discussing the questions with their colleagues. Before the experiments, the researcher explained the main objectives of this research and vouched the voluntary nature of their participation

such that they could quit at any time if they wished to do so. However, all respondents appeared confident and seemed enthusiastic to participate in the experiment.

The instructions of the instrument informed them that they need to make a series of judgments related to *shariah* auditing procedures and internal audit procedures, and that these judgments would involve evaluating Islamic banking products and operations as well as conventional banking products and operations. They were also informed that they would be required to document and list down all the justifications and reasons that they believe were appropriate. In addition, they were also verbally reminded to follow all other instructions throughout the experiment. After reading the instructions on the folder cover, they began the experiments by recording the current time on a space provided on the folder cover. The duration for each experiment was also recorded later by the researcher to ensure all experiments had been conducted within the stipulated time.

Furthermore, the experiments were carried out using the counterbalanced order, in which the respondents performed the high and low *shariah* audit task or internal audit task either before or after the Islamic banking and finance and internal audit knowledge test. The researcher also instructed the respondents to complete a section before proceeding to the following section. For instance, they need to complete the *shariah* audit task and internal audit task first before they proceed to the knowledge test. This ordering of questions would prevent the respondents from using same arguments pertaining to a particular practice to another similar practice, given that there are similarities between *shariah* audit and internal audit and also between Islamic deposit product and conventional deposit product. Moreover, this ordering helped the researcher to examine whether the respondents would be able to clearly distinguish the *shariah*



principles stipulated in each of the cases, thus enabling them to make the correct judgment. The duration of the experiment conducted was one-and-half hours.

#### 4.4.2.6 Hypotheses

The research instrument was designed to test all the research hypotheses as summarized in Table 4.9:

**Table 4.9 : List of Hypotheses**

No	Hypotheses	Research Methods
<b><u>H1</u></b>	The three most important knowledge required to perform <i>shariah</i> audit are Islamic Banking and Finance Knowledge, Internal Audit Knowledge and <i>Shariah</i> Knowledge	In-depth Interviews
<b><u>H2</u></b>	Spirituality of internal auditors affects judgement and performance of <i>shariah</i> auditing	Experiments
<b><u>H3</u></b>	<p>There are significant moderating effect of task complexity, knowledge and professional ethics on the relations between spirituality and <i>shariah</i> auditing judgement performance.</p> <p><b><u>H3 (a)</u></b> There is a moderating effect of task complexity categorized as High and Low on the relationship between spirituality and <i>shariah</i> auditing judgement performance.</p> <p><b><u>H3 (b)</u></b> There is a moderating effect of Knowledge categorized as High and Low on the relationship between spirituality and <i>shariah</i> auditing judgement performance.</p> <p><b><u>H3 (c)</u></b> There is a moderating effect of professional ethics - (High and Low) on the relationship between spirituality and <i>shariah</i> auditing judgement performance.</p>	Experiments

#### 4.4.2.7 Model Specification and Variables' Measurements

To test the above said hypotheses (specifically for hypotheses 2 and 3), a modified version from Tan and Kao's (1999)<sup>6</sup> model is shown below:

$$AP = \beta_0 + \beta_1 \text{SPIRIT} + \beta_2 \text{TASKCOMP} + \beta_3 \text{SPIRITTASK} + \beta_4 \text{KNOW} + \beta_5 \text{SPIRITKNOW} + \beta_6 \text{ETHICS} + \beta_7 \text{SPIRITETHICS} + \varepsilon$$

**Table 4.10 : List of Hypotheses and Measurement of Variables**

Hypotheses	Dependent Variable	Measurements of variables
	<b>AP</b>	<i>Shariah</i> Auditing judgement performance was measured by the number of correct responses in task complexity
	<b>Independent Variable</b>	<b>Measurements of variables</b>
<b>Hypotheses 2</b>	<b>SPIRIT</b>	Responses are measured through spirituality test adapted from : Human Spirituality Scale (HSS) - Wheat (1991) by using mean centered proportion
	<b>Moderating Variable</b>	<b>Measurements of variables</b>
<b>Hypotheses 3</b>	<b>TASKCOMP</b>	Task complexity is measured through a set of questions relating to <i>shariah</i> auditing process and internal auditing process. This section consists of two (2) level of complexity (high and Low) and two types of task (Islamic auditing and internal auditing process) – Using mean centered proportion
<b>Hypotheses 3</b>	<b>KNOW</b>	Knowledge test contained ten (10) multiple choice questions for Islamic banking and finance questions as well as 10 multiple questions for internal audit questions – Using mean centered proportion
<b>Hypotheses 3</b>	<b>ETHICS</b>	Responses was measured through eleven (11) standards of conduct of internal auditor in IIA code of ethics (quoted from study conducted by

<sup>6</sup> The original regression model by Tan and Kao (1999) is as follows:

PERFORMANCE = B<sub>0</sub> + B<sub>1</sub> ACCOUNTABILITY + B<sub>2</sub> TASKCOMP + B<sub>3</sub> KNOW + B<sub>4</sub> ABILITY +  $\varepsilon$

		Ziegenfuss and Singhapadki (1994) by using mean centered proportion)
<b>Hypotheses 3 (a)</b>	<b>SPIRITTASK</b>	Moderation effect – Interaction term between Spirituality (IV) and Task complexity (Moderator)
<b>Hypotheses 3 (b)</b>	<b>SPIRITKNOW</b>	Moderation effect – Interaction term between Spirituality (IV) and Knowledge (Moderator)
<b>Hypotheses 3 (c)</b>	<b>SPIRITETHICS</b>	Moderation effect – Interaction term between Spirituality (IV) and Ethics (Moderator)

#### 4.4.2.8 Pilot Testing of the Experiment

In this section, the researcher discusses the background and results of the pilot testing as follows:

##### (a) *The Background of the Pilot Study*

A pilot study was suggested to be conducted on related parties (Bryman and Bell, 2007), such as academicians, *shariah* committee members, and graduate students who specialize in Islamic banking and finance. Two experts in Islamic banking and finance were engaged to review the research instrument to determine its face validity, reliability, and clarity. Based on the review, all the tasks and questions were deemed both valid and reliable. However, some questions related to internal audit were deemed inappropriate to be tested on this group of students as they did not have any internal auditing experience.

According to Saunders et al. (2000), a pilot study is regarded as one of the methods that can maximize the response rates, validity, and reliability of the data that are to be collected. It can also help the researcher with the wording and ordering of questions and the design of the letter of introduction (Oppenheim, 2001). A pilot study is also conducted to detect weaknesses in the design and instrumentation (Sekaran 2003).

Thus, a pilot study for the experimental instrument was carried out on a group of graduate students specializing in Islamic banking in a public university and a group of bankers working in Islamic financial institutions in Malaysia. The purpose of this pilot study was to ensure the appropriateness of the objectives of this study as well as to gather preliminary data to verify the validity of the instrument. The postgraduate students were deemed knowledgeable in Islamic banking and finance based on their high performance of their coursework in the subject matter. Thus, these students, together with a group of bankers, served as relevant proxies in the pilot study. Moreover, the bankers had significant working experience in Islamic banking products and operations, thus enabling them to provide reasonable information and responses.

In total, 36 respondents participated in this experiment, and the average time to complete the experiment was approximately one hour. Given the comprehensiveness of the research instrument, which would entail longer time to complete, it was quite impossible for the participants to express their thoughts with careful considerations. As expected, it was found that many of the returned instruments had not been answered completely, especially for the internal auditing-related questions. This outcome was not surprising as the respondents in the pilot study were not internal auditors, and therefore, they had little experience and knowledge in internal auditing. Overall, the pilot study had been useful in helping the researcher to analyze the section on *shariah* auditing and Islamic banking of the instrument more objectively in terms of the constructs that were meant to be measured.

(b) *The Results of the Pilot Study.*

Table 4.11 summarizes the demographic of the respondents such as their designation, general working experience, Islamic audit working experience, general qualifications, Islamic banking qualifications, and religious denominations.

**Table 4.11: Respondents Demographic Background – Pilot Study**

	Frequency	Percentage (100%)
<b><i>Designation</i></b>		
CIA	1	3.2
Deputy CIA/Vice President	1	3.2
Manager	1	3.2
Asst. Manager	2	6.5
Senior Manager	6	6.5
Executives	3	3.3
Not IA – Others	1	3.2
Students	21	67.7
Missing Value(s)	1	3.2
<b><i>General Working Experience</i></b>		
More 20 yrs.	1	3.2
10-20 yrs.	2	6.5
5 -10 yrs.	5	16.1
1-5 yrs.	5	16.1
Less than 1 yr.	14	45.2
None	2	6.5
Missing value(s)	2	6.5
<b><i>Islamic Audit Working Experience</i></b>		
More than 20 yrs.	1	3.2
1-5 yrs.	4	12.9
Less than 1 yr.	17	54.8
None	7	22.6
Missing value(s)	2	6.5
<b><i>General Qualifications</i></b>		
Master Degree	11	35.5
Degree	18	58.1
Others	1	3.2
Missing Value(s)	1	3.2
<b><i>Islamic Banking Qualifications</i></b>		
Master in IBF	5	16.1
Degree Islamic Studies	2	6.5
Degree Islamic Law/Shariah	3	9.7
Others	5	16.1
None	15	48.4
Missing Value(s)	1	3.2

<b><i>Religious Denominations</i></b>		
Islam	30	96.8
Missing Value(s)	1	3.2

Clearly, the postgraduate students formed the majority of the respondents, constituting 67.7% of respondents, and the practitioners constituted 29.1% of respondents in this pilot study. Nearly half of the respondents, at 45.2 %, had working experience less than a year. Likewise, 77.4 % of the respondents had Islamic banking experience less than a year. A majority of the respondents had higher academic qualifications, with 58.1% and 35.5 % of them had Bachelor's degree and Master's degree respectively. However, only 32.3 % of the respondents held Islamic banking and Islamic study qualifications compared with almost 64.5 % of the respondents who did not possess any Islamic qualifications. In terms of religious denomination, respondents of the Islamic faith constituted an overwhelming majority, registering 96.8 % of the total respondents.

Table 4.12 summarizes the descriptive statistics of the pilot study, highlighting the mean scores, standard deviations, minimum scores, and maximum scores of the constructs in each section of the experimental instrument. As expected, the mean scores for all internal audit tasks and internal audit knowledge are lower than the Islamic audit task and Islamic banking knowledge. This difference is mainly attributed to the majority of the respondents who did not have any sufficient internal audit experience and knowledge as they were mainly postgraduate students.

**Table 4.12: Descriptive Analysis for Pilot Study**

	N	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Std. Error
TotalscoreIslamicKnow	31	.00	9.00	5.806	2.135	-1.201	.421	1.813	.821
TotalscoreInternalknow	31	.00	6.00	2.064	1.842	.343	.421	-1.037	.821
TotalscoreIslamicHighTask	31	.00	16.00	8.354	4.665	-.609	.421	-.521	.821
TotalscoreIslamicLowTask	31	.00	10.00	5.000	3.415	.102	.421	-1.056	.821
TotalscoreInternalhighTask	31	.00	9.00	4.193	2.903	.022	.421	-1.210	.821
TotalscoreInternallowTask	31	.00	10.00	2.096	2.573	1.215	.421	1.274	.821
SPIRITSUM	31	86.00	167.00	138.41	19.297	-.699	.421	.484	.821
ETHICSSUM	31	26.00	77.00	62.00	12.860	-.938	.421	.535	.821
Valid N (listwise)	31								

The mean scores of Islamic banking and finance knowledge and internal audit knowledge are 5.81 and 2.06. The mean score of Islamic audit task is 13.35, with high complexity Islamic audit task and low complexity Islamic audit registering mean scores of 8.35 and 5.00, respectively. In contrast, the mean score of internal audit task is only 6.29, with high complexity internal audit task and low complexity internal audit task registering mean scores of 4.19 and 2.10, respectively. The small sample size made the analysis of the data to check the assumptions of normality problematic. However, based on the skewness and kurtosis analysis, the data are in the acceptable range of -2 and + 2, allowing relevant statistical analyses on such data (Pallant , 2011).

Another important objective of conducting the pilot study is to find out whether the developed scales are reliable. According to Pallant (2011), checking the reliability of scale is vital in determining its internal consistency, which refers to the degree by which the items can reliably measure an underlying construct. As shown in Table 4.13, the reliability test performed on the constructs revealed that task complexity, spirituality, and ethics have high internal consistency, as underscored by the computed reliability

coefficients of .80, .91, and .92 respectively. These findings reinforce the reliability of Wheat's (1991) HSS and Ziegenfuss and Singhapadki's (1994) IIA code of ethics instruments in studies in Malaysia, as demonstrated in this study. However, the reliability coefficient computed for Islamic knowledge and internal audit knowledge is quite low at .61. Nonetheless, the use of this instrument to measure this construct is still acceptable as other studies involving lower values, such as .43 and .39 in Tan and Kao's (1999) and Tan and Libby's (1997) studies, have been deemed equally acceptable, given the composite nature of such construct. Table 4.13 summarizes the Cronbach's alpha coefficients of the constructs.

**Table 4.13 : Reliability Test**

<b>COMPONENTS ON THE FUNCTIONS OF <i>SHARIAH</i> AUDIT</b>	<b>CRONBACH'S ALPHA</b>	<b>N OF ITEMS</b>
List of Task Complexity Questions	0.80	13
Islamic Knowledge	0.60	10
Internal Audit Knowledge	0.61	10
Spirituality	0.91	25
Ethics	0.92	11

In addition, a correlation analysis was performed in the pilot study to examine the degree of association between the two metric variables. The correlation analysis showed the direction and the strength of relation, which provided additional support to test the research hypotheses of this study. In fact, the correlation analysis was performed to examine whether there is a significant relation between the main independent variable (i.e., spirituality) and the dependent variable (*shariah* auditing performance). Establishing such relation was important to help the researcher to investigate the effects of moderator variables, namely task complexity, knowledge, and ethics, on the *shariah* auditing performance. Baron and Kenny (1986) state that the basic moderator effect can



be represented by an interaction between an independent variable and a factor that may affect or specify the appropriate conditions of the relation. Therefore, a correlation analysis was conducted on spirituality and *shariah* auditing performance, which showed a moderate and positive association between the two variables, as indicated by the computed coefficient of .57.

#### 4.4.3 External and Internal Validity

Validity is one of the important factors in determining the quality of research. In particular, validity will determine whether a researcher's conclusion based on the research results is true (valid), or false (invalid), to help explain the actual state of a phenomenon accurately (McBurney and White, 2010). Furthermore, Shadish et al. (2002) state that validity is all about "inferences" and the extent to which relevant evidence supports those inferences. They also proposed four types of validity that must be considered in designing and evaluating research, namely internal validity, construct validity, external validity, and statistical conclusion validity. Table 4.14 summarizes the categorizations of validity based on Shadish et al's (2002) and McBurney and White's (2010) work.

**Table 4.14: Compilation of Validity Definition from Shadish et.al (2002), and McBurney and White (2010)**

Types of validity	Meanings from Shadish et al . 2002	Meaning from McBurney and White (2010)
<b>Internal Validity</b>	The validity of inferences about the correlation (co-variation) between treatment and outcome: The validity of inferences about whether observed co-variation between A (the presumed treatment) and B (the presumed outcome) reflects a causal relationship from A to B as those variables were manipulated or measured. ~ between independent and dependent variables.	Concern on the extent of which study provides evidence of a cause – effects relationship between the independent and dependent variable

<b>Construct Validity</b>	The validity of inferences about the higher order constructs that represent sampling particulars.	The extent to which the results support the theory behind the research
<b>External Validity</b>	The validity of inferences about whether the cause-effect relationship holds over variation in persons, settings, treatment variables, and measurement variables.	To what extent the findings of experiments will well explain to other situation or populations
<b>Statistical Conclusion Validity</b>	The validity of inferences about the correlation (co-variation) between treatment and outcome.	To what extent data gathered to be the result of cause-effect relationships rather than accident

*Compilation of Validity definition from Shadish et.al (2002), McBurney, and White (2010)*

#### 4.4.3.1 Internal Validity

The research design was carefully chosen and implemented such that the study would have high internal validity. Particularly, every stage of the development process of the research design (such as the selection and arrangement of questions or case study of the research instrument) and the reliability and appropriateness of questions were verified by experts. The main objective of such development process was to eliminate any alternative explanations, which might compromise the findings of the study. Common threats to internal validity include history, maturation, testing, instrumentation, selection bias, and mortality (Creswell, 2011,2012). Such threats to internal validity are due to researchers' weaknesses in selecting the appropriate procedures for experiments, the manipulation of treatments, and the experiences and responses of respondents.

History threats relate to events that occur during or immediately preceding the study or are influenced by events that may occur during the experiment. As stipulated by the BNM, all IFIs in Malaysia should conduct *shariah* auditing starting from year 2011. Thus, by now, most auditors would become more aware of this guideline such that they could have familiarized with the concept and practices of *shariah* auditing. This awareness could have led the respondents to be well-versed on the subject matter, and

therefore the research instrument is deemed reasonable to be tested on them. However, to avoid biases among the internal auditors, the study was strictly monitored throughout the experiment in terms of time allocation such that the internal auditors would have ample time to answer the questions given. With sufficient time, the internal auditors would not rush to provide the answers, otherwise their judgments would be flawed.

Maturation threat is defined as the mental and physical changes experienced by the research subjects, which may affect the research outcomes. In this study, the internal auditors completed the experiment in a single session, which lasted one-and-half hours, and therefore the maturation threat was avoided. However, in some cases, testing threat may be introduced due to the testing procedures. In this study, the respondents might be exposed to testing threats if they were measured on multiple times using the same variable. Thus, in this study, all variables were measured simultaneously, thus avoiding the “pre-test and post-test” measurements that are typically carried out in sequence. In addition, instrumentation threats may arise from differences in the instruments or differences in the administration of the instrument.

For this study, the same research instrument was used for all respondents within stipulated time. Even though the study involved six experiments, each of the experiment used the same procedure and administration process. In each session of the experiment, all respondents were reminded to not discuss their answers with their colleagues. Two research assistants were engaged to monitor the experiments. The research assistants were also responsible to ascertain that the respondents would not attend the experiment more than one.

Mortality threats occur when some of the research subjects are found missing or some of them did not complete an experiment. As their participation was voluntary, the

respondents could, at any time, quit the experiments. However, no such threat materialized as all the respondents remained engaged throughout the experiments until completion. Furthermore, in this study, random assignment helped minimize the threat of selection bias. Invariably, the method used to recruit research subjects can lead to sample selection bias. In this study, official invitation letters were sent to CIAs of 16 IFIs requesting them to nominate their internal auditors to participate in the experiment. Bias could occur if the CIAs' selection of their internal auditors was done based on certain criteria that are beyond of the control of this study. In the official letters, no specific group of internal auditors was requested. It was revealed that all the internal auditors had a fair share of experience in *shariah* auditing, regardless job specifications.

#### **4.4.3.2 External Validity**

External validity is concerned with how well the findings of an experiment can be generalized to other situations or populations (McBurney and White, 2010). Creswell (2012) states that potential threats to external validity arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations. Respondents, tasks, and time can pose a threat to external validity. This study was designed to collect data only from the internal auditors at 16 IFIs (which have been listed in the BNM website as Islamic organizations) in Malaysia. Thus, the findings of this study can only be generalized to this population only. As stipulated in the SGF 2010, internal auditors are also responsible to perform *shariah* audit in the IFIs. Therefore, generalization of the findings to other functions and groups (i.e., *shariah* review officer and *shariah* risk officer as stipulated in the SGF 2010) is inappropriate. In addition, this study made use of specific audit tasks in a specific setting, namely *shariah* auditing task in the IFIs setting.

Moreover, the mandatory guidelines of the BNM has been enforced more than three years, thus the needed expertise to help Islamic banking and finance industry may not mature to the intended level yet. Thus, more efforts are needed by IFIs to keep strengthening their audit practices and the competency of their workforce. In light of this development, the research findings may only be relevant in today's context, not in the future context.

#### **4.4.4 The Statistical Analyses**

The first step in the data analysis was to analyse any violations of the statistical assumptions of normality of the dependent variables as well as the constant and equal variance of residuals using visual analysis of the “stem and leaf” plots and histograms. After the visual analysis, skewness and kurtosis test for normality and Levene's test for equality of variances were conducted. These analyses confirmed that no such violations occurred, thus the ensuing correlational analysis based on Pearson correlation model was performed on the dependent, independent, and moderator variables (i.e., task complexity, knowledge and ethics).

Baron and Kenny (1986) state that basic moderator effect can be represented as an interaction between the independent variable and a factor that may affect or specify the appropriate conditions of the relation. Significant correlations among dependent variables were detected in this study, thus they were evaluated simultaneously using multivariate statistics. Given that the dependent variables were significantly correlated as expected, regression analysis was used to examine any significant relations among spirituality, task complexity, knowledge, and ethics on *shariah* auditing judgement performance. The regression analysis enabled the researcher to check the interaction effects (moderation effects) among all variables. In addition, specific contrast by

regression analysis allowed the researcher to address hypotheses H3 (a), H3 (b) and H3 (c) as follows:

- <sup>u</sup> High Complexity Islamic Audit Task /High Islamic Knowledge/ High Spirituality/ High Ethics = Total Audit Task
- <sup>u</sup> Low Complexity Islamic Audit Task / Low Islamic Knowledge / Low Spirituality/ Low Ethics =Total Audit Task
- <sup>u</sup> High Complexity Internal Audit Task /High Internal Audit Knowledge / High Spirituality / High Ethics = Total Audit Task
- <sup>u</sup> Low Complexity Internal Audit Task/ Low Internal Audit Knowledge / Low Spirituality/ Low Ethics = Total Audit Task

Lastly, for the manipulation check on complexity, the researcher performed pairwise comparisons on the complexity measures based on the two levels and types of the complexity task, which was adopted from Tan and Kao's (1999) study.

#### **4.5 Overview of the chapter**

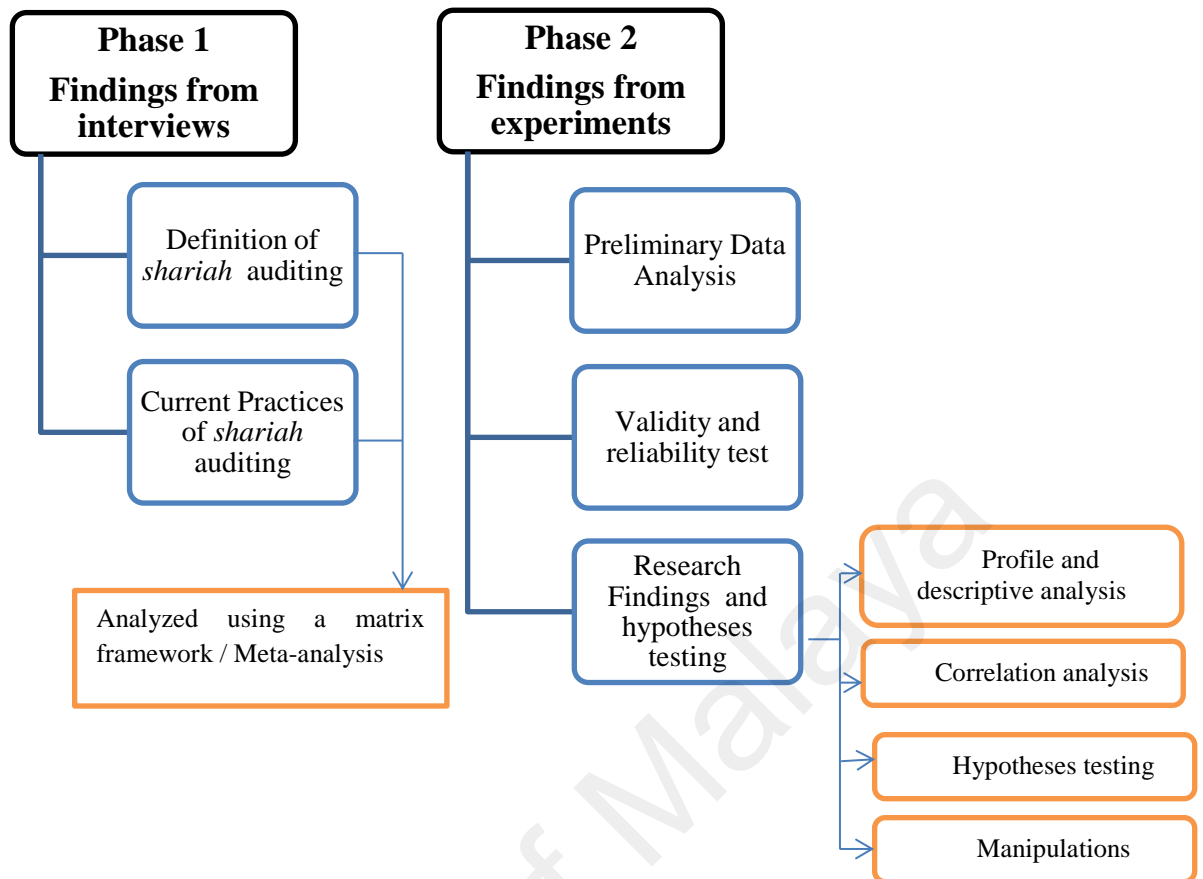
This chapter provides a detailed discussion on the research methodology used in the study, especially on the empirical part of the study. An experimental approach was selected as the most appropriate method of data collection given that the focus of the study was to examine factors affecting internal auditors' judgement performance. This chapter also elaborates on the various strategies to formulate the research design, the development of a case study and experimental instrument, and internal and external validity of the study. Finally, this chapter details the relevant statistical techniques used to test the research hypotheses of the study.

## CHAPTER 5: RESULTS AND DISCUSSIONS OF FINDINGS

### 5.1 Introduction

This chapter discusses the findings of the analysis and testing of the research hypotheses. As mentioned in the previous chapter, the main objective of the study was to investigate the knowledge requirements of internal auditors to perform *shariah* audit in IFIs in Malaysia as well as to investigate the effect of spirituality on *shariah* auditing judgement performance of internal auditors. In addition, the moderation effects of task complexity, knowledge, and ethics on the relation between spirituality and *shariah* auditing judgement performance were also investigated. Accordingly, this chapter provides the discussion of the findings based on the two major phases of the study. The first phase involved the analysis of respondents' perceptions on various issues of *shariah* auditing practices, definitions and objectives, challenges and limitations, and knowledge requirements. In total, 15 respondents who had sufficient experience in *shariah* auditing were drawn from various groups of the Islamic banking and finance industry.

The second phase of the study examined the main effect of spirituality and moderation effects of moderator variables on *shariah* auditing judgement performance through a series of experiments involving 148 internal auditors of IFIs in Malaysia. The statistical analyses performed on the empirical data were based on regression analysis. Overall, this chapter comprises several sections as summarized in Figure 5.1.



**Figure 5.1: An overview of Chapter 5**

## 5.2 Phase 1: Findings from Interviews

The interview transcripts were analyzed using a matrix framework<sup>7</sup>. The matrix framework or meta-analysis interview was adopted from Patton (2002) and Zain (2005). As quoted by Zain (2005), the matrix format draws attention to the presence or absence of consistency and consensus across different respondents, and as such it is a useful tool for identifying commonalities and differences in the research themes (Miles and Huberman, 1984; Martin and Meyerson, 1988). In general, all responses from fifteen (15) respondents were categorized into two main themes or categories. The findings of interviews were important to answer the first research Hypotheses (i.e., H1) that the three most important knowledge required to perform *shariah* audit are Islamic

<sup>7</sup> Chapter 4; section 4.4.1 explained in details of in-depth interviews such as designing interviews questions, administration and sampling.



banking and finance knowledge, *shariah* knowledge and internal audit knowledge. The findings indicate that all the respondents agreed that the three most important knowledge required to perform *shariah* audit were Islamic banking and finance, *shariah* audit and internal audit knowledge. The findings were based on in-depth interviews, which are represented under two themes as summarized in Table 5.1.

**Table 5.1: Themes of the In-depth Interviews**

<b>Themes of In-depth interviews</b>	
(1)	Definition of <i>shariah</i> auditing <ul style="list-style-type: none"> <li>- contrasting the definition from the Islamic perspectives and conventional perspectives as well as in terms of practices and approach of <i>shariah</i> auditing</li> </ul>
(2)	Current practices of <i>shariah</i> auditing in terms of : <ul style="list-style-type: none"> <li>(i) Scope and extent of <i>shariah</i> auditing</li> <li>(ii) The current framework adopted by the IFIs</li> <li>(iii) Relation with <i>shariah</i> review and <i>shariah</i> committee</li> <li>(iv) Competency and knowledge requirements</li> <li>(v) Governance and reporting line of internal auditor</li> <li>(vi) Challenges and limitation</li> </ul>

### **5.2.1 Definition of *Shariah* Auditing**

All fifteen (15) respondents agreed with and understood the definition of *shariah* auditing as stated in the *Shariah* Governance Framework for Islamic Financial Institutions (SGF) (2010) issued by the BNM, stipulating that *shariah* auditing is the periodical assessment to validate and provide assurance that the internal control of a company is effective and efficient, which is in line with the *shariah* principles. All respondents also agreed that the *shariah* auditing function was important to reduce the *shariah* risks and non-compliance of banks. In addition, they also agreed that the internal audit department was expected to perform consulting practices to other departments, such as providing advice in setting up sound internal control to preserve

*shariah* principles. Examples of the respondents' responses to support the above findings are as follows:

*“ shariah auditing is important to perform as it will help to reduce shariah risk. Shariah risk is an important issue. If we do not properly manage shariah risk, it will lead to other risks such as credit risk, operational risk, reputation risk and etc.”*  
[Respondent 1]

*“...in our internal audit department, we adopt ERM (Enterprise risk management) and COSO framework to identify the shariah audit risk. Bank have their own policies, so we need to know the risk for each of the policies and then incorporating them into the audit procedures. We also audit our systems to check for any potential risks”*  
[Respondent 2]

Such concern is reinforced by the response from one (1) of the respondents, who is an external auditor in one of the big four audit firms in Malaysia. Emphatically, he indicated that the current practices of *shariah* auditing in IFIs were not sufficient to reduce the risks as exemplified by the statements as follows:

*“... apparently, the internal audit department does not have a clear understanding of the internal auditing process, exemplified by their inability to use a systematic approach or methodology, to link with other completed works and results, and to fully understand the objectives of what that they are trying to achieve”* [Respondent 15].

Furthermore, thirteen (13) respondents indicated that the definition and practices of *shariah* auditing and conventional auditing were similar, except that the main objective of *shariah* auditing was to ensure sound and effective internal control for *shariah* compliance. Interestingly, two (2) of the respondents viewed that *shariah* auditing

methodology and definition were different compared with conventional auditing as highlighted as follows: “ ... *previously, yes we can say it is similar to conventional or normal audit procedures, but then, at current state, we are moving towards specific shariah auditing objectives, process and approach because we concerns on shariah risk and non-compliance issue*” [Respondents 4 and 7].

However, all the respondents agreed and admitted that the process of *shariah* auditing would be more effective and sound if internal auditors had relevant, adequate knowledge of *Fiqh Muamalat* and Islamic legal contracts or maxims. The knowledge of these two areas will enhance the process of auditing as the internal auditor will become more appreciative and alert on the issues of *shariah* non-compliance. This Islamic knowledge also makes the approach and process of conducting *shariah* auditing different from the conventional auditing process. Samples of the responses that stress on such emphasis are as follows:

“...*Most of internal auditors understand their roles and functions, but due to the lack of knowledge, some of them are still unclear about shariah auditing process and shariah review process. In fact, internal auditors tend to conduct shariah audit only based on the audit checklist, which shows that they do not really understand the objectives and justifications with regard to shariah non-compliant issues*” [Respondent 10].

‘...*from my observation, many internal audit in IFIs still don’t understand shariah auditing functions. Therefore, they are still unable to provide an assurance regarding the effectiveness and efficiency of internal control. This could be due to a lack of shariah knowledge and uncertainty of shariah auditing objective itself.*” [Respondent 8 and 11].

*“...shariah auditing consists of different audit objectives, which are to achieve maqasid of shariah. Therefore, shariah audit should be different from the normal audit process....internal auditor should have adequate knowledge to contrast the differences”*  
[Respondents 4,10,12 and 13].

Given these findings, most of the internal auditors seemed to have a firm understanding of the definition of *shariah* auditing. They also agreed that main objective and function of *shariah* auditing was to reduce *shariah* risk or *shariah* non-compliant risk in IFIs. More importantly, all the respondents agreed that to achieve such objective would entail internal auditors to possess sound understanding of *shariah* principles and IBF knowledge, enabling them to appreciate and justify the reasons for any *shariah* non-compliant issues in the *shariah* auditing process.

## **5.2.1 The Current Practices of *Shariah* Auditing in terms of:**

### **5.2.1.1 Scope and Extent of *Shariah* Auditing**

SGF (2010) stipulates that the internal audit department of a bank should perform the *shariah* auditing function. Currently, a significant number of full-fledged Islamic banks including several foreign owned entities and some conventional banking institutions have established Islamic banking subsidiaries. The findings from the interviews show that *shariah* auditing is performed by the internal audit department and only one IFI has a dedicated unit in the internal audit department to perform *shariah* auditing. Specifically, fourteen (14) respondents agreed and confirmed that all internal auditors in such department were responsible to perform *shariah* auditing when they were requested to conduct internal audit on certain Islamic banking operations or products. Furthermore, they noted organizations that did not have a dedicated unit of *shariah* audit would usually appoint two to three experienced internal auditors to help other

internal auditors during the *shariah* auditing process as the former had adequate knowledge of Islamic banking, finance and *shariah*. From the regulation point of view, one of the SAC members' responses are revealing, as expressed as follows:

*"... Not many banks have established a dedicated unit of shariah audit. Apparently, the BNM does not see any necessities for IFIs to establish such specialized unit as it will tighten up the regulatory requirements, which at the end will affect the growth of the industry."* [Respondent 14].

The respondents also agreed that the internal audit department should design appropriate *shariah* auditing programs to cover all aspects of the IFIs' business operations and activities, such as the audit of financial statements, compliance audit, review on internal control of organizational structures, people, process, information technology, and review on *shariah* governance. The respondents' understanding of the scope and extent of *shariah* auditing, as emphasized by the SGF's (2010) guideline, is deemed adequate. According to eight (8) respondents (who reported that *shariah* auditing process in their IFIs was effective), in reality the practices of *shariah* auditing only covered basic aspects, thus needing further improvement. In fact, they highlighted that *shariah* auditing was only performed at the surface level of the auditing process, such as fulfilling an audit program checklist. Moreover, they reported that internal auditors who performed audit on certain Islamic products and operations relied heavily on their experience in conventional audit.

Such reliance is certainly inappropriate due to the different nature and concepts of the Islamic banking products and operations that require assurance of compliance based

on the *shariah* principles. For instance, the *ijarah*<sup>8</sup> contracts should fulfill specific conditions, such as the establishment of evidence of ownership to support that the asset is in the ownership of the IFIs, including accounting treatment and claims for capital allowances to local accounting and tax regulations. In addition, some of the respondents claimed that not many of the internal auditors had good understanding of certain concepts of Islamic banking and the nature of its operations, which had resulted in them making bad or wrong judgments in determining the *shariah* compliance of IFIs' transactions. Furthermore, to improve *shariah* auditing of IBF operations and products, one external auditor succinctly expressed that:

*".... before conducting shariah internal audit, the audit department should develop a structured methodology in terms of the scope of shariah audit, shariah risk assessment, shariah audit planning procedures, audit testing methodology, reporting and rating methodology, coordination of work performed by shariah review functions, and relation between shariah audit opinion and work performed."*[Respondent 15]

In addition, some respondents also commented that *shariah* auditing practices had not been effectively carried out due to insufficient time to conduct *shariah* auditing as well as the lack of expertise. The responses as to whether their organizations are practicing effective *shariah* audit process are quite diverse. Only three (3) respondents reported that such practices were very effective, with another five (5) respondents reported moderate effectiveness of such practices. In addition, another three (3) respondents reported that such practices were quite effective, with another four (4) respondents claiming that the *shariah* auditing in their banks was not effective.

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<sup>8</sup> *Ijarah* is leasing ; the sale of usufruct of an asset

In fact, the three (3) respondents who reported that the *shariah* auditing process was very effective were working in full-fledged Islamic banks. Presumably, the nature of activities, operations, and products that they were involved with are based on *shariah* principles. One (1) of the respondents indicated that the *shariah* auditing process was ineffective due to "... repetition of work between *shariah* audit procedures and *shariah* review procedures". However, it is expected that the *shariah* auditing process will improve, and is improving, after the implementation of IFSA 2013. Such contention is best exemplified the response as follows;

*"They are improving...everybody is aware of the important roles and functions of shariah auditing to reduce shariah non-compliant risks as well as the penalty charges for breach of IFSA 2013. As such, the practice will improve as the new regulatory guideline, namely IFSA 2013, has been enforced on all IFIs"*[Respondent 14]

#### **5.2.1.2 The Current Framework Adopted by the IFIs**

Under this subsection, the researcher investigated the approach or process that has been adopted by the internal audit department in relation to the framework or standards, audit process, audit program, and plan. The findings indicate that the internal audit department has adopted a framework or standards as stipulated in the International Standards for Professional Practice of Internal Auditing (IPPF) (issued by the IIA and Guidelines on Minimum Audit Standards for Internal Auditor of Financial Institution). Currently, there are no standards specifically designed for *shariah* auditing. *Shariah* auditing is being performed in all units of business operation, which normally depends on the internal audit risk assessment and annual internal audit plan conducted by the internal audit department. Eight (8) respondents revealed that the current practices of *shariah* audit program in IFIs are shared with the conventional audit program, which in

some extent involves certain modifications of the latter. Only seven (7) respondents stated that their organization had designed a structured *shariah* audit program for *shariah* auditing purposes. However, the respondents claimed that to offer reliable Islamic financial services, the *shariah* audit program still needed improvement due to the lack of appropriate *shariah* audit procedure, policies, and processes. The audit program should also abide with standard operating procedures, including accounting standards (MASB or IFSB), BNM regulatory requirements and others.

In terms of risk assessments, all respondents agreed that their risk assessments were based on group internal audit risk assessment. For example, one (1) external auditor indicated that such assessments were important to *shariah* auditing process as highlighted in his responses as follows:

*“ ... when the internal auditors perform risk assessment in shariah auditing process, they need to deal with several questions as follows: “Which needs to be considered between compliance checks or risk based audit? “How do you define shariah non-compliant risk?” “Who should execute shariah audit?” “Should IFIs hire Islamic scholars or should they train professional internal auditors in Islamic finance?” “What are the scope and definition of shariah audit?” “Should shariah audit be different from conventional audit?” “To whom or what type of entities that assurance of shariah audit is meant for?” “How do you determine the planning and testing methodology so as to provide assurance of shariah audit?”, and lastly “How do you raise the issues and rate the reports?” [Respondent 15].*

In addition, the respondents were asked whether it was essential for the IFIs to have its own *shariah* audit framework and program. All respondents noted that the BNM should at least issue a general framework and list of audit programs to be used as a



guideline for the IFIs. The objective of such framework is to help IFIs in designing their own *shariah* auditing framework and program, which will be based on the nature and types of Islamic banking products and operations they are offering. Surprisingly, the response of the BNM's SAC does not reflect such need as illustrated by the following statement:

*"I don't think we need to issue a structured shariah audit framework. This is important to ensure the growth and to promote the Islamic banking industry. If the regulations are too binding or stringent, the Islamic banking and finance will experience difficulty expensive, thus halting its growth. For me, awareness of its importance and continuous education need to be carried out aggressively at the individual level as well as at the management level."* [Respondent 14].

#### **5.2.1.3 Roles of Shariah Review Function and Shariah Committee in Shariah Auditing**

According to SGF (2010), the internal auditors may use the expertise of IFIs' *shariah* officers and *shariah* committee members in performing the *shariah* audit for as long as the objectivity and independence of the audit are not compromised. The findings of the interviews indicate that the internal auditors had a close working relation with the *shariah* review department in many aspects of the audit, particularly in confirming the compliance of business operations with the *shariah* principles and practices. For instance, the internal audit department would review the *shariah* compliance framework and internal control. The respondents also indicated that they had a clear understanding of their independent and objective role as an internal auditor. In addition, they stressed that *shariah* reviews department would serve as a referral point for the internal audit department to receive confirmation and clarification on certain *shariah* issues.

Apparently, all the respondents also understood the role and function of the *shariah* reviews department, which are to ensure *shariah* compliance of all Islamic banking activities as highlighted by the following statements

*“Yes! We do have a close relation with our shariah reviews department. They serve as our referral source if we are not sure about certain shariah issues” [Respondent 5].*

*“We work closely with the shariah reviews department. But then, we still maintain our independence. They are only our auditee!” [Respondent 6].*

*“We have a close relation with the shariah reviews department, and we are fully aware of the functions. This is important to ensure no repetitious process... shariah reviews function is mainly concerned with monitoring of daily functions” [Respondent 7].*

Concerning the issues of relation with the *shariah* reviews department, one (1) respondent indicated that there were some different practices. He stated that many internal auditors and *shariah* review officers did not have a clear understanding of their functions based on his statements as follows:

*“...many of them only understand the differences at the conceptual level, not at the operational level. There seems to be redundancy in the audit process between shariah audit and shariah review. In practice, they are conducting similar work, such as performing a shariah review check on legal documents. In audit, we are more concerned with specific matters. And, should the internal auditors conduct shariah audit based on risk or based on a checklist!” [Respondent 15].*

Moreover, in terms of the relation between internal auditors and *shariah* committee, several different practices were highlighted by the respondents. Nine (9) respondents

indicated that their internal audit department had a close working relation with the *shariah* committee; whereas two (2) of the respondents stated that their working relation with such committee was not that close. In contrast, four (4) respondents claimed that their IFIs' *shariah* committee did not play any active role in *shariah* audit function, which clearly violates the SGF's (2010) guidelines that emphasize such a role to deal with *shariah* matters arising from any IFIs' business operations and activities. Some of the responses elicited during the interviews are as follows:

*"...close relation, but sometimes the SC does not possess sufficient understanding of the whole process of banking activities, especially in terms of operational matters. Most of them are only concerned with shariah issues and risk."*[Respondent 8]

*"...From my observation, it seems shariah committee lacks understanding of operational matters. They only focus on shariah fatwas on Islamic banking products, but at the end they need to sign off on shariah audit report, indicating whether or not operations of Islamic banks are in compliance with shariah ... there is no link or connection between what they assured in the shariah audit report and the work they performed to ensure such assertion and assurance."*[Respondent 9].

*"....there is close working relation between the internal audit department and the shariah committee. But then, in some cases, the shariah committee itself lacks understanding in terms of banking operational matters"* [Respondent 6].

The *shariah* committee's active roles can also be measured through their participation in an audit committee meeting; however, this such practice varies among the IFIs. For example, two (2) respondents informed that their *shariah* committee had been invited to attend the board of directors' meeting but not the audit committee meeting. In contrast, another eight (8) respondents stated that their *shariah* committee

had been invited to attend the audit committee meeting. In addition, another two (2) respondents (one was the BNM's SAC and the other was an external auditor) claimed that they could not play an active role because their management was not fully aware of or did not understand the important role of *shariah* committee in developing *shariah* audit programs to help assist internal auditors in reviewing the *shariah* auditing process.

Therefore, it was not surprising that their *shariah* committee was not invited to attend any audit committee's meetings or board of directors' meetings. Another finding from this interview also indicates that, in some situations, their roles were restricted by the management that laid down certain limitations, which effectively rendered the *shariah* committee ineffective in the internal audit department. The following subsections discuss the formal reporting channel practiced by the internal audit department based on the findings of the *shariah* auditing process.

#### **5.2.1.4 Governance and Reporting Line of Internal Auditors**

Findings of the interviews show that all the IFIs' governance and reporting line of *shariah* internal auditors had complied with the SGF (2010) guidelines, which require such reports to be addressed to the board of audit committee of the IFIs and *shariah* committee. Also, the same guidelines entail the internal audit department to report any *shariah* non-compliant issues to the board of directors of the IFIs.

#### **5.2.1.5 Competency and Knowledge Requirements**

All the respondents strongly agreed that internal auditors should possess sound Islamic banking and finance knowledge (IBF), *shariah* knowledge, and internal audit knowledge to help them discharge their duty effectively, especially in *shariah* auditing process. According to the respondents, having such knowledge could help internal

auditors appreciate and understand the *shariah* principles more comprehensively, thus enabling them to immediately identify any violations of the *shariah* principles in Islamic banking and financial transactions and operations.

Therefore, the above findings provide clear evidence to support of the first research hypotheses that the three most important knowledge required by internal auditors to perform *shariah* audit are Islamic banking and finance knowledge, *shariah* knowledge, and internal audit knowledge. A closer examination of the SGF (2010) indicates that the competency requirement of internal auditors is closely related with such knowledge. Specifically, Principles 7, Para 7.8 of the guidelines states that “the function shall be performed by internal auditors, who have acquired adequate *shariah*-related knowledge and training”. However, the term “adequate knowledge” has not been clearly defined by the BNM, which gives rise to many interpretations. For example, such interpretations might imply that internal auditors should hold professional certifications and qualifications or they should have a certain level of skills based on the number of hours of training. Given this vague requirement, IFIs will have no clear guidelines to qualify the appointment of their internal auditors to conduct *shariah* audit. Examples of the responses of respondents regarding the importance of IBF knowledge and *shariah* knowledge for *shariah* audit process are as follows;

*“...six basic disciplines of knowledge that internal auditors should be equipped with before they perform shariah auditing effectively are Islamic banking operations, shariah ‘muamalat’ and principles, audit techniques and practices, accounting, commercial law, and whole risk management”[Respondent 14].*

*“...exactly! Shariah knowledge and Islamic banking and finance knowledge are important to help auditors provide justifications and explain any shariah non-compliant matters” [Respondent 3].*

*“....our industry demands internal auditors who are expert in IBF and shariah knowledge. However, many of the internal auditors are only good in accounting and auditing, but they lack IBF knowledge and shariah. Alternatively, if we were to hire shariah graduates, we still need to train and educate them to instill audit and accounting knowledge in them. Therefore, recruiting internal auditors who can understand both disciplines is very challenging. Indeed, they are in demand!” [Respondent 1].*

*“From my observation, many internal auditors do not understand some of the basic shariah principles and do not have adequate IBF knowledge, despite many organizations claiming they have well-trained staff. For example, some of them have been asking me some basic shariah principles. And, I think, research should be carried out to measure the level of competency and knowledge of internal auditors needed for shariah auditing process” [Respondent 14].*

An interesting finding from the interviews reveals that, in addition to IBF and shariah knowledge, spirituality of internal auditors and IFIs' staff was also considered to be an important element that would lead to the improvement of Islamic banking operations based on shariah principles. Accordingly, this finding reinforces the imperative to make all IFI's workers, especially their internal auditors, to have a deep sense of spirituality, which would lead to better shariah audit performance. The following statements from two respondents underscore such imperative:

*“...we provide two-day compulsory induction course for our staff. On the first day, we teach them about IBF and fundamental shariah knowledge. Then, on the second day of induction course, we emphasize the importance of spirituality in the workplace, and not so much on ‘muamalat’. In fact, sometimes, we will conduct ‘usrah’ in which we focus on good spiritual values and accountability when we visit our branch. Working in a full-fledged Islamic bank, we should dearly adhere to the shariah principles.”*  
[Respondent 12].

*“For me, shariah knowledge and other related knowledge, such as auditing, accounting, finance, and banking, are important. However, in principle, all individuals need to understand their main role that is to serve Allah (SWT), the accountability of their actions, and the impact of spirituality on what they believe”* [Respondent 13].

Unexpectedly, the findings of interviews indicate that IFIs did not perceive *shariah* knowledge to be important for their staff. Nonetheless, such perception was not consistent across all IFIs. For example, three respondents indicated that their organization did not mandate training in Islamic *Fiqh Muamalat*, Islamic Legal Maxims, and Islamic accounting and auditing even though such training was part of their key performance indicators (KPI). Meanwhile, another ten (10) respondents stated that their organizations strongly encouraged their staff to attend or enroll in any Islamic banking and finance courses, only on a voluntary basis.

Hood and Bucheery (1999) assert that for Muslim auditors, Islamic beliefs (as prescribed in the holy Quran, Sunnah and *Ijma’*) override the legal rules and professional code of ethics. Thus, in this study, the researcher also explored the perception of whether only Muslims should perform the *shariah* auditing process. However, all the respondents did not agree with such perception, but they outlined

certain conditions that should be fulfilled by non-Muslims auditors, such that the latter should not only have adequate *shariah* knowledge but also the ability to apply that knowledge in every transaction of Islamic banking products and operations. However, for the *shariah* review process, the respondents insisted on only Muslims *shariah* officers due to the intricate nature of such undertaking by which engaging non-Muslim *shariah* officers would be inappropriate.

#### **5.2.1.6 Challenges and Limitations**

All the respondents unanimously reported that their biggest challenge in implementing effective *shariah* auditing was attributed due to the lack of expertise and resources. This findings suggests that many of the internal auditors did not have sufficient Islamic *shariah* knowledge and understanding of the Islamic financial system. Further compounding the problem, not many *shariah* officers had firm understanding of the conventional financial system. Thus, they had difficulty in comparing the difference between the two financial systems.

Arguably, one of the plausible reasons is that these officers might not have sufficient and specific training when they were at the institutions of higher learning (IHLs). Ideally, these IHLs should conduct relevant academic programs that consist of a combination of accounting and auditing courses and Islamic principles courses. Furthermore, the lack of support from the management contributed to the problem in implementing effective *shariah* auditing. This finding is quite alarming given that only eight (8) respondents agreed that their management played an important role in supporting *shariah* auditing practices. Furthermore, another seven (7) respondents stated that their management did not perceive *shariah* auditing to be important. Such negative perception rests on the misplaced notion of the management that *shariah*



auditing is similar to conventional or normal practices of auditing, as highlighted by the respondents' responses as follows:

*"...The management tends to see shariah audit as part of conventional, normal audit procedures. They do not really appreciate the importance of shariah audit on the shariah compliance process" [Respondent 8].*

*".... management is still unclear about the roles and functions of shariah review and shariah audit" [Respondent 7].*

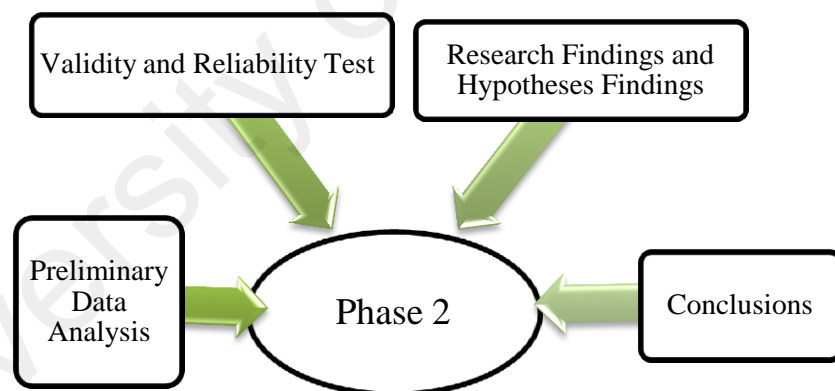
*"...I agreed, the management, shariah committee, and shariah audit department should play an important role in promoting shariah audit" [Respondent 5].*

*"... I found a problem ... there is an information gap between the shariah committee and the management. Essentially, the management has to be more cooperative to provide the necessary support. However, the shariah committee has different objectives and concerns, which are different from the management's objectives, which are fixated on profit maximization. In certain cases, shariah committee has limited knowledge of the real operations of the banks. Then, in some cases, the findings of shariah auditing or shariah reviews have not been given much emphasis. As such, the management needs to be more transparent. And, internal auditors should play their role more actively in explaining and reporting real situation of the IFIs to both parties, especially in terms of the lack of internal control and related risks" [Respondent 15].*

### **5.3 Phase 2: Findings of the Experiments**

The objective of this section is to present the findings of the second phase of the research, namely the experiments. First, a detailed description of the preliminary data screening and normality tests for assumptions of regression analysis is provided.

Second, the findings of the descriptive analysis are further elaborated. Third, the finding of a correlation analysis is presented to highlight any significant correlations among the dependent variables. This analysis was important due to the significant correlations of potential continuous covariates with the dependent variable to justify the inclusion of the variables in the statistical analysis. Forth, the finding of the hypothesis testing of the effect of spirituality on *shariah* auditing judgement performance is presented. Fifth, the findings of the hypotheses testing of the moderation effects of task complexity, knowledge, and ethics on *shariah* auditing are discussed. To further investigate the interaction effects for each level of the moderator variables, specific contrast analysis was carried out using regression analysis. Lastly, the analysis based on manipulation post experimental questionnaires is presented in this section. Figure 5.2 summarizes the discussion of this section.



**Figure 5.2: The Structure of Discussion of the Experimental Findings**

### 5.3.1 Preliminary Data Analysis

Preliminary analysis of data involves a series of data examination process in order to organise such data for further analysis. In general, the purpose of preliminary analysis of data is to ensure that the data are complete and no mistakes occur during data entry process. In essence, according to Tabachnick and Fidell (2007), preliminary data

analysis comprises data screening and cleaning. They contend that researchers should carry out the preliminary analysis of data with utmost care, as this process can be considered “as fundamental to an honest analysis of the data”. This careful consideration was especially important at the initial stage of data analysis that helps the researcher to decide on the appropriate statistical procedures to apply and to avoid any distortions in the correlations analysis, such as perfect or near perfect correlations among variables that render the use of multivariate analysis invalid. Figure 5.3 summarizes the discussion of the preliminary analysis in this section.



**Figure 5.3: The Structure of the Discussion of Preliminary Analysis**

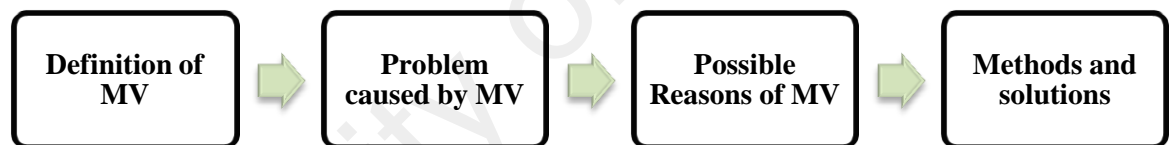
#### **5.3.1.1 Data Cleaning**

Prior to analysis, data collected from the respondents were examined to check their accuracy, missing values, and fit between distributions using the SPSS program. The objective of data cleaning and checking was to ensure the accuracy of data that would be analysed by the statistical analysis software, namely the SPSS. Univariate descriptive statistics using SPSS frequencies was performed as the first step to examine such accuracy or anomaly of data (Tabachnick and Fidell, 2007). The process of data cleaning involves checking the range of all the values, the acceptable range of means and standard deviations, accurate recording of data based on the respective variables, modifications of data, and cross referencing of data with the experimental instrument.

In total, 148 answer sheets of the experimental instrument were collected from five experimental sessions. However, two had to be rejected due to extensive missing

information. Furthermore, approximately half of those who participated in the experiments did not complete all the sections of the instrument, resulting in incomplete responses and missing data problem. In view of the above problems, the methods of handling missing values and the approach taken to enhance the reliability and validity of the results had to be selected carefully, which are also discussed in this section.

When a complete data set is not available or not feasible, it is necessary for researchers to address the issue of missing data. The discussion under this theme consists of the following subsections: the definition of missing data or values, the pattern of missing data, problems caused by missing data, and methods of handling missing data (based on the approach derived from the previous studies) as summarized in Figure 5.4.



**Figure 5.4: The Structure of Discussion of the Missing Data**

#### **5.3.1.2 Meaning, Problem and Possible Reasons of Missing Value Related to this Study.**

Missing data or values are unobserved values in a data set or empty cells in a data metric (McBurney and White, 2010). Missing data is commonplace and unavoidable in behavioural studies (Little, 1999; Allison, 2001; Saunders et al. 2006; Tabachnick and Fidell, 2007; Schlomer, Bauman, and Card, 2010; Winkler and McCarthy, 2014). Nevertheless, such occurrence of missing data is a serious problem, irrespective of the type of research one is involved with.

From the statistical point of view, Rubin (1987, 1996) assert that a data set that contains missing data or values will be treated as a complete data set in most of the statistical analyses. Essentially, standard statistical methods are designed for complete, “rectangular” data sets (Little and Rubin, 2002), where the rows and columns represent units (cases) and variables (items), respectively. The missing variables and cases alter the rectangularity of the data set, resulting in a variety of missing data patterns. However, most statistical procedures will not be able to deal with a non-rectangular data set, thus forcing the researchers to perform ad hoc editing of data to make them fit with the parameters required by the method of analysis. Given that complete-data methods are unable to handle non-rectangular data matrixes, missing data can seriously bias the results, and thus draw inappropriate conclusions, such as inefficient estimates of population characteristics, distorted distributions, and increased errors in hypothesis testing (Saunders et al., 2006; Schlomer et al., 2010; Winkler and McCarthy, 2014).

Another problem caused by missing data is that the results derived from such data analysis are imprecise to be generalized to other populations. For example, it is possible that respondents who did not provide all the required responses might have different response profiles and perceptions compared with those who had provided all responses. Thus, the current sample of such research can no longer represent the population of the study. If the researcher chooses to draw their conclusions based solely on those who had responded completely, the conclusions would be biased. Lastly, using only complete data would reduce the sample size, thus reducing the statistical power of the analysis. Thus, removing respondents with non-response items from the analysis will be wasteful. Therefore, researchers should put extra effort to achieve a higher response rate and complete profiles by conducting “call backs” among the selected sample. This process of calling back will require additional time and funding to trace respondents who failed

to respond or those whose responses were incomplete or unusable. Invariably, and unfortunately, such efforts may not yield the desired results.

Missing data or values can introduce several problems in research. According to Tabachnick and Fidell, (2007), missing data can compromise the validity of research findings. In other words, the findings of statistical analysis can be biased and the amount of variability in the data will not be correctly estimated. Thus, it is important for researchers to investigate the reasons of missing data, the pattern of missing data and the proportion of missing data (Tabachnick and Fidell, 2007). In particular, understanding the reasons and patterns of missing data is more important compared with knowing the amount of missing data (Tabachnick and Fidell, 2007). In the literature, there is no consensus regarding the percentage of missing data that can introduce serious problems to research. In fact, several scholars have proposed the percentage of missing data that is acceptable to be 5% or 10 %, and even 20 % as a cut-off point (Schlomer et al., 2010).

Schlomer et al. (2010) highlight two reasons that lead to the problem of missing data. First, in many studies, missing data arises due to “non-response” items, suggesting that the respondents did not give responses for all items as they might feel uncomfortable with certain statements of the items. For example, items on salary or education level may be sensitive to certain people or respondents may lack the required knowledge to respond. According to Finch and Margraf (2008) (cited in Cokluk and Kayri, 2011), missing data can happen when respondents leave some questions unmarked as they may not know the answers or they may avoid predicting the answers. In addition, Bryman and Bell (2007) and McBurney and White (2010) contend that non-response items as “a source of non-sampling errors that is likely to happen when respondents refuse to cooperate, skip certain items, and avoid giving comments and answer”.

The second reason of missing data is due to “participant attrition”, which typically occurs in longitudinal studies and experimental designs employing multiple observations from the same participants. The participants may drop out of the experiments due to fatigue or boredom or may be unavailable for a session during the process of data collection in the experiments. In this study, the trend of missing data between each section of the experimental instrument was not homogenous, which could be classified as “non-response”. For example, the section of task complexity, namely Section 1 (A) and Section 1 (B), were the most problematic sections as the percentage of missing data was more than 30% for each questions regardless of whether the questions are concerned with the *shariah* audit task complexity or internal audit task complexity. Clearly, the percentages of missing data in other sections were lower compared with the task complexity section.

The above missing data occurred due to several reasons. First, the internal auditors might lack the requisite knowledgeable or experience in *shariah* auditing. Second, the nature and structure of the questions might be overwhelming to some of the internal auditors. Therefore, the call-back procedure was carried out to gain a better understanding of the reasons for non-response items or missing values. In this study, some of the questions sheet of the experiment were emailed to 60 respondents (who during the experimental sessions had consented to be contacted). They were requested to provide appropriate responses to two questions that were extracted from the section of low level task complexity (as shown in table 5.2). These questions were selected due to the high percentage of missing data. Additionally, the internal auditors would be able to answers these questions without any problems as these questions are based on low level task complexity.

**Table 5.2: The Percentages of Missing Data of Question 2**

Variables/sections	Missing data (No of respondents)	Percentage of missing Data (%)
Question 2 (b) (IBF Question)	49	33.6
Question 2 (b) (Internal Audit Questions)	56	38.4

In the emails, the respondents were requested to express their judgements and justifications (if they knew the answers) or tick the following statement (for those who did not know the answer) as shown in Figure 5.3.

*If you are not sure how to respond to or answer the questions, please tick below,*

☐ *I do not know the answer*

*because:*

---

*(i.e., I'm not an internal sharia auditor/ I am not involved in sharia audit practices/  
I do not have the knowledge of Islamic banking product etc.)*

**Figure 5.5: Sample of Respondent's Responses During Call Back Procedure**

As a result, only sixteen (16) respondents replied the e-mail and gave their feedback. In contrast, four (4) respondents did not know the answers for both questions. Furthermore, seven (7) and five (5) respondents did not know the answers for Question 2 (b) (for IBF) and Questions 2 (b) (for internal audit), respectively. Therefore, this feedback suggests that the main reason for non-response or missing values was that the respondents did not have adequate knowledge or experience to help them answer the questions.



Clearly, half of the respondents did not possess sufficient knowledge as highlighted in the feedback indicating that out of nine (9) responses to questions on *Ujrah* (which was extracted from the low complexity level in Section 2(b)), seven (7) respondents admitted that they did not know the answers. Moreover, for questions on credit (which was also extracted from the low complexity level in Section 2 (b)), from the 11 responses received, only two respondents responded correctly; whereas five (5) respondents stated that they did not know how to answer such questions. Table 5.3 summarizes the call-back responses from the respondents by emails.

**Table 5.3 : Call Back Responses**

<b>Respondents</b>	<b>Question on UJRAH</b>	<b>Question on Credit limit</b>	<b>No answer for <i>ujrah</i> – 2 (b) (As they don't know the answer)</b>	<b>No answer for Credit limit – 2 (b) (As they don't know the answer)</b>
P 1	/	/		
P 2			/	/
P 3		X	/	
P 4	x	X		
P 5	/	X		
P 6			/	/
P 7	/	X		
P 8	/	X		
P 9		X	/	
P 10	/	/		
P 11	/			/
P 12	x	X		
P 13			/	/
P 14		X	/	
P 15			/	/
P 16	/	X		
<b>TOTAL RESPONDENTS : 16</b>	9 responses (7 of respondents' answer correctly while, 2 of respondents' answer were incorrect )	11 responses (2 of respondents answer correctly, while 9 of respondents' were incorrect)	<b>7</b>	<b>5</b>

In addition, the respondents were also instructed to rate their mental efforts and complexity level for each item of the task complexity section. The purpose of this instruction was to measure the level of their knowledge as well as to measure their competence based on the level of complexity of the questions. In other words, the rating mechanism was used as a “check-and-balance” for the selection of questions used in the experimental instrument. The researcher also conducted a frequency analysis of respondents’ scores and compared the findings with the ratings to investigate the reasons for missing values. Tables 5.4 and Table 5.5 summarize the findings of the *shariah* (Islamic) task complexity and internal audit task complexity, respectively.

**Table 5.4 : Frequency and Percentage Analysis of Mental Efforts and Level of Complexity for the Section of *Shariah*/Islamic Audit Task Complexity (High and Low level) vs. Respondents’ Scores**

<u>Variables</u>	<u>Frequency</u>	<u>Percentage (100%)</u>	<u>Questions and Scores</u>			
<u><i>Mental efforts for Questions High Islamic task complexity Islamic Sec 1 (A) Q 1</i></u>						
No Effort at all	6	4.1				
Low Effort	9	6.2				
Slightly Effort	14	9.6				
Neutral	37	25.3				
Moderate Effort	25	17.1				
Very hard effort	24	16.4				
great deal of effort	15	10.3				
<u><i>Rate of complexity for Questions High Islamic task complexity Islamic Sec 1 (A) Q 1</i></u>						
No complex at all	8	5.5				
Low complex	10	6.8				
Slightly	13	8.9				

Scores for question list of objectives	Frequency	Percent	Cumulative Percent
.00	43	29.5	29.5
1.00	34	23.3	52.7
2.00	39	26.7	79.5
3.00	26	17.8	97.3
4.00	3	2.1	99.3
6.00	1	.7	100.0
Total	146	100.0	

Scores for questions list of shariah objectives	Frequency	Percent	Cumulative Percent
.00	46	31.5	31.5
1.00	45	30.8	62.3
2.00	29	19.9	82.2
3.00	19	13.0	95.2
4.00	5	3.4	98.6
5.00	1	.7	99.3
8.00	1	.7	100.0
Total	146	100.0	

complex			<table> <tr> <th>Score for question list of documents</th><th>Frequency</th><th>Percent</th><th>Cumulative Percent</th></tr> <tr> <td>.00</td><td>49</td><td>33.6</td><td>33.6</td></tr> <tr> <td>1.00</td><td>13</td><td>8.9</td><td>42.5</td></tr> <tr> <td>2.00</td><td>21</td><td>14.4</td><td>56.8</td></tr> <tr> <td>3.00</td><td>28</td><td>19.2</td><td>76.0</td></tr> <tr> <td>4.00</td><td>23</td><td>15.8</td><td>91.8</td></tr> <tr> <td>5.00</td><td>8</td><td>5.5</td><td>97.3</td></tr> <tr> <td>6.00</td><td>2</td><td>1.4</td><td>98.6</td></tr> <tr> <td>7.00</td><td>2</td><td>1.4</td><td>100.0</td></tr> <tr> <td>Total</td><td>146</td><td>100.0</td><td></td></tr> </table>	Score for question list of documents	Frequency	Percent	Cumulative Percent	.00	49	33.6	33.6	1.00	13	8.9	42.5	2.00	21	14.4	56.8	3.00	28	19.2	76.0	4.00	23	15.8	91.8	5.00	8	5.5	97.3	6.00	2	1.4	98.6	7.00	2	1.4	100.0	Total	146	100.0	
Score for question list of documents	Frequency	Percent	Cumulative Percent																																								
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Very complex	22	15.1																																									
Extremely complex	12	8.2																																									
			<table> <tr> <th>Scores for question list of audit process</th><th>Frequency</th><th>Percent</th><th>Cumulative Percent</th></tr> <tr> <td>.00</td><td>53</td><td>36.3</td><td>36.3</td></tr> <tr> <td>1.00</td><td>10</td><td>6.8</td><td>43.2</td></tr> <tr> <td>2.00</td><td>14</td><td>9.6</td><td>52.7</td></tr> <tr> <td>3.00</td><td>34</td><td>23.3</td><td>76.0</td></tr> <tr> <td>4.00</td><td>26</td><td>17.8</td><td>93.8</td></tr> <tr> <td>5.00</td><td>7</td><td>4.8</td><td>98.6</td></tr> <tr> <td>6.00</td><td>2</td><td>1.4</td><td>100.0</td></tr> <tr> <td>Total</td><td>146</td><td>100.0</td><td></td></tr> </table>	Scores for question list of audit process	Frequency	Percent	Cumulative Percent	.00	53	36.3	36.3	1.00	10	6.8	43.2	2.00	14	9.6	52.7	3.00	34	23.3	76.0	4.00	26	17.8	93.8	5.00	7	4.8	98.6	6.00	2	1.4	100.0	Total	146	100.0					
Scores for question list of audit process	Frequency	Percent	Cumulative Percent																																								
.00	53	36.3	36.3																																								
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6.00	2	1.4	100.0																																								
Total	146	100.0																																									
			<table> <tr> <th>Scores for question list of justification to report</th><th>Frequency</th><th>Percent</th><th>Cumulative Percent</th></tr> <tr> <td>.00</td><td>34</td><td>23.3</td><td>23.3</td></tr> <tr> <td>1.00</td><td>29</td><td>19.9</td><td>43.2</td></tr> <tr> <td>2.00</td><td>25</td><td>17.1</td><td>60.3</td></tr> <tr> <td>3.00</td><td>33</td><td>22.6</td><td>82.9</td></tr> <tr> <td>4.00</td><td>11</td><td>7.5</td><td>90.4</td></tr> <tr> <td>5.00</td><td>13</td><td>8.9</td><td>99.3</td></tr> <tr> <td>6.00</td><td>1</td><td>.7</td><td>100.0</td></tr> <tr> <td>Total</td><td>146</td><td>100.0</td><td></td></tr> </table>	Scores for question list of justification to report	Frequency	Percent	Cumulative Percent	.00	34	23.3	23.3	1.00	29	19.9	43.2	2.00	25	17.1	60.3	3.00	33	22.6	82.9	4.00	11	7.5	90.4	5.00	13	8.9	99.3	6.00	1	.7	100.0	Total	146	100.0					
Scores for question list of justification to report	Frequency	Percent	Cumulative Percent																																								
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5.00	13	8.9	99.3																																								
6.00	1	.7	100.0																																								
Total	146	100.0																																									
<i><b>Mental efforts for Questions Low Islamic task complexity IS Sec 1 (A) Q 2</b></i>			<table> <tr> <th>Scores for question list of justification – BBA questions</th><th>Frequency</th><th>Percent</th><th>Cumulative Percent</th></tr> <tr> <td>.00</td><td>44</td><td>30.1</td><td>30.1</td></tr> <tr> <td>1.00</td><td>23</td><td>15.8</td><td>45.9</td></tr> <tr> <td>2.00</td><td>34</td><td>23.3</td><td>69.2</td></tr> <tr> <td>3.00</td><td>24</td><td>16.4</td><td>85.6</td></tr> <tr> <td>4.00</td><td>11</td><td>7.5</td><td>93.2</td></tr> <tr> <td>5.00</td><td>10</td><td>6.8</td><td>100.0</td></tr> <tr> <td>Total</td><td>146</td><td>100.0</td><td></td></tr> </table>	Scores for question list of justification – BBA questions	Frequency	Percent	Cumulative Percent	.00	44	30.1	30.1	1.00	23	15.8	45.9	2.00	34	23.3	69.2	3.00	24	16.4	85.6	4.00	11	7.5	93.2	5.00	10	6.8	100.0	Total	146	100.0									
Scores for question list of justification – BBA questions	Frequency	Percent	Cumulative Percent																																								
.00	44	30.1	30.1																																								
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great deal of effort	16	11.00																																									

<b><i>Rate of complexity for Questions Low Islamic task complexity IS Sec 1 (A) Q 2</i></b>			<b>Scores for question list of justification – Ujrah questions</b>	
No complex at all	5	3.4	0.00	49
Low complex	4	2.7	1.00	37
Slightly complex	11	7.5	2.00	37
Neutral	29	19.9	3.00	14
Moderate complexity	34	23.3	4.00	4
Very complex	28	19.2	5.00	5
Extremely complex	17	11.6	Total	146
				100.0
				100.0

For Section 1 (A) of high Islamic task complexity, about 39.1 % of respondents indicated that the questions were complex or difficult (15.8 % + 15.1% + 8.2%). Moreover, more than 30 % of the respondents scored only zero marks (list of audit objectives: 29.5 %; list of *shariah* objectives: 31.5 %; list of documents used: 33.6%; list of audit process: 36.3%; and list of justification to report or not: 23.3 %). Such results may be attributed to the possibility that the respondents did not know how to answer as highlighted by their inability to comprehend each question. In addition, an interesting finding was revealed such that the percentages of complexity and blank answers were equal, which was more than 30%. Meanwhile, for section (A) of low Islamic task complexity, about 54.1 % of respondents indicated that the question was complex or difficult (23.3 % + 19.2% + 11.6%). Furthermore, the percentages of respondents who did not answer the questions and scored zero marks were 30.1 % and 33.6 %, respectively.

**Table 5.5 : Frequency and Percentage Analysis of Mental Efforts and Level of Complexity for the Section of Internal Audit Task Complexity (High and Low Level) vs. Respondents' Scores**

<u>Variables</u>	<u>Frequency</u>	<u>Percentage (100%)</u>	<u>Questions and Scores</u>			
<i><b>Mental efforts for Questions High Internal audit task complexity IN Sec 1 (B) Q 1</b></i>						
No Effort at all	7	4.8				
Low Effort	8	5.5				
Slightly Effort	12	8.2				
Neutral	32	21.9				
Moderate Effort	22	15.1				
Very hard effort	34	23.3				
great deal of effort	13	8.9				
<i><b>Rate of complexity for Questions Low Internal audit task complexity IA Sec 1 (B) Q 1</b></i>						
No complex at all	8	5.5				
Low complex	8	5.5				
Slightly complex	14	9.6				
Neutral	29	19.9				
Moderate complexity	24	16.4				
Very complex	35	24.0				
Extremely complex	10	6.8				

			4.00	8	5.5	95.9
			5.00	6	4.1	100.0
			Total	146	100.0	
<b><i>Mental efforts for Questions Low Internal audit task complexity IA Sec 1 (B) Q 2</i></b>						
No Effort at all	7	4.8	<b>Scores for question list of justification – Repayment Capacities</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Low Effort	11	7.5	.00	49	33.6	33.6
Slightly Effort	12	8.2	1.00	16	11.0	44.5
Neutral	23	15.8	2.00	40	27.4	71.9
Moderate Effort	30	20.5	3.00	27	18.5	90.4
Very hard effort	35	24.0	4.00	5	3.4	93.8
great deal of effort	13	8.9	5.00	9	6.2	100.0
			Total	146	100.0	
<b><i>Rate of complexity for Questions Low Internal audit task complexity IA Sec 1 (B) Q 2</i></b>						
No complex at all	8	5.5	<b>Scores for question list of justification – Repayment Capacities</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Low complex	11	7.5	.00	56	38.4	38.4
Slightly complex	13	8.9	1.00	25	17.1	55.5
Neutral	19	13.0	2.00	48	32.9	88.4
Moderate complexity	34	23.3	3.00	14	9.6	97.9
Very complex	36	24.7	4.00	3	2.1	100.0
Extremely complex	9	6.2	Total	146	100.0	

The above findings show 47.2 % (16.4%, 24.0%, and 6.8%) of the respondents rated the questions of internal audit of high complexity as complex or difficult. Moreover, more than 40% (43.2%, 47.3%, 49.3 %, and 31.5 %) of the respondents did not answer the questions. For questions of low complexity internal audit, 54.2% (23.3%, 24.7%, and 6.2%) of the respondents rated the questions as complex or difficult, and more than 30% (33.6 % and 38. 4 %) of the respondents did not answer the questions. An analysis of the mean score for each section based on the manipulation check was carried out to validate the complexity level, the findings of which are summarized in Table 5.6.

**Table 5.6 : The Analysis of Mean Scores and Percentages (In Parentheses) for Each Section in Task Complexity**

<b>Post-experiment / Types of Task complexity</b>	<b>Task Comp (IS) High</b>	<b>Task Comp (IS) Low</b>	<b>Task Comp (INT) High</b>	<b>Task Comp (INT) Low</b>
<b>Complexity Level</b>	4.3538 (39.1 %)	<u><b>4.8359</b></u> (54.1 %)	4.5469 (47.2 %)	<u><b>4.5692</b></u> (54.2 %)
<b>Mental Effort</b>	4.5231 (43.8 %)	<u><b>4.7813</b></u> (52.1 %)	4.6250 (47.3 %)	<u><b>4.6412</b></u> (53.4 %)

From the Table 5.6, the mean scores of audit task of high complexity and mental effort were 4.35 and 4.52, respectively, suggesting that nearly half of them rated the questions as complex, which required moderate mental effort. Surprisingly, they rated the questions of Islamic task of low complexity to be more complex than task of high complexity as indicated by the mean scores of 4.84 and 4.78 for task complexity and mental effort, respectively. Likewise, they too found the internal audit task of low complexity to be complex as highlighted by the mean scores of 4.60 and 4.64 for task complexity and mental effort, respectively. For internal audit task of high complexity, the mean scores of task complexity and mental effort were 4.55 and 4.63, respectively.

Clearly, the above findings of audit tasks based on task complexity was unexpected. Even though the researcher had sought experts' views and validated the responses, the questions have been categorized as less complex (See Section 4.4.2.4 : The development of detailed case and components of experiments). The findings also suggest that missing data was partly due to the inability of respondents to respond accordingly, which might be attributed to their poor knowledge of Islamic banking and finance knowledge and internal audit knowledge. For high complexity section, respondents were required to conduct audit tasks that they might be familiar with as most internal auditors had been involved in formulating audit objectives, reviewing

documentation, and conducting audit procedures. Hence, the internal auditors were able to answer the questions without too many problems even though the questions are based on a complex case study.

Furthermore, the findings of the demographic analysis provide some clues to explain the missing data. In all likelihood, their poor experience in Islamic banking and finance operations and products and their lack of relevant qualifications might have contributed to the above findings. The analysis revealed that almost 45% of the respondents had relevant experience less than a year. Moreover, 70.5% of the respondents did not hold any *shariah* or Islamic banking qualifications (see the details in the Subsection 5.4.1: Profile and descriptive analysis).

Another reason is that answering questions pertaining to task complexity was challenging, which might be attributed to the qualitative nature and structure of the tasks. Focusing on such tasks might have made them become fatigued or bored, thus affecting their effort to provide appropriate answers. On the other hand, the structure and nature of sections of knowledge and spirituality mainly consist of multiple choice questions (MCQ) and measurements were based on Likert-type scale. Essentially, the above aspects reflect the quantitative nature of the questions, which were relatively easy for them to answer. The justification for formulating the task complexity questions based on the qualitative structure are as follows;

(1) *To achieve the objective of the study*

Initially, “quantitative” questions, such as multiple-choice questions (MCQ) on judgement and decision process, were preferred. However, the use of such questions would be inappropriate to measure internal auditors’ spirituality – which is an abstract



construct. Therefore, the “qualitative” questions were deemed more appropriate and valid.

(2) *To probe respondents’ responses*

The task complexity questions were mainly designed to probe respondents’ thought process by which that they could elaborate and express their judgment decision making process more reliably. If they were competent with the subject matter, the respondents should be able to provide their answers and justifications more accurately.

(3) *Example from previous studies*

Previous studies also used a similar structure by using qualitative options for responses, such as Bonner and Lewis (1990) and Tan and Kao (1999) studies. For example, in an experimental study to examine the accountability effects on auditors’ performance, Tan and Kao (1999) required the respondents to write down the compliance and substantive test and financial statement errors in an internal control evaluation in a list.

To sum up, missing data poses a serious threat to the validity of research findings because statistical analyses can only be performed on complete data set (Saunders et al., 2006; Schlomer et al., 2010; Winkler and McCarthy, 2014). Tabachnick and Fidell (2007) argue that “knowing the reasons and patterns of missing data is more important compared with the amount of missing data”. Taking cognizance of this argument, several analyses and methods to help explain the missing data were carried out in this study. More importantly, the analysis of missing data by specific statistical techniques helped the researcher to deal with the “non-response” issues and the lack of knowledge of the respondents. Examples of the statistical techniques that are widely recommended

by many researchers are imputation, augmentation, and deletion (Saunders et. al., 2006; Tabachnick and Fidell, 2007; Field 2009, Scholomer et al., 2010 and Winkler and McCarthy, 2014). The following subsections discuss the methods of handling missing data and the approach adopted in the study.

#### **5.3.1.3 Methods of Handling Missing Data**

There are three methods of handling missing data, namely deletion, augmentation and imputation. Among the three, data deletion is the most common method used in many analyses because of its simplicity. However, data deletion can cause bias and reduce statistical power as well as reduce the sample size of the study. On the other hand, data augmentation uses advanced statistical techniques involving a parameter estimation that is created based on observed data and is augmented by extra information gained from assuming certain underlying distributions and probability models. Examples of data augmentation are maximum likelihood (ML), expectation maximisation (EM), and Markov Chain Monte Carlo (MCMC).

Data imputation can be divided into two types, namely single imputation and multiple imputation procedures. Single imputation is a method that replaces missing values in each field by the field's mean or mode where appropriate, the process of which is known as "means substitutions". One of the advantages of this method is its easy, quick implementation. In contrast, multiple-imputation procedure involves predicting the missing values by using existing values from other variables (cited in Wayman, 2003). The predicted values are called "imputes", which will substitute for the missing values, and the full data set is called an "imputed data set." This process is performed multiple times, producing multiple imputed data sets. Later, a standard statistical analysis is carried out on each imputed data set, producing multiple findings,

which are then combined to produce an overall finding. Given this advanced imputations of missing values, this method has become the most popular method in handling missing data.

In this study, the single imputation method was chosen to handle the missing data. This choice was made based on practical and economic considerations, notably its ease of use (which does not require advanced statistical expertise) and quick implementation.

#### **5.3.1.4 Outliers**

As part of checking the integrity of the data, the independent and moderator variables were tested for outliers. According to Tabachnick and Fidell (2007), “an outlier is a case with such an extreme value on one variable (a univariate outlier), or such a strange combination of scores on two or more variables (a multivariate outlier) that may distort statistical analysis”. Thus, the main objective of this process was to conduct outliers checking to identify any incorrect data entry and to identify any extreme values in the sample. Univariate outliers in this data set were identified through the use of box-plots, histograms, normal probability plots and detrended normal probability plots. Once outliers had been identified, the data entered was checked for accuracy by comparing them with the real values recorded in the experimental instrument.

In addition, Tabachnick and Fidell (2007) recommend “data transformation” option to deal with outliers. Using such transformation, the normality of distribution can be improved by pulling univariate outliers closer to the centre of distribution, thus reducing their impact. In this study, only for ethics variable there were outliers, namely cases 23, 32, and 97. According to Field (2009), there are three options to reduce the impact of outliers, namely remove the cases, transform the data, and change the data. For this study, the removal of cases was not performed as it would reduce the number of

respondents<sup>9</sup>. Another reason for not removing the cases was that there were many answers or responses to questions in other sections of the instrument. Removing these cases would effectively discard other information that might be important to the study, thus these cases should be preserved. Another option to deal with outliers is to transform the data (Field, 2009). In this study, transformation of the ethics variable was performed that did not significantly reduce the impact of outliers on the data set.

### 5.3.1.5 Multicollinearity

Multicollinearity refers to high correlations among the independent variables. To detect such correlations, the tolerance and VIF measures are used to determine whether the relations among the variables are significantly high or not (Field, 2009; Hair, Black, Babin, Anderson, and Tatham, 2006). In this study, the above measures for each regression model were computed and analysed. Table 5.7 summarizes the findings of the collinearity analysis. The findings indicate a tolerance greater than .10 and VIF lower than 10 for all variables, which confirmed that there was no multicollinearity among the variables of the study.

**Table 5.7 : The Computed Tolerance and VIF Values**

Variables	Collinearity Statistics	
	Tolerance	VIF
Task Comp (IS) High	.791	1.265
Task Comp (IS) Low	.897	1.115
Task Comp (IN) High	.812	1.232
Task Comp (IN) Low	.983	1.018
Knowledge (IBF)	.934	1.070
Know (Internal Audit)	.935	1.069

<sup>9</sup> According to Tabachnick and Fidell (2007), before deleting outliers, one must consider the total sample in the study and identify the impact of deletion as it will limit generalizability.

Spirituality	.663	1.508
Ethics	.651	1.536

#### 5.3.1.6 Normality, Linearity, and Homoscedasticity Analysis

The assumption of normality prescribes that the distribution of cases fit the pattern of a normal curve. For the examination of normality, the researcher conducted an inspection using box-plots, histograms, normal probability plots, or detrended normal probability. The findings indicate a relatively normal distribution. In addition, the analysis of skewness and kurtosis revealed that most of the variables did not violate the assumptions of normality as the skewness and kurtosis were between the range of -1.0 and +1.0 (Tabachnick and Fidell, 2007). However, ethics and low task complexity task variables were found to have violated the normality assumptions due to outliers. Table 5.8 summarizes the findings of skewness and kurtosis analysis. Therefore, several remedial treatments were taken to improve the normality of the data (see Subsection 5.3.1.4 for detailed discussion).

In addition, the researcher also conducted an analysis of skewness on each variable based on the calculation of Z-score. Field (2009) states that the function of Z-score is to compare skewness and kurtosis of different samples that use different measures. The Z-score also allows the researcher to investigate the likelihood of the values of skew and kurtosis to occur<sup>10</sup>.

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<sup>10</sup> Field (2009) stated an absolute value greater than 1.96 is significant at  $p < .05$ , above 2.58 is significant at  $P < .01$  and absolute value above about 3.29 are significant at  $P < .001$ . However, according to Field (2009) the issue of normality deviations largely depends on sample size of the study.

**Table 5.8 : Skewness and Kurtosis Analysis**

VARIABLES	SKEWNESS		KURTOSIS	
	Statistic	Std. Error	Statistic	Std. Error
(IV) Total Spirituality	-.537	.206	1.059	.408
(Moderator) High Complexity List Islamic Task	-.236	.219	-.739	.435
(Moderator) Low Complexity List Islamic Task	1.103	.246	1.014	.488
(Moderator) High Complexity List Internal Task	.258	.236	-1.052	.467
(Moderator) Low Complexity List Internal Task	.909	.258	.902	.511
(Moderator) Total Islamic Knowledge	-.226	.202	-.522	.401
(Moderator) Total Internal Audit Knowledge	.555	.206	-.285	.410
(Moderator) Total Ethics	.555	.206	-.285	.410
(DV) Total <i>Shariah</i> Audit Judgement Performance	-2.523	.206	9.332	.410

For the examination of linearity and homoscedasticity, the researcher conducted an analysis based on the scatter plots of residuals against predicted values. The finding shows the relation between residuals and predicted was not significant, indicating that the assumption of linearity had not been violated. In addition, the normal plot of regression standardised residuals for the dependent variables as well as the histogram indicate a relatively normal distribution. (See Appendix G for the scatter plots of residual against predicted values and the histogram and the normal plot regression-standardized residuals for the dependent variables).

### 5.3.2 Validity and Reliability Test

Prior to the analysis of the research findings, the researcher performed a data quality test, which comprises data validity and reliability test (see Section 4.4.3 for detailed

discussion on external and internal validity and reliability). In this study, the validity test was conducted earlier in the pilot experiment and expert judgement was sought from experts to ascertain the content validity of the research instrument. Sekaran (2003) states that a panel of judges or experts can be engaged to attest the content validity of research instruments. Thus, eight experts from diverse backgrounds were recruited to provide such judgment (see Appendix E for experts' comments). Accordingly, the research instrument of this study was verified to be valid with some changes made based on the experts' comments and recommendations.

Determining the reliability of the research instrument was based on the measurement of the Cronbach's Coefficient Alpha value. The purpose of reliability test is to ensure internal consistency of the instrument by analysing the degree to which the items used are all measuring the same underlying attributes (Pallant, 2011). In other words, the internal consistency of measures is where the items should "hang together as a set", with each of them independently measuring the same concept so that respondents attach the same overall meaning to each of the items (Tabachnick and Fidell; 2006, Sekaran ; 2003).

According to Pallant (2011) and Sekaran (2003), the computed values will range from "0" to "1", with higher values indicating greater reliability. In particular, the acceptable range of Cronbach's Alpha values is between .7 and .8, as reported in the literature (Field, 2009; Pallant, 2011; Sekaran, 2003). However, Kline (1999) (cited in Field, 2009), notes that Cronbach's Alpha values at .8 and above are appropriate for cognitive test, such as intelligence test and an ability test, and the cut-off point of .7 is more practical. Furthermore, Kline (1999) also argues that values at .7 and below are acceptable for research dealing with psychological constructs due to their diversity. The reliability test was performed on each part of the instrument except the demographic

section. Table 5.9 summarizes the computed values of Cronbach's Alpha of the experimental instrument.

**Table 5.9 : The Computed Values of Cronbach's Alpha**

COMPONENTS ON THE FUNCTIONS OF <i>SHARIAH</i> AUDIT	CRONBACH'S ALPHA	N OF ITEMS
Section 1 (A) <i>Shariah</i> audit Task Complexity Questions	0.834	7
Section 1 (B) Internal audit Task Complexity Questions	0.799	6
Section 2 (A) Islamic Knowledge Questions	0.526	10
Section 2 (B) Internal Audit Knowledge Questions	0.430	10
Section 3 Spirituality Statements	0.883	25
Section 4 Ethics Statements	0.888	11
Section 6 Post - experiment - Manipulation	0.850	8

Clearly, many of the computed values of Cronbach's Alpha for some sections of the research instruments were above the cut-off point of .7, ranging from .80 to .89. Apparently, the respondents understood the questions well, which enabled them to respond consistently and reliably. In contrast, the computed values of Cronbach's Alpha for Islamic knowledge question items in Section 2 (A) and internal audit question items in Section 2 (B) were low, registering values of .53 and .43, respectively. This finding was expected due to the nature of the questions tested in these sections, which comprise various categories, such as Islamic banking and finance questions, *shariah* questions and internal audit questions.

This finding of low reliability of question items pertaining to Islamic knowledge and internal audit knowledge is consistent with other studies, such as Tan and Kao's (1997, 1999) studies, which yielded Cronbach's Alpha values of .43, .42 and .19 for the



knowledge construct. Such low reliability computation is inevitable because knowledge construct is a composite construct rather than a unidimensional construct, which is assumed to be the case for Cronbach's Alpha computation (Tan and Kao, 1999). Overall, the reliability analysis qualified the data and validated the consistency of the measurements of variables.

### 5.3.3 Research Findings and Hypotheses Testing

The main objective of this section is to present the experimental findings of the study, especially the hypotheses testing. Figure 5.6 shows the structure of the discussion in this section.



**Figure 5.6 : The Structure of Discussion**

#### 5.3.3.1 Profile and Descriptive Analysis

In this subsection, the discussion focuses on two parts, namely descriptive analysis on demographic background and descriptive analysis on the variables (as per figure 5.6). In this study, six experimental sessions were performed, which spanned three months starting from April, 2013 until June, 2013 at predetermined venues in Kuala Lumpur, Malaysia. The respondents were internal auditors from 16 established Islamic banks in Malaysia. In total, 148 internal auditors participated in the experiments (see Appendix C for the list of Islamic financial institutions). Then, table 5.10 summarises the demographic of the respondents in this study.

Part 1 - Descriptive analysis on  
Demographic Background



Part 2 - Descriptive analysis on  
Variables

**Figure 5.7: Profile and Descriptive Analysis**

(a) *Discussion on the Respondent's Demographic Background*

**Table 5.10 : Respondents' Demographic**

VARIABLES	FREQUENCY	PERCENTAGE (100%)
<b><i>Designation:</i></b>		
Deputy CIA	4	2.7
Manager	36	24.7
Asst. Manager	37	25.3
Senior Auditor	17	11.6
Audit Executives	37	25.3
Not IA - Others	7	4.8
<b><i>General Working Experience</i></b>		
More 20 yrs.	14	9.6
10-20 yrs.	49	33.6
5 -10 yrs.	35	24.0
1-5 yrs.	35	24.0
Less than 1 yr.	5	3.4
<b><i>Islamic/shariah Audit Working Experience</i></b>		
10-20 yrs.	3	2.1
5 -10 yrs.	11	7.5
1-5 yrs.	48	32.9
Less than 1 yr.	67	45.9
<b><i>General Qualifications</i></b>		
PhD	1	0.7
Master Degree	15	10.3
Degree	93	63.7
Professional Cert	12	8.2
Diploma	12	8.2
Others	5	3.4
<b><i>Islamic Banking Qualifications</i></b>		
Master in Islamic Banking and Finance	3	2.1
Professional Certificate (CIFP)	7	4.8
Degree Islamic Studies	2	1.4
Degree Islamic Law/Shariah	2	1.4

Others	21	14.4
None	103	70.5
<b><i>Religious Denominations</i></b>		
Buddha	15	10.3
Christian	11	7.5
Hindu	4	2.7
Islam	105	71.9
Others	1	0.7
<b><i>Importance of Religion</i></b>		
Neutral	10	6.8
Moderately Important	6	4.1
Very Important	26	17.8
Extremely Important	92	63.0

Out of this sample, 64.3% of the respondents were those who held senior positions in IFIs, such as senior auditors, assistant manager, manager, and vice president. In terms of working experience, 67.2 % of the respondents had been working in their respective capacities for more than five years. However, only 32.9% of them had working experience in *shariah* auditing between one and five years, and another 45.9% of the internal auditors had working experience in *shariah* auditing of less than a year. Thus, the total percentage of those who had working experience in *shariah* auditing of less than five years was 78.8%. In addition, only 2.1% of the respondents had more than 10 years of working experience in *shariah* auditing.

With regard to academic qualifications related to Islamic banking and finance (IBF), only 10% of the respondents had such qualifications. This finding is consistent with the previous findings of studies by Karim (1990), Kasim et al. (2009) and Yahya and Mahzan (2014, 2012), who found accountants and auditors lacked relevant qualifications, knowledge, and experience, especially in *shariah* and Islamic banking and finance disciplines. In terms of general academic qualifications, the percentages of the respondents who had Bachelor's degrees, Master's degrees, professional

certificates, diplomas, and doctoral degrees were 63%, 10.3%, 8.2%, 8.2%, and .7%, respectively. Obviously, the majority of the respondents had tertiary education. In terms of religion, respondents who were Muslims, Buddhists, Christians, and Hindus constituted 71.9%, 10.3%, 7.5%, and 2.7% of the total respondents, respectively. Furthermore, 80.8 % of the respondents professed that religion was important in their lives.

**(b) Descriptive Statistics of the Variables examined in the Study**

In this subsection, several tables are presented to highlight relevant descriptive statistics of the variables examined in this study. Before the study proceeds with the discussion of the descriptive analysis, it is appropriate for the study to recall the total score for each variable in Table 5.11, to be used as a reference and benchmark of scores obtained by internal auditors. Table 5.12 highlights the descriptive statistics of all the variables based on all types of banks in Malaysia. Table 5.13 shows the descriptive statistics of all the variables based on the nationality of the banks.

**Table 5.11 : The Total Scores of all Variables**

<b>Variables</b>	<b>Total Scores</b>
(IV) Total Spirituality (TS)	175
(Moderator) High Complexity List <i>Shariah</i> audit/Islamic Task (HTCIS)	23
(Moderator) Low Complexity List <i>Shariah</i> audit/Islamic Task (LTCIS)	10
(Moderator) High Complexity List Internal Task (HTCIN)	19
(Moderator) Low Complexity List Internal Task (LTCIN)	10
(Moderator) Total IBF and <i>Shariah</i> Knowledge (IBFK)	10
(Moderator) Total Internal Audit Knowledge (INTK)	10
(Moderator) Total Ethics (TE)	77
(DV) Total <i>Shariah</i> Audit Judgement Performance (TPDV)	62

**Table 5.12 : The Descriptive Statistics of all the Variables**

	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic
(IV) Total Spirituality	85	169	135.99	15.03
(Moderator) High Complexity List <i>Shariah</i> audit/Islamic Task	1	22	10.34	5.02
(Moderator) Low Complexity List <i>Shariah</i> audit/Islamic Task	1	10	3.50	2.28
(Moderator) High Complexity List Internal Task	1	15	6.48	3.91
(Moderator) Low Complexity List Internal Task	1	9	3.16	1.62
(Moderator) Total IBF and <i>Shariah</i> Knowledge	1	10	5.85	1.86
(Moderator) Total Internal Audit Knowledge	1	7	3.21	1.56
(Moderator) Total Ethics	12	77	63.13	10.34
(DV) Total <i>Shariah</i> Audit Judgement Performance	6	43	23.49	7.84

As shown in Table 5.12, the mean score of respondents' spirituality was 135.99, with a minimum score and a maximum score of 85 and 169, respectively, indicating that in general they had a deep sense of spirituality. For high complexity *shariah* (Islamic) audit task, the mean score was 10.34 (out of maximum 23), with a minimum score and a maximum score of 1 and 22, respectively. For low complexity *shariah* (Islamic) audit task, the mean score was 3.50 (out of maximum 10), with a minimum score and a maximum score of 1 and 10, respectively. Evidently, their performances in both categories of *shariah* (Islamic) audit task were relatively low. This particular finding has a serious implication to the current practices as many researchers have highlighted the needs of internal auditors to equip themselves with Islamic banking and finance and *shariah* knowledge as well as relevant skills to perform *shariah* audit successfully

(Kasim et al., 2009; Kasim and Sanusi, 2013; Yahya and Mahzan, 2014, 2012; Abdul Ghani, 2014).

In addition, the above findings are unexpected given the contention made in PwC's (2011) report titled *Shariah Audit: Industries' Insight*. In this report, about 80% of respondents from several financial institutions claimed that their internal auditors were adequately trained in Islamic banking and financing products, and another 60% of the respondents claimed that their internal auditors were adequately trained in *shariah* auditing related matters. Furthermore, 70% of the respondents from Islamic financial institutions also indicated that they had sufficient competent staff to perform *shariah* audit effectively. Arguably, such contention is open for debate given the above findings that suggest current internal auditors do not have such competency.

The mean, minimum, and maximum scores of respondents' high complexity internal task were 6.48, 1, and 15, respectively. Whereas, the mean, minimum, and maximum scores of respondents' low complexity internal task were 3.16, 1, and 9, respectively. For IBF and *shariah* knowledge, the mean score was 5.85, with a minimum score and a maximum score of 1 and 10, respectively. For internal audit knowledge, the mean score was 3.21, with a minimum score and a maximum score of 1 and 7, respectively. Clearly, the above findings indicate that the respondents had low knowledge of both IBF and *shariah* knowledge and internal audit. These particular findings are consistent with other studies, which found a lack of competency among internal auditors (Kasim et al., 2009; Abdul Ghani, 2014; Yahya and Mahzan, 2014). The mean, minimum, and maximum scores of respondents' ethics were 63.13, 12, and 77, respectively. Finally, the mean, minimum, and maximum scores of respondents' *shariah* audit judgement performance were 23.49, 6, and 43, respectively.

Table 5.13 summarizes the mean scores of the *shariah* audit judgement performance based on four types of banks, namely full-fledged local Islamic financial institutions (FFL), full-fledged foreign Islamic financial institutions (FFF), Islamic banking subsidiaries of conventional local financial institutions (SCL), and Islamic banking subsidiaries of conventional foreign financial institutions (SCF). The findings indicate that the mean scores of *shariah* audit judgement performance of FFF and SCF were relatively higher compared with FFL and SCL. The mean score of *shariah* audit judgement performance of FFF was 26.72, with a minimum score of 8.00 and a maximum score of 42.00. Almost equally, the mean score of *shariah* audit judgement performance of SCF was 25.43, with a minimum score of 17 and a maximum score of 39.00. On the other hand, the mean score of *shariah* audit judgement performance of SCL mean score was 23.43, with a minimum score of 6.00 and a maximum score of 43.00. Among the four types of banks, the mean score of *shariah* audit judgement performance of FFL was the lowest, registering 22.90, with a minimum score of 11.00 and a maximum score of 39.00. However, this finding should be interpreted with caution as the sample size for each type of bank was relatively small, which might not be generalizable to the actual population of internal auditors.

**Table 5.13 : The Descriptive Statistics of all the Variables based on the Nationality of the Banks**

	Full Fledge Local Islamic Financial Institutions (FFL) (N = 43)				Full Fledge Foreign Islamic Financial Institutions (FFF) (N = 12)			
	Min	Max	Mean	Std. Deviation	Min	Max	Mean	Std. Deviation
(IV) Total Spirituality	85.00	164	136.74	14.74	104.00	153.00	132.50	12.55
(Moderator) High Complexity List <i>Shariah</i> audit/Islamic Task	1.00	22.00	9.91	4.35	2.00	18.00	11.50	5.61
(Moderator) Low Complexity List <i>Shariah</i> audit/Islamic Task	1.00	10.00	3.45	2.35	1.00	10.00	4.54	2.62
(Moderator) High Complexity List Internal Task	1.00	15.00	5.92	3.90	1.00	13.00	7.41	3.60
(Moderator) Low Complexity List Internal Task	1.00	6.00	3.45	1.43	2.00	7.00	3.36	2.01
(Moderator) Total IBF and <i>Shariah</i> Knowledge	3.00	10.00	6.02	1.81	4.00	8.00	6.08	1.56
(Moderator) Total Internal Audit Knowledge	1.00	7.00	3.52	1.81	2.00	6.00	3.36	1.28
(Moderator) Total Ethics	41.00	77.00	63.62	7.10	12.00	76.00	61.58	16.37
(DV) Total <i>Shariah</i> Audit Judgement Performance	11.00	39.00	22.90	6.35	8.00	42.00	26.72	10.78



**5.13 – (continued): The Descriptive Statistics of all the Variables based on the Nationality of the Banks**

	Islamic Banking Subsidiaries of Conventional Local Financial Institutions (SCL) (N = 72)				Islamic Banking Subsidiaries of Conventional Foreign Financial Institutions (SCF) (N = 5)			
	Min	Max	Mean	Std. Deviation	Min	Max	Mean	Std. Deviation
(IV) Total Spirituality	85.00	169.00	135.64	16.03	126.00	156.00	140.00	15.01
(Moderator) High Complexity List <i>Shariah</i> audit/Islamic Task	1.00	18.00	10.36	4.83	10.00	20.00	15.00	4.12
(Moderator) Low Complexity List <i>Shariah</i> audit/Islamic Task	1.00	10.00	3.39	2.38	1.00	5.00	3.40	1.51
(Moderator) High Complexity List Internal Task	1.00	14.00	6.68	3.88	1.00	13.00	4.40	5.07
(Moderator) Low Complexity List Internal Task	1.00	6.00	2.93	1.43	1.00	4.00	2.50	1.29
(Moderator) Total IBF and <i>Shariah</i> Knowledge	1.00	9.00	5.71	1.94	3.00	8.00	5.80	2.28
(Moderator) Total Internal Audit Knowledge	1.00	7.00	3.05	1.47	2.00	4.00	2.40	.89
(Moderator) Total Ethics	15.00	77.00	63.08	11.05	54.00	77.00	65.00	10.81
(DV) Total <i>Shariah</i> Audit Judgement Performance	6.00	43.00	23.43	7.411	17	39.00	25.43	8.64

The same table also shows that all the four types of banks attained similar mean scores of spirituality and ethics. For example, the mean scores of spirituality (in descending order) of SCF, FFL, SCL, and FFF were 140.00, 136.74, 135.64, and 132.50, respectively. This finding is highly promising because spiritual element is believed to have a positive effect on work outcomes (Ashmos and Duchon, 2000; Giacalone and Jurkiewicz, 2003). Furthermore, this finding will have a serious implication for the current practice in Malaysian IFIs as no similar empirical finding has been reported in the literature.

In addition, the mean scores of task complexity and knowledge of internal auditors based on the four types of banks were also calculated. The calculation revealed an unexpected finding where FFF and SCF attained relatively higher mean scores of Islamic audits task complexity and IBF and *shariah* knowledge. The mean scores of Islamic audits of high and low level complexity were 11.50 and 4.54, respectively. The mean scores of IBF and *shariah* knowledge of high and low level complexity were 15.00 and 3.40, respectively. In contrast, FFL and SCL attained relatively lower mean scores of Islamic audits task complexity and IBF and *shariah* knowledge. Nonetheless, for these two types of banks, they achieved relatively higher mean scores of internal audit task and internal audit knowledge. The FFL's mean scores of internal audit task of high and low complexity were 5.92 and 3.45, respectively. For SCL, the mean scores of internal audit task of high and low complexity were 6.68 and 2.93, respectively. For internal audit knowledge, the mean scores of FFL's and SCL's were 3.52 and 3.05, respectively.

Overall, the findings related to task complexity and knowledge indicate that internal auditors from FFF and SCF were more skillful and competent compared with their counterparts from FFL and SCL. The reason for this is not clear, but it may be due to

the exposure of the former to global and international standards and procedures, which need to be adhered to by foreign banks. The foreign banks may also have greater capacity to employ the best for their business across the globe. In summary, some of the interesting findings are as follows:

- Spirituality had a mean score of 135.99, with a minimum score of 85 and maximum score of 169.
- The mean scores of Islamic audit task and IBF knowledge indicate the respondents had higher proficiency and competency in *shariah* audit and Islamic audit, as well as IBF and *shariah* knowledge compared with internal audit task and internal audit knowledge
- The mean score of all sections (i.e., task complexity; Islamic and Internal task complexity, IBF knowledge and Internal audit knowledge) was lower compared with the mean score of each section.
- SCF attained the highest mean score of spirituality at 140.00, followed by FFL at 136.74, then by SCL at 135.64, and lastly by FFF at 132.50.
- FFF and SCF achieved higher mean scores of the *shariah* audit (Islamic task) of high and low complexity as well as IBF and *shariah* knowledge.
- FFL and SCL attained relatively higher mean scores of internal audit task and internal audit knowledge.

### 5.3.3.2 Correlation Analysis

The purpose of correlation analysis was to investigate the degree of association between two variables. In addition, such analysis shows the direction and strength of a relation and may serve as the preliminary support for the hypotheses developed in a study (Field, 2009; Tabachnick and Fidell, 2007). The correlation coefficient varies between “-1” to “+1”. A positive coefficient indicates that the two variables are positively correlated, indicating that as one of the variables increases by a certain amount, the other increases by the same amount accordingly. In contrast, a negative coefficient indicates a negative relation, where if one of the variables increases by a certain amount, the other decreases by the same amount (Field, 2009; Pallant, 2011). A coefficient of zero indicates no relation at all, where if one of the variables changes, the other remains unchanged (Hair et al., 2006; Field, 2009). Table 5.14 shows the correlation matrix of bivariate relations among all the variables in this study.

**Table 5.14 : Bivariate Relations among all Variables**

Variables	TS	HTCIS	LTCIS	HTCIN	LTCIN	IBFK	INTK	TE	TPD V
TS	1								
HTCI	0.071	1							
LTCI	0.098	0.269**	1						
HTCIN	-0.060	0.416**	0.230**	1					
LTCIN	-0.094	0.122	0.208*	0.264**	1				
IBFK	0.060	0.082	0.099	-0.068	0.049	1			
INTK	-0.093	-0.104	-0.015	-0.176*	0.001	0.230**	1		
TE	0.332**	0.093	0.015	-0.047	-0.167*	0.137	0.108	1	
TPDV	0.236**	0.199*	0.335**	0.287**	0.289**	0.098	-0.131	-0.012	1

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

TS – Total Spirituality; HTCIS - High Complexity List *Shariah* audit/Islamic Task; LTCIS - Low Complexity List *Shariah* audit/Islamic Task ; HTCIN - High Complexity List Internal Task ; LTCIN - Low Complexity List Internal Task ; IBFK - Total IBF and *Shariah* Knowledge ; INTK - Total Internal Audit Knowledge ; TE – Total Ethics ; TPDV – Total Performance.

As shown in Table 5.14, the associations among independent variables, moderator variables, and dependent variable were moderate. According to Baron and Kenny (1986), to establish an analytic framework for testing moderation effects, it is desirable that the moderator variables be uncorrelated with both predictor (IV) variable and the criterion (DV) variable to demonstrate a clearly interpretable interaction effects. As one of the objectives in this study was to investigate the moderation effects (that would affect the direction, strength, or both of the relation between an independent variable and a dependent variable), it was crucial for the spirituality as the main independent variable (IV) to have a significant correlation with the total performance as the dependent variable (DV) for this study.

Pearson correlation analysis carried out showed that the relation between total performance and spirituality was moderate and positive,  $r(146) = .24, p < .01$ , suggesting that the probability of getting a correlation coefficient within a sample of 146 provided that the null hypotheses were true is very low (close to zero). In other words, the above correlation provided initial support for the expected direction and strength of the relation between spirituality and total performance. Task complexity was positively correlated with audit judgement performance ( $p < .01$ ), with correlation coefficients ranging from .20 to .34. However, there was no significant correlation between knowledge and task complexity, which was unable to replicate other findings based on the model developed by Libby (1995)<sup>11</sup>. Arguably, this insignificant correlation is possibly due to the lack of knowledge among respondents to perform the

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<sup>11</sup> Libby (1995) emphasized at the antecedent and consequences of knowledge, which focuses on the relationship between ability, knowledge, experience and performance. See also Libby and Luft (1993), Tan and Kao (1999), Bonner and Lewis (1990) for the explanation of knowledge and task relationship. Abdolmohammadi and Wright, (1987); Bonner, (1994) and Tan et al., (2002) for task complexity and audit judgment performance.

tasks assigned to them in the experiments. Ethics, however, was positively correlated with the spirituality,  $r(146) = .33, p < .01$

Finally, the correlation analysis also indicated the relation between the independent variables and moderation variables were not highly significant, suggesting that multicollinearity was not present. As highlighted in Section 5.3.1.5 (see Table 5.7), all the variables had tolerance values below .1 and VIF values below 10, which are the cut-off threshold of tolerance and VIF value above which will violate the assumptions of the regression analysis (Hair et al., 2006; Field, 2009).

### 5.3.3.3 Hypotheses Testing and Findings

Findings of the regression analysis on *shariah* audit judgement performance are presented in this section to discuss the main and interaction effects of spirituality and moderator variables. The regression analysis was carried out to test the research hypotheses of the study. The F-statistics, which is a test for statistical significance of regression equation as a whole, was used to assess the relation between the dependent variable (Y) and the independent variables in the model (X). If the F value is significant, then the regression equation explains the relation between X and Y. The regression analysis was also performed to assess the effects of moderation variables on the relation between a specified independent variable and a dependent variable. Altogether, there are three (3) main research hypotheses formulated in this study. One research hypothesis was tested using a structured interview data matrix analysis (see sections 5.2), and the remaining hypotheses were tested using regression analysis. Table 5.15 summarizes all the research objectives, research questions, and research hypotheses of the present study.

**Table 5.15: The Research Objectives, Research Questions and Research Hypotheses**

<b>RESEARCH OBJECTIVES (RO)</b>	<b>RESEARCH QUESTIONS (RQ)</b>	<b>HYPOTHESES</b>
<p><b><u>RO 1</u></b> To examine the knowledge requirements' of internal auditors to perform <i>shariah</i> audit in Islamic Financial Institutions (IFIs) in Malaysia</p>	<p><b><u>RQ 1</u></b> What kinds of knowledge that internal auditors' need in order to perform <i>shariah</i> audit in Islamic Financial Institutions (IFIs) in Malaysia.</p>	<p><b><u>H 1<sup>12</sup></u></b> The three most important knowledge required to perform <i>shariah</i> audit are Islamic Banking and Finance Knowledge, <i>Shariah</i> Knowledge, and Internal Audit Knowledge</p>
<p><b><u>RO 2</u></b> To examine the impact of spirituality on internal auditors' <i>shariah</i> audit judgement performance.</p>	<p><b><u>RQ 2</u></b> Does spirituality affect internal auditors' <i>shariah</i> audit judgement performance?</p>	<p><b><u>H 2</u></b> Spirituality of internal auditors affects judgment and performance of <i>shariah</i> auditing</p>
<p><b><u>RO 3</u></b> To examine the moderating effects of task complexity, knowledge and professional ethics on the relationship between spirituality and internal auditors' <i>shariah</i> auditing judgement performance.</p>	<p><b><u>RQ 3</u></b> Do task complexity, knowledge and professional ethics moderate the relationship between spirituality and internal auditors' <i>shariah</i> audit judgement performance?</p>	<p><b><u>H 3</u></b> There are significant moderating effect of task complexity, knowledge and ethics on the relations between spirituality and <i>shariah</i> auditing judgement performance.</p> <p><b><u>H 3 (a)</u></b> There is a moderating effect of task complexity categorized as High and Low on the relationship between spirituality and <i>shariah</i> auditing judgment performance.</p> <p><b><u>H 3 (b)</u></b> There is a moderating effect of Knowledge categorized as High and Low on the relationship between spirituality and <i>shariah</i> auditing judgement performance.</p>

<sup>12</sup> Discussion of result for Hypotheses 1 (H-1) can be viewed in section 5.2 : findings from interviews



		<b>H 3 (c)</b> There is a moderating effect of Ethics - (High and Low) on the relationship between spirituality and <i>shariah</i> auditing judgement performance.
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The predictor variable or independent variable (spirituality), moderation variables (task complexity, knowledge, and ethics), and the product of spirituality and moderator variables were regressed in three steps on the criterion variable or dependent variable (*shariah* audit judgement performance). Overall, eight (8) equations were constructed and tested by estimating the regression equations as summarized in Table 5.16.

**Table 5.16 : List of Regression Equations**

EQUATIONS	
$Y_{1AP} = \beta_0 + \beta_1 \text{ SPIRIT} + \epsilon \dots$	(1)
$Y_{2iAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_2 \text{ TASKCOMP} + \epsilon \dots$	(2)
$Y_{2iiAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_2 \text{ TASKCOMP} + \beta_3 \text{ SPIRITTASKCOMP} + \epsilon \dots$	(3)
$Y_{3iAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_4 \text{ KNOWLEDGE} + \epsilon \dots$	(4)
$Y_{3iiAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_4 \text{ KNOWLEDGE} + \beta_5 \text{ SPIRITKNOWLEDGE (IBF and SHARIAH KNOWLEDGE AND INTERNAL AUDIT KNOWLEDGE)} + \epsilon$	(5)
$Y_{4iAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_6 \text{ ETHICS} + \epsilon \dots$	(6)
$Y_{4iiAP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_6 \text{ ETHICS} + \beta_7 \text{ SPIRITETHICS} + \epsilon \dots$	(7)
$Y_{5AP} = \beta_0 + \beta_1 \text{ SPIRIT} + \beta_2 \text{ TASKCOMP} + \beta_3 \text{ SPIRITTASK} + \beta_4 \text{ KNOW} + \beta_5 \text{ SPIRITKNOW} + \beta_6 \text{ ETHICS} + \beta_7 \text{ SPIRITETHICS} + \epsilon \dots$	(8)

The eight (8) regression equations were formulated based on Baron and Kenny's (1986) suggestion in establishing an analytical framework to test moderation effects. According to Baron and Kenny (1986), three relations are tested in the moderation analysis phase. First, the independent variable and the dependent variable; second, the moderator and the dependent variable; and third, the interaction of the independent and

moderator variables with the dependent variables. The moderation hypothesis is supported if the third relation is significant, which signifies the effects of independent and moderator variables on the dependent variables.

Equation (1) measures the direct effects of the predictor variable (SPIRIT) on criterion variable (*SHARIAH* AUDIT JUDGEMENT PERFORMANCE). Equation (2) tests the main effects of SPIRIT and TASK COMPLEXITY on *SHARIAH* AUDIT JUDGEMENT PERFORMANCE. Next, equation (3) incorporates the multiplicative interaction between SPIRIT and TASK COMPLEXITY. Equation (4) measures the main effects of SPIRIT and KNOWLEDGE on *SHARIAH* AUDIT JUDGEMENT PERFORMANCE. While equation (5) incorporates multiplicative interaction between SPIRIT and KNOWLEDGE. The final moderator tested was ETHICS where Equation (6) tests the effects of SPIRIT and ETHICS on *SHARIAH* AUDIT JUDGEMENT PERFORMANCE. Equation (7) represents the multiplicative interaction between SPIRIT and ETHICS.

The study also assessed the impact of all moderation variables on the relations between specified independent variables. As such, Equation (8) was formulated to test the multiple interaction effects of the predictor variable (IV) and the moderators on the criterion variable (DV). The moderators will moderate the relation between the predictor and criterion variables if the interaction yields a significant value (Baron and Kenny, 1986; Iskandar and Sanusi, 2011). To contrast the findings of the hypotheses testing, the discussion of regression analysis is presented in three (3) parts. The hypotheses were tested at the standard  $p < .05$  level of significance.

## Hypothesis H 2

### **Spirituality of internal auditors significantly affects judgment and performance of *shariah* auditing**

This hypothesis was tested to determine the main effect of spirituality on *shariah* audit judgement performance. The finding of the regression analysis for Equation (1) as shown in Table 5.17 indicates that spirituality was significantly related to *shariah* audit judgement performance,  $t(146) = 2.91, p < .001$ . Spirituality also explained a significant proportion of variance in *shariah* audit judgement performance scores,  $R^2 = .056, F(1,146) = 8.48, p < .001$  (The beta coefficient values recorded is 0.263). Thus, this finding provides evident to support the second hypothesis, of which the relation between spirituality and *shariah* audit judgement performance was significant, suggesting that internal auditors with high spirituality will perform better in *shariah* audit compared with those with lower spirituality. This particular finding is consistent with previous findings that showed the significant effect of spirituality on organizational performance, work performance, and individual performance (Neck and Milliman, 1994; Ashmos and Duchon, 2000; Giacalone and Jurkiewicz, 2003; Kolodinsky et al., 2008; Petchsawang and Duchon, 2008 and 2012; Karakas 2009; and Nasina and Pin, 2011).

**Table 5.17 : Spirituality (IV) and Total Score (All Task Complexity) (DV)**

Variables	Relevant Hypothesis	$\beta$	Std. Error	t-value	p-value
Spirituality	H2	.263	.090	2.912	.004
R square	: .056		F Ratio		: 8.482
Adjusted R Square	: .049		Significance F		: .004
N	: 146				

### **Hypotheses H3**

**There are significant moderation effects of task complexity, knowledge and professional ethics on the relation between spirituality and *shariah* auditing judgement performance**

**Hypotheses H 3 (a): There is a moderating effect of task complexity categorized as High and Low on the relationship between spirituality and *shariah* auditing judgement performance**

The findings of the moderated regression analysis for predictors (IV) and moderator variables on performance by level of task complexity are presented in Table 5.18 and Table 5.19. The independent variable and all moderator variables were first centred by subtracting the mean scores from each item, resulting in a new mean of zero. Centering these values would reduce the level of collinearity between variables without affecting the regression findings (Field, 2009). Then, the interaction terms were created by multiplying each centred independent variable with the centred moderation variables. The interaction term should be significant to explain the incremental variance in the dependent variables beyond the main effects in the presence of the moderation effects (Aiken and West, 1991; Tabachnick and Fidell, 2007; Field, 2009). The variables were entered into the regression model in three steps. First, the dependent variable was regressed on the centred independent variables. Second, the centred independent variable and moderator variables were entered. Third, the interaction terms between the independent and moderators variables were inserted.

The effects of spirituality, knowledge, and professional ethics on *shariah* audit judgement performance were analysed separately for the low complexity and high

complexity task in order to demonstrate specific relations of these variables with *shariah* audit judgement performance at different levels of complexity. The third hypothesis (H3) is that the moderation effects of task complexity, knowledge, and professional ethics on the relation between spirituality and *shariah* audit judgement performance will be significant.

As shown in Table 5.18, there were only two significant interaction effects on *shariah* audit judgement performance for high task complexity and only one significant interaction effect on the *shariah* audit judgement performance for low task complexity. The two variables for the high task complexity level were spirituality and professional ethics and Islamic knowledge and professional ethics. This finding indicates that respondents with higher spirituality and ethics achieved better *shariah* audit judgement performance,  $t(146) = 1.99, p < .05$ . Furthermore, the findings also indicate that the higher the Islamic knowledge and professional ethics that the respondents had, the better they performed *shariah* audit judgement,  $t(146) = 2.43, p < .05$ .

However, for the high task complexity, the study found no moderation effects of knowledge (both types of knowledge, IBF and *shariah* knowledge and internal audit knowledge) and professional ethics, suggesting that spirituality does not improve performance even when one has high knowledge and high ethics. In contrast, for the low task complexity, there was an interaction effect, suggesting that high spirituality, high Islamic knowledge, and high professional ethics can improve *shariah* audit judgement performance. However, the findings of regression analysis for the low task complexity indicate that spirituality, knowledge, and professional ethics did not significantly contribute to the variance in *shariah* audit judgement performance,  $R^2 = .11, F(1, 146) = 1.57, p < .001$ . This particular finding suggests that as the level of task complexity increases, internal auditor's judgement performance decreases. Arguably, in

performing tasks of high complexity, internal auditors need to anticipate and understand a myriad of issues under ambiguous situations, thus impairing their *shariah* audit judgement performance.

In addition, the researcher also examined the moderation effect of task complexity on the relation between spirituality and *shariah* auditing judgement performance by separating Islamic audit and internal audit into high and low task complexity. Again, the objective was to specifically contrast the different types of task complexity and to observe whether they significantly affect *shariah* audit judgement performance. The findings of this analysis as shown in Table 5.19 are slightly similar with the findings presented in Table 5.18. For Islamic high complexity task (Panel A), only one significant interaction effect between Islamic knowledge and professional ethics was observed. This signifies that high Islamic knowledge and high professional ethics have significant effects on *shariah* audit judgement performance and no interaction effect was detected between spirituality and *shariah* audit judgement performance. For Islamic low task complexity (Panel B), there were moderation effects among spirituality, Islamic knowledge, and professional ethics. These findings are consistent with the findings reported earlier (see Table 5.18, Panel B, Low task complexity). Such moderation effects denotes that high spirituality, high Islamic knowledge, and high professional ethics in low task complexity condition improved respondents' *shariah* audit judgement performance.

Meanwhile, for high internal audit task complexity (Panel C), two significant interaction effects were observed between spirituality and professional ethics and between internal audit knowledge and professional ethics on audit judgement performance. Such interaction effects suggest that high spirituality, high ethics, and high internal audit knowledge can lead to better *shariah* audit judgement performance. In

contrast, such interaction effects were not observed for low internal audit task complexity (Panel D).

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**Table 5.18 : Regression of Spirituality, IBF and *Shariah* Knowledge, Internal Audit Knowledge and Professional Ethics on *Shariah* Auditing Judgement Performance by Level of Complexity (DV)**

Variables	Panel A High Task Complexity (Islamic/SA and Internal Audit) (DV)	
	Regression Coefficient	P-Value
Spirituality	-.606	.546
Islamic Know	-.417	.678
Internal Know	-1.351	.179
Ethics	.968	.335
Spirituality x Islamic Knowledge	-.697	.487
Spirituality x Internal Knowledge	1.577	.117
Spirituality x Ethics	-1.987	<b>.049</b>
Islamic Know x Ethics	2.430	<b>.016</b>
Internal Know x Ethics	-1.765	.080
Spirituality x Islamic Know x Ethics	.744	.458
Spirituality x Internal Know x Ethics	-1.148	.253
	R square : .090 Adjusted R Square : .015 F Ratio : 1.200 Significance F : .293 N : 146	



**Table 5- 18 (Continued) : Regression of Spirituality, IBF and *Shariah* Knowledge, Internal Audit Knowledge and Professional Ethics on *Shariah* Auditing Judgement Performance by Level of Complexity (DV)**

Variables	Panel B Low Task Complexity (Islamic/SA and Internal Audit) (DV)	
	Regression Coefficient	P-Value
Spirituality	.399	.690
Islamic Know	1.580	.116
Internal Know	-.574	.567
Ethics	.622	.535
Spirituality x Islamic Knowledge	-.611	.542
Spirituality x Internal Knowledge	.089	.930
Spirituality x Ethics	-1.415	.159
Islamic Know x Ethics	1.372	.172
Internal Know x Ethics	.670	.504
Spirituality x Islamic Know x Ethics	-2.425	<b><u>.017</u></b>
Spirituality x Internal Know x Ethics	.177	.859
	R square : .114 Adjusted R Square : .042 F Ratio : .1.573 Significance F : .114 N : 146	

**Table 5.19: Regression of Spirituality, IBF and *Shariah* Knowledge and Internal Audit Knowledge, Professional Ethics on *Shariah* Auditing Judgement Performance by Level of Complexity between Islamic/*Shariah* Audit (SA), Task Complexity and Internal Audit Task Complexity (DV)**

Variables	Panel A High Islamic/SA Task Complexity		Panel B Low Islamic/SA Task Complexity	
	Regression Coefficient	P-Value	Regression Coefficient	P-Value
Spirituality	-.241	.810	1.092	.277
Islamic Know	-.014	.989	1.101	.273
Internal Know	-1.036	.302	-.292	.771
Ethics	1.271	.206	1.434	.154
Spirituality x Islamic Knowledge	-1.042	.299	-.248	.804
Spirituality x Internal Knowledge	1.042	.300	.817	.416
Spirituality x Ethics	-1.101	.273	-1.600	.112
Islamic Know x Ethics	2.150	<b>.033</b>	1.845	.067
Internal Know x Ethics	-1.003	.317	.192	.848
Spirituality x Islamic Know x Ethics	1.225	.223	-2.208	<b>.029</b>
Spirituality x Internal Know x Ethics	-.735	.464	-.419	.676
	R square : .074 Adjusted R Square : -.002 F Ratio : .979 Significance F : .468 N : 146		R square : .109 Adjusted R Square : .036 F Ratio : 1.493 Significance F : .141 N : 146	

**Table 5.19 (Continued): Regression of Spirituality, IBF and *Shariah* Knowledge and Internal Audit Knowledge, Professional Ethics on *Shariah* Auditing Judgement Performance by Level of Complexity between Islamic/*Shariah* Audit (SA), Task complexity and Internal Audit Task Complexity (DV)**

Variables	Panel C High Internal Audit Complexity		Panel D Low Internal Audit Complexity	
	Regression Coefficient	P-Value	Regression Coefficient	P-Value
Spirituality	-.894	.373	-.830	.408
Islamic Know	-.829	.409	1.427	.156
Internal Know	-1.292	.199	-.677	.500
Ethics	.180	.857	-.903	.368
Spirituality x Islamic Knowledge	.050	.961	-.810	.419
Spirituality x Internal Knowledge	1.743	.084	-1.024	.308
Spirituality x Ethics	-2.493	<b>.014</b>	-.379	.705
Islamic Know x Ethics	1.919	.057	-.063	.950
Internal Know x Ethics	-2.180	<b>.031</b>	1.006	.316
Spirituality x Islamic Know x Ethics	-.211	.833	-1.432	.154
Spirituality x Internal Know x Ethics	-1.301	.195	.954	.342
	R square : .074 Adjusted R Square : -.002 F Ratio : .979 Significance F : .468 N : 146		R square : .109 Adjusted R Square : .036 F Ratio : 1.493 Significance F : .141 N : 146	

**H 3 (b): There is a moderating effect of knowledge categorized as High and Low on the relationship between spirituality and *shariah* auditing judgement performance**

The findings of regression analysis for spirituality, knowledge, and *shariah* auditing judgement performance as a predictor, a moderator, and a criterion variable, respectively, are presented in Table 5.20 and Table 5.21. Two sets of regression analysis were conducted in this study. First, the moderation effects were derived from a separate analysis between total IBF and *shariah* knowledge and total internal audit knowledge (see Table 5.20). Second, a regression analysis was performed on the summation of total knowledge of IBF and *shariah* knowledge and total internal audit knowledge (see Table 5.21).

Hypothesis H3 (b) states that there is a significant moderation effect of knowledge categorized as high and low on the relation between spirituality and *shariah* audit judgement performance. In fact, the findings from preliminary interviews and in-depth interviews suggest that IBF knowledge and *shariah* knowledge are essential requirements to conduct *shariah* auditing effectively. Moreover, the findings from interviews indicate that spirituality is another important factor to help achieve the distinct objectives of *shariah* auditing in IFIs' operations. However, no such relation and effects were found to be significant based on the two sets of regression analysis that showed all interaction terms pertaining to knowledge effects were insignificant (see Table 5.20 and Table 5.21). Arguably, these insignificant findings may be due to the lack of sensitivity of the research instrument to measure the moderator as only 10 multiple-choice questions were used to test each division.

**Table 5.20: The Regression of Spirituality, Knowledge IBF and *Shariah* and Internal Audit Knowledge (combination) on *Shariah* Auditing Judgment Performance**

Moderator – Total IBF and Shariah Knowledge		
Variables	Total Performance	
	Regression Coefficient	P-Value
Spirituality	2.501	<u>.014</u>
IBF and Shariah Knowledge	1.248	.214
Spirituality x IBF and Shariah Knowledge	-1.760	.081
	R square : .083 Adjusted R Square : .063 F Ratio : 4.269 Significance F :.006 N : 146	
Moderator – Total Internal Audit Knowledge		
Variables	Total Performance	
	Regression Coefficient	P-Value
Spirituality	2.881	<u>.005</u>
Internal audit Knowledge	-1.203	.231
Spirituality x Internal Audit Knowledge	1.342	.182
	R square : .079 Adjusted R Square : .060 F Ratio : 4.073 Significance F :.008 N : 146	

**Table 5.21 : Regression of Spirituality, Summation of Total Knowledge IBF and *Shariah* and Internal Audit Knowledge**

<b>Moderator – Total Knowledge ( Summation of IBF, <i>Shariah</i> and Internal audit Knowledge )</b>		
<b>Variables</b>	<b>Total Performance</b>	
	<b>Regression Coefficient</b>	<b>P-Value</b>
Spirituality	2.841	<b>.005</b>
Total IBF, <i>Shariah</i> and Internal audit Knowledge	-.033	.973
Spirituality x IBF, <i>Shariah</i> and Internal audit Knowledge	-.104	.917
	R square : .056 Adjusted R Square : .036 F Ratio : 2.793 Significance F : .043 N : 146	

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**Table 5.22 : Regression of Spirituality, Professional Ethics on *Shariah* Auditing Judgment Performance**

<b>Moderator – Ethics</b>		
<b>Variables</b>	<b>Total Performance</b>	
	<b>Regression Coefficient</b>	<b>P-Value</b>
Spirituality	3.138	<b>.002</b>
Ethics	-1.182	.239
Spirituality x Ethics	.212	.833
	R square : .065 Adjusted R Square : .045 F Ratio : 3.295 Significance F : .022 N : 146	

**H 3 (c): There is a moderating effect of professional ethics - (High and Low) on the relationship between spirituality and *shariah* auditing judgement performance**

Hypothesis H3 (c) proposes that there is a significant moderation effect of ethics on the relation between spirituality and *shariah* audit performance. The analysis performed showed that there were no significant interaction effects, thus failing to support the above research hypothesis (see Table 5.22). Moreover, the finding of the analysis shows that there was no main effect of ethics on *shariah* auditing performance.

*(a) Additional Analysis for the Third Research Hypothesis*

In this study, an additional analysis was carried out to contrast the variances among respondents based on specific combinations of the variables. To recall, the experiments used a four-factor all within-subject<sup>13</sup> design, with 16 ( $2 \times 2 \times 2 \times 2 = 2^4$ ) combinations based on spirituality, task complexity, knowledge, and ethics, with each having two levels (high and low). In this factorial design, each experimental unit was assigned to one of the possible combinations of the existing level of the experimental factors. As such, Table 5.23 shows the 16 factorial observations, which were equivalent to 16 experimental observations among respondents.

Initially, ANOVA<sup>14</sup> analysis was intended to be used to contrast the variances. However, the findings from previous regression analysis did not show any significant moderation effects on *shariah* auditing judgement performance, which indicate weak relations among the independent variable, moderator variables, and dependent variable. Moreover, the third research hypothesis was partly supported, namely the sub

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<sup>13</sup> Please refer chapter 3; sub section 3.4 further explanations on conceptual framework.

<sup>14</sup> ANOVA is a way of comparing ratio of systematic variance to unsystematic variance in an experimental study (Field, 2009).

hypothesis H3 (a) that involved the task complexity variable. Thus, it was pointless to do further analysis of ANOVA as the findings could be expected to be not significant.

**Table 5.23 : Sixteen Experimental Observations of the Variables**

Prob.	Experimental Observations	N = no of respondents
1	LS X LK X LE X LTC	19
2	LS X LK X LE X HTC	19
3	LS X LK X HE X LTC	13
4	LS X LK X HE X HTC	13
5	LS X HK X LE X LTC	23
6	LS X HK X LE X HTC	23
7	LS X HK X HE X LTC	22
8	LS X HK X HE X HTC	22
9	HS X LK X LE X LTC	15
10	HS X LK X LE X HTC	15
11	HS X LK X HE X LTC	13
12	HS X LK X HE X HTC	13
13	HS X HK X LE X LTC	20
14	HS X HK X LE X HTC	20
15	HS X HK X HE X LTC	21
16	HS X HK X HE X HTC	21
***	LS – Low Spirituality LK – Low Knowledge LE – Low Ethics LTC – Low task complexity	HS – High Spirituality HK – High Knowledge HE – High Ethics HTC - High Total Complexity

The 16 experimental observations were derived from the process of sorting the data based on certain criteria. For example, the first condition of experimental observations was based on low spirituality, low task complex, low knowledge, and low ethics to yield the condition or combination “LS x LK x LE x LTC”, which consisted of 19 respondents as highlighted in Table 5.23. Similar procedure was used to establish the remaining experimental conditions. Then, each of the experimental conditions was then analysed using the regression analysis, the finding of which is shown in Table 5.24.



The justification for conducting 16 regression analyses on these experimental observations was to investigate and contrast judgement decision making process and their effects on *shariah* auditing judgement performance at various conditions of experimental observations. Therefore, the use of regression analysis in this case was acceptable given that ANOVA analysis can be considered as a special case of regression analysis (Field, 2009). According to Field (2009), ANOVA is a test to investigate the differences between mean scores of data and, at the same time, to see how well a regression model fits that data using the  $F$  value. In addition, according to Field (2009), ANOVA is represented by multiple regression equation. Essentially, the study sought to examine under which conditions that the respondents performed audit judgment decision making process effectively and efficiently.

**Table 5.24 : The Findings of Regression Analysis for 16 Experimental Observations**

	Probabilities	Variables	Mean	Std. Dev	R-Square	Adjusted R	Sign F Change	t	Significant
1	LS X LK X LE X LTC	DV_1	.5242	.07647	.200	-.029	.504		
		Lowtask_1	.3451	.14873				.900	.383
		LowSpirit_1	.6845	.07762				.963	.352
		LowEthics_1	.6528	.18869				-.211	.836
		LowKnowledge_1	.3532	.05450				-.009	.993
2	LS X LK X LE X HTC	DV_2	.5242	.07647	.318	.123	.222		
		Hightask_2	.4187	.16302				1.836	.088
		LowSpirit_2	.6845	.07762				.635	.536
		LowEthics_2	.6528	.18869				-1.029	.321
		LowKnowledge_2	.3532	.05450				-.042	.967
3	LS X LK X HE X LTC	DV_3	.5054	.09888	.098	-.353	.921		
		Lowtask_3	.2909	.10974				-.365	.725
		LowSpirit_3	.7521	.02956				.123	.905
		HighEthics_3	.8871	.03017				.131	.899.
		LowKnowledge_3	.3123	.06237				.739	.481
4	LS X LK X HE X HTC	DV_4	.5054	.09888	.148	-.278	.839		
		Lowtask_4	.4059	.14333				.781	.457
		Spirit_4	.7521	.02956				.419	.686
		Ethics_4	.8871	.03017				-.088	.932
		Knowledge_4	.3123	.06237				.910	.389

**Table 5-24 (continued): The Findings of Regression Analysis for 16 Experimental Observations**

	Probabilities	Variables	Mean	Stad. Dev	R-Square	Adjusted R	Sign F Change	t	Significant
5	LS X HK X LE X LTC	DV_5 Lowtask_5 LowSpirit_5 LowEthics_5 HighKnowledge_5	.5261 .3412 .7257 .7787 .5410	.08283 .10637 .04985 .05452 .08364	.521	.415	<b>.007</b>	3.636 2.183 -1.873 -1.816	<b>.002</b> <b>.043</b> .077 .086
6	LS X HK X LE X HTC	DV_6 Hightask_6 LowSpirit_6 LowEthics_6 HighKnow_6	.5261 .3913 .7257 .7787 .5410	.08283 .14909 .04985 .05452 .08364	.318	.166	.124	1.975 2.058 -1.169 -.768	.064 .054 .258 .453
7	LS X HK X HE X LTC	DV_7 Lowtask_7 LowSpirit_7 HighEthics_7 HighKnowledge_7	.5159 .3393 .7332 .8831 .5659	.13419 .11687 .06550 .03738 .07462	.492	.372	<b>.016</b>	3.222 1.334 -.763 .113	<b>.005</b> .200 .456 .911
8	LS X HK X HE X HTC	DV_8 Lowtask_8 LowSpirit_8 HighEthics_8 HighKnowledge_8	.5159 .4032 .7332 .8831 .5659	.13419 .19039 .06550 .03738 .07462	.297	.132	.176	1.676 1.278 .408 .719	.112 .218 .689 .482

**Table 5.24 (continued): The Findings of Regression Analysis for 16 Experimental Observations**

	Probabilities	Variables	Mean	Std. Dev	R-Square	Adjusted R	Sign F Change	t	Significant
9	HS X LK X LE X LTC	DV_9 Lowtask_9 HighSpirit_9 LowEthics_9 LowKnowledge_9	.5207 .3054 .8174 .8006 .3167	.10450 .08420 .03554 .03565 .08997	.009	-.387	.999	.229 .226 .151 .232	.824 .826 .883 .821
10	HS X LK X LE X HTC	DV_10 Hightask_10 HighSpirit_10 LowEthics_10 LowKnowledge_10	.5207 .4184 .8174 .8006 .3167	.10450 .15692 .03554 .03565 .08997	.054	-.325	.963	.721 .453 .175 .204	.487 .660 .864 .842
11	HS X LK X HE X LTC	DV_11 Lowtask_11 HighSpirit_11 HighEthics_11 LowKnowledge_11	.5554 .3345 .8677 .9171 .2962	.04576 .11910 .04641 .04932 .07763	.250	-.126	.634	.470 1.498 -.697 -.001	.651 .173 .505 .999
12	HS X LK X HE X HTC	DV_12 Hightask_12 HighSpirit_12 HighEthics_12 LowKnowledge_12	.5554 .3772 .8677 .9171 .2962	.04576 .16715 .04641 .04932 .07763	.271	-.093	.588	.682 1.296 -.433 .207	.515 .231 .677 .841

**Table 5.24 (continued): The Findings of Regression Analysis for 16 Experimental Observations**

	Probabilities	Variables	Mean	Stad. Dev	R-Square	Adjusted R	Sign F Change	t	Significant
13	HS X HK X LE X LTC	DV_13 Lowtask_13 HighSpirit_13 LowEthics_13 HighKnowledge_13	.5490 .3607 .8249 .7567 .5217	.08239 .14230 .03727 .15884 .07285	.535	.411	<b>.016</b>	3.722 1.814 .191 .215	<b>.002</b> .090 .851 .833
14	HS X HK X LE X HTC	DV_14 Hightask_14 HighSpirit_14 LowEthics_14 HighKnowledge_14	.5490 .3882 .8249 .7567 .5217	.08239 .14832 .03727 .15884 .07285	.185	-.032	.515	1.211 1.214 .019 1.097	.245 .243 .985 .290
15	HS X HK X HE X LTC	DV_15 Lowtask_15 HighSpirit_15 HighEthics_15 HighKnowledge_15	.5457 .3253 .8653 .9221 .5462	.08471 .13495 .04693 .05323 .07580	.422	.278	<b>.052</b>	.979 .156 -.541 -2.251	.342 .878 .596 <b>.039</b>
16	HS X HK X HE X HTC	DV_16 Hightask_16 HighSpirit_16 HighEthics_16 HighKnowledge_16	.5457 .4027 .8653 .9221 .5462	.08471 .16974 .04693 .05323 .07580	.460	.325	<b>.034</b>	1.459 .284 -.989 -2.766	.164 .780 .338 <b>.014</b>

Among the 16 experimental observations, only five of them were found to be significant as summarized in Table 5.25 (below).

**Table 5.25 : Summary of Significant Results for 16 Experimental Observations**

<b>Experimental Observations</b>	<b>F- Value &lt; 0.05</b>
LS x HK x LE x LTC	0.00
LS x HK x HE x LTC	0.01
HS x HK x LE x LTC	0.03
HS x HK x HE x LTC	0.05
HS x HK x HE x HTC	0.01

In all experimental observations, the respondents were observed to have high knowledge, suggesting that they could attain high *shariah* auditing judgement performance. However, as found in the analysis, they could barely perform in the condition of low task complexity. Arguably, this low performance indicates that respondents might have found the questions of low task complexity to be difficult to answer despite such questions being ordinary, not highly challenging. Furthermore, all experimental observations involving respondents with high knowledge and high task complexity were observed to be not significant.

In addition, mixed findings were found for spirituality and ethics, which signify that spirituality and ethics did not significantly affect *shariah* auditing judgement performance. In contrast, the findings show that two conditions, namely “LS x HK x LE x LTC” and “HS x HK x HE x HTC”<sup>15</sup> were found to be significant. It was highly likely that respondents who had high spirituality, high ethics, and high knowledge were able to deal with tasks of high complexity more effectively, which significantly helped

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<sup>15</sup> In Tan and Kao (1990), study found accountability improve auditors’ performance only when respondents have both high knowledge and high problem-solving ability.

improve their *shariah* auditing judgement performance. Likewise, respondents who had high level of knowledge but with low spirituality and low ethics could also deal with tasks of low complexity effectively, which significantly helped enhance their *shariah* auditing judgement performance.

The above findings, however, did not provide any indications as to the conditions under which the respondents had performed judgement decision making process effectively and to what extent did they influence *shariah* auditing judgement performance. One possible explanation is that the respondents might have overlooked the importance of paying greater attention to the questions and tests regarding spirituality, knowledge (IBF and *shariah* and internal audit knowledge), and task complexity (Islamic or *shariah* audit and internal audit).

#### **5.3.3.4 Manipulations analysis**

The purpose of manipulation analysis is to investigate and understand whether the respondents perceived the experiment to be a reflection of what was intended and to rule out any alternative explanations. In other words, the function of manipulation checks is to ensure that the experimental instrument is able to tap into the specific causes and effects of constructs that was specified by the theory (Shadish et al., 2002)<sup>16</sup>. The manipulation check based on one sample *t*-test analysis was performed on Section 6 of the experimental instrument that revealed the following findings as shown in Table 5.26.

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<sup>16</sup> Please refer to section 4.4.2.4 in chapter 4 for further explanations on manipulations analysis and its objectives

**Table 5.26 : One Sample *t*-test Analysis of Post-Task Questionnaires  
(Manipulations Analysis)**

Components	Mean	Std. Deviation	t-value	df	p-value
Spirituality affects judgment	5.518	1.464	-11.662	132	0.000**
Spirituality and effort	5.417	1.523	-12.023	133	0.000**
Importance of spirituality	6.029	1.192	-9.494	135	0.000**
Importance of ethics	6.426	0.775	-8.621	135	0.000**
Effort exert on the experiment	5.541	1.111	-15.137	132	0.000**
Importance of IBF and <i>Shariah</i> Knowledge	6.303	0.924	-8.750	134	0.000**
Task material	5.298	1.297	-15.175	133	0.000**
Task material and their Job scope	5.261	1.314	-15.311	133	0.000**

All statements related to spirituality, knowledge, and ethics were analysed as manipulation check. The analysis revealed significant findings ( $p < .05$ ) and the mean scores of all statements reported were above 5.0. Thus, it can be concluded that most of the respondents agreed that spirituality and ethics were important elements in their lives. In addition, they also agreed that having IBF and *shariah* knowledge was essential to help them perform *shariah* auditing with better efficiency.



**Table 5.27: Pairwise Comparisons of Complexity and Effort Measures**

	Mean	Std. Deviation	T-Value	df	Sig. (2 - tailed)
<b><u>Pair 1 :</u></b> <b>Total High complexity +</b> <b>Total Low complexity</b>	3.344	16.051	2.329	124	0.021
<b><u>Pair 2 :</u></b> <b>Mental effort for Total High</b> <b>complexity +</b> <b>Mental effort for Total Low</b> <b>complexity</b>	0.986	21.094	0.565	145	0.573
<b><u>Pair 3 :</u></b> <b>High Islamic Complexity +</b> <b>Low Islamic Complexity</b>	0.476	1.063	5.025	125	0.000
<b><u>Pair 4 :</u></b> <b>Mental effort for High Islamic</b> <b>complexity +</b> <b>Mental effort for Low Islamic</b> <b>complexity</b>	0.285	1.130	2.837	125	0.005
<b><u>Pair 5 :</u></b> <b>High Internal audit Complexity</b> <b>+</b> <b>Low Internal audit Complexity</b>	0.008	0.777	0.115	124	0.909
<b><u>Pair 6 :</u></b> <b>Mental effort for High Internal</b> <b>complexity +</b> <b>Mental effort for Low Internal</b> <b>complexity</b>	0.023	0.650	0.411	125	0.682

The manipulation check for the level of complexity entailed the respondents to rate the construct based on 7-point Likert-type scale, ranging from “1” (*not at all complex*) to “7” (*extremely complex*). Meanwhile, for mental effort, they were also asked to rate this construct based on the similar scale, ranging from “1” (*very little effort*) to “7” (*great deal of effort*). The finding of the paired sample t-test shows (see table 5.27) there was a significant difference between high task complexity and low task complexity ( $Mean = 3.34$ ,  $t = 2.329$ ,  $p < 0.05$ ), which suggests a successful complexity test. In addition, specific analysis of paired sample t-test for each type of task complexity, Islamic audit, and internal audit task complexity showed that there were significant

difference between high Islamic task complexity and low Islamic task complexity ( $Mean = .48, t = 5.03, p < 0.05$ ) and between mental efforts ( $Mean = 0.29, t = 2.84, p < 0.05$ ).

Arguably, such differences may be attributed to respondents having found high Islamic task complexity more challenging, complex, and required more effort compared with low Islamic task complexity and internal audit task complexity. In addition, the finding of analysis of mean scores of task complexity indicates that the respondents considered the questions in the experiments as complex given that their score was only 4.36. Such score may indicate that they exercised moderate effort to answer the questions<sup>17</sup>. Finally, the manipulation check on task complexity reaffirmed the veracity of the previous finding of the construct.

#### **5.4 Overview of the chapter**

This chapter discusses the findings of the interviews and experiments. The findings of the interviews provide new insights into the understanding of the current practices of *shariah* auditing in a unique environment of Islamic banking, which requires a different philosophical concept. Particularly, the findings help emphasize the importance of *shariah* and Islamic banking and finance knowledge in performing *shariah* audit, which was addressed by the first research hypothesis of this study. In essence, this study sought to increase the understanding of *shariah* audit based on the Islamic banking context, which places greater emphasis on fulfilling societal needs.

The findings of the interviews suggest that IFIs are still struggling to establish a standard *shariah* auditing framework and program. Such predicament is attributed to

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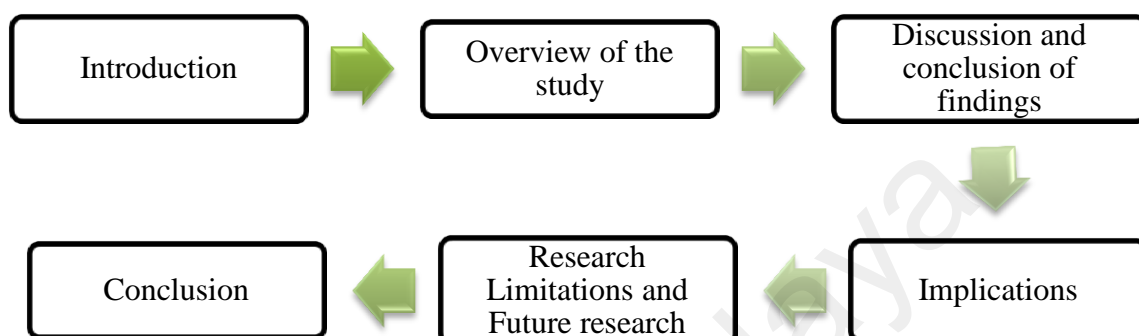
<sup>17</sup> Please refer section 5.3.1, table 5.4 for discussion of descriptive analysis for task complexity and mental efforts

IFIs' limited auditing scope and their varying practices and *shariah* auditing frameworks, which have persisted since the inception of Islamic banking in Malaysia. Thus, most of these financial entities have to rely on the conventional auditing framework to carry out *shariah* audit, which is limited in scope to help them meet the objectives of the *shariah* audit (Kasim et al., 2009). The findings also indicate that current *shariah* auditing practices need improved understanding among internal auditors, better implementation of *shariah* auditing process, enhanced expertise requirements, and better support from the management. The findings also highlight that the majority of internal auditors of IFIs only have experience or expertise in accounting and auditing, but they lack the knowledge of IBF and *shariah* principles. Thus, such findings provide support for the first research hypothesis that the three most important knowledge required to perform *shariah* audit are Islamic banking and finance knowledge, *shariah* knowledge, and internal audit knowledge.

Experimental findings based on a series of regression analyses were used to test the second and third research hypotheses. The findings indicate that spirituality had a significant impact on *shariah* auditing performance, which essentially support the second research hypothesis. The same findings also indicate that only one of the three moderator variables, namely task complexity, had a significant moderation effect on the relation between spirituality and *shariah* auditing performance. The other moderator variables, namely knowledge and ethics, did not have significant moderation effects on such relation between spirituality and *shariah* auditing performance. Thus, these particular findings provide evidence to partly support the third research hypothesis.

## CHAPTER 6: CONCLUSION, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

Discussions in this chapter are presented in the following diagram:



**Figure 6.1 : Structure of Chapter 6**

### **6.1 Introduction**

This chapter first provides a discussion of the results of the study by focusing on the specific research objectives, research questions, and research hypotheses as outlined in Chapter One. Then, this chapter elaborates on the practical implications of the findings and the contributions of the research to current practices. Next, the limitations of the study and recommendations for future research are also discussed, and finally the chapter provides the main conclusion of the research undertaken.

### **6.2 Overview of the Study**

There are various conceptualizations of spirituality, performances, and factors affecting audit judgment and decision making performance, where the latter are known in JDM research as “Determinants of Performances” (Abdolmohammadi,199; Bonner and Lewis, 1990 ; Bonner and Pennington,1991; Libby, 1995; Libby and Tan, 1997;

Tan and Kao, 1999; Ashmos and Duchon, 2000; Giacalone and Jurkiewicz, 2003; Kolodinsky, et al., 2008; Petchsawang and Duchon, 2009, 2012; Nasina and Pin Pin, 2011; M. Iskandar and M. Sanusi, 2011). Thus far, these concepts have been studied quite extensively in behavioral, spirituality, accounting and auditing studies. Little research has been devoted to studying these concepts in the Islamic banking and finance domain in Malaysia. Hence, it is interesting to study the effects of spirituality and the factors affecting internal auditors audit judgment performances based on the Malaysian perspective. This aim of the study was to develop further understanding of the effects of spirituality and factors affecting *shariah* auditing judgment performances in Malaysian Islamic financial institutions (IFIs) because these organizations operate differently than the conventional financial institutions. Essentially, the former have different objectives and use different approaches that emphasize on *shariah* or Islamic principles (Abdul Rahman, 2007, 2008a; Grais and Pellegrini, 2006; Haji Besar et al., 2009; Shafii et al., 2010 and Shahrizal, 2011).

For this reason, it is reasonable to expect that the personnel in general or internal auditors in particular of IFIs to exhibit different view on how they perceive spirituality, *shariah* auditing process and approach, and the IFIs' objectives. Naturally, and logically, the possible differences in these concepts perceived by individuals will have an impact on judgment performance, leading to different results and outcomes. In the present study, three main objectives were formulated by the researcher. First, the objective of the study is to discuss and identify current practices and perceptions of internal auditors on *shariah* auditing, particularly in terms of knowledge requirements. This objective is important, as previous research has shown that *shariah* auditing practices are still at the developmental stage entailing further improvement (Besar et al., 2009; Kasim et al., 2009; PWC report, 2011; Abdul Ghani, 2014; Yahya and Mahzan,

2012). Second objective of this study is to investigate the effects of spirituality on auditing judgment performance. Third objectives, this study aimed to investigate the impacts of moderating factors on internal auditors' *shariah* auditing judgment performance. In JDM research, these factors are known as "Determinants of performances", which in the present study had been examined to observe their moderating effects on *shariah* auditing judgment performance. To address the three research objectives, three main research questions were formulated as follows: first, what is the type of knowledge do internal auditors need in order to perform *shariah* audit in Malaysian IFIs in Malaysia?; Second, does spirituality affect internal auditors' *shariah* audit judgement performance?; and third, do task complexity, knowledge and professional ethics moderate the relationship between spirituality and internal auditors' *shariah* audit judgement performance?

The BNM through SGF 2010 has stipulated that *shariah* auditing is a required function to be conducted within IFIs operations by internal auditors. More specifically, the internal auditors are responsible to conduct *shariah* audit periodically, to provide an independent assessment and assurance, to add value and improve the degree of compliance in relation to the IFI's business operations, to ensure a sound and effective internal control system for *shariah* compliance, among others. Establishing *shariah* compliance has become more imperative after the issuance of Islamic Financial Services Act (IFSA, 2013). In this act, the legislations specifically delineate the enforcement of *shariah* non-compliance risks and imposed statutory duty upon the IFIs to ensure their objectives, aims, operations, affairs, and products are in compliance with the *shariah* rules.

Research of the effects of spirituality on work performance, job performance, organization performance as well as personal influence performance has also been

carried out by many scholars, revealing a number of insights (Emmons, 1999; Ashmos and Duchon, 2000; Karakas, 2010; Kolodinsky et al., 2008; Krishnakumar and Neck, 2002; Milliman et al., 2003; Mohamed et al., 2004; Pawar, 2009; Usman and Danish, 2010; Kamil et al. 2012 and etc). For example, spirituality has been found to positively influence ones' good life in terms of desirability, moral, feeling of connectedness to others, increased motivation, and enhanced job competencies. Apparently, this finding suggests that highly spiritual individuals would be more contented with their lives.

Since 1970, JDM research was particularly concerned with human behavioural studies, especially from the perspectives of external auditors, audit managers, management auditors, accountants, risk managers, and tax preparers. Then, the study in JDM was extended to research in accounting and auditing, which has become one of the most popular research areas. This is not surprising as findings from such research would enlighten the researchers to understand, evaluate, and improve judgement decision-making process among accountants and auditors. Armed with better understanding or knowledge, decisions derived from the accounting and auditing process would be more reliable. In JDM research, several theoretical frameworks have been proposed, and some of them have been adopted in many studies, such as policy capturing, probabilistic judgment, heuristics and biases, cognitive process, multi-person information processing, and determinants of performance. For the present study, the theoretical framework developed by Trotman (1996) known as "Determinants of Performance" was adopted by the researcher.

Currently, research focusing the impact of spirituality on judgment performance has been lacking. Given this dearth of research, the present study was carried out to examine the moderating effects of three variables, namely task complexity, knowledge, and ethics, on the relations between spirituality and judgment performance. The

investigation carried out in the present study involved a systematic measurement of variables through interviews and an experimental setting approach. Three (3) main research hypotheses were formulated to focus on the mentioned variables, notably spirituality and audit judgment performance. More specifically, the second hypothesis (i.e., H2) was formulated to examine any significant impact of spirituality on the audit judgment performance. The third hypothesis, which consists of three sub hypotheses, namely H3 (a), H3 (b), and H3 (c) were established to explore the moderating effects of the determinants of performance.

Another important issues addressed by this study relates to the importance of IBF knowledge, *shariah* knowledge, and accounting and auditing knowledge in the *shariah* auditing process. Having sufficient knowledge as mentioned above will help preserve and uphold *shariah* governance so as to abide to the requirement imposed by relevant regulators on IFIs in Malaysia. In this regard, a considerable number of studies have been conducted in JDM to examine the impacts of accounting and auditing knowledge on judgment performance (Bonner and Lewis, 1990; Libby and Luft, 1993; Bonner and Walker, 1994; Libby, 1995; Nelson et al., 1995; Tan and Kao, 1999; Tan and Libby, 1997; Tan et al., 2002; Abdolmohammadi et al., 2006 and etc.). However, studies focusing on the impacts of IBF knowledge and *shariah* knowledge on judgment performance have been inadequate. Thus, in view of this inadequacy, this study sought to investigate the impacts of these types of knowledge on *shariah* auditing performance, which was articulated by the first research hypothesis (i.e., H1)

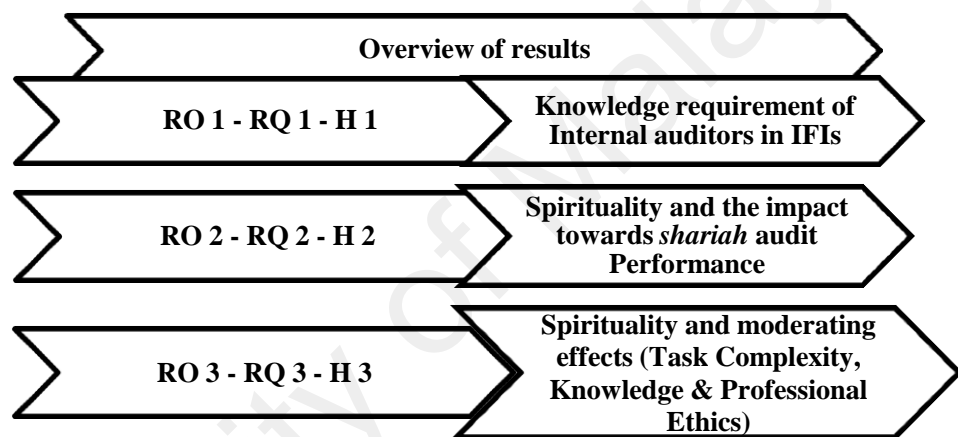
Data were collected using a research method based on two phases of data collection, involving interviews and experiments. In the first phase, interviews were conducted with chief internal auditors (CIA), *shariah* committee members, internal auditors, and academicians to gain a deeper understanding of the *shariah* auditing process. Whereas,



in the second phase, six experiments were performed to examine the impacts of spirituality and moderating variables on the *shariah* audit judgment performance. In all, 148 Malaysian IFIs' internal auditors, who have vast experience in *shariah* auditing, were recruited to participate in the experiments.

### 6.3 Discussion of Findings

This section provides an overview of the research findings and the discussion on the three research objectives, questions, and hypotheses in a specific order as follows:



**Figure 6.2 : Discussion of Results**

In this study, the testing of the research hypotheses were carried based on data collected from the interviews and experiments. More specifically, the first hypothesis was tested based on the analysis of the interview data; whereas, the remaining hypotheses were tested using the empirical data. The analysis of the data resulted in a mix of findings: some of the research hypotheses were supported or partially supported, and some were not. On one hand, research sub hypotheses (i.e., H3 (a), H3 (b), and H3 (c)) that dealt with the impacts of moderating effects of task complexity, knowledge, and ethics on the relation between spirituality and *shariah* auditing judgment

performance were partially supported. On the other hand, research hypothesis that pertained to the impacts of IBF, *shariah*, and internal auditing knowledge on *shariah* auditing judgment performance was fully supported, suggesting that they collectively play a critical role in the *shariah* auditing process.

In fact, all the respondents unanimously agreed that the three domains of knowledge need to be fully grasped by internal auditors to help them make better *shariah* auditing judgment. Equipped with such knowledge, internal auditors can confidently and reliably offer explanations, justifications, and inferences in judging whether an IFI's business activities are in compliance with the *shariah* principles or not. Therefore, in auditing IFIs' products and operations, the concepts and principles of IBF must be fully understood in the *shariah* context. In addition, the findings from the interviews reveal that spirituality to be an important factor to help achieve the objectives of IBF, entailing internal auditors to apply a different approach in auditing. This revelation is evident by some of the respondents' feedback indicating that high spirituality would result in quality work performance and judgment performance.

Further analyses were performed on the empirical data of the experiments to test the second and third hypotheses, which pertained to the effects of spirituality on *shariah* auditing judgment performance. The testing of the second hypothesis indicated that spirituality of internal auditors had a significant impact on *shariah* auditing judgment performance. For the third research hypothesis, the testing revealed that there were partial moderating effects of task complexity, knowledge and ethics on the relation between spirituality and *shariah* auditing performance. Detailed discussion of the analysis of the research hypotheses is dealt with in the following sub sections of this chapter.

### **6.3.1 Knowledge Requirements of *Shariah* Auditors in IFIs: The Testing of the First Research Hypothesis, H1**

The results of this study indicate that all the respondents agreed that the three most important knowledge required in performing *shariah* audit were Islamic banking and finance, *shariah* and internal audit knowledge. According to them, with adequate knowledge in these three categories, internal auditors would be able to assess Islamic banking operations and products more objectively so as to establish their compliance, or non-compliance, with *shariah* principles. In addition, the respondents also agreed that highly knowledgeable internal auditors would be able to expedite the internal audit process using a systematic, disciplined approach, the results of which would help them to evaluate and improve the effectiveness of risk management, control, and governance process, to evaluate audit risk, to provide consulting activities that add value to an organization's operations, and to provide independent assurance of the effectiveness and efficiency of IFIs, among others.

Therefore, in light of the above finding, internal auditors in IFIs in Malaysia should equip themselves with sufficient knowledge in the three domains so that they can become competent *shariah* internal auditors. By being competent, they are expected to have a repertoire of skills, knowledge, and understanding, thus enabling them to apply this set of skills in various contexts in their organization (Maclure and Norris, 1992 as quoted in Hassall et al., 1996). In other words, with such knowledge and skills, they would be able to scrutinize whether the internal controls put in place in IFIs are adequate to uphold *shariah* principles or otherwise as required by IBF and *shariah* and internal auditing.

The importance of these types of knowledge and qualifications has been highlighted in previous research. For example, Abdul Rahman (2008a) asserts that *shariah* auditors should be equipped with two basic types of knowledge: (a) specialized *shariah* knowledge as applied in IBF, and (b) accounting and auditing knowledge and skills. In addition, he strongly urges the need for practitioners involved in the internal *shariah* audit to have relevant qualifications to better serve the emerging requirements and expected demands due to the expansion of the Islamic banking and finance industry. Similarly, in line with Abdul Rahman's argument, Kasim et al. (2009) also stress the importance of relevant qualifications of *shariah* auditors in instilling faith or confidence into their clients with regard to the former's efforts to determine the *shariah* compliancy of IFIs' operations. Supporting this need, 80% to 86% of respondents from a survey conducted by PwC and IBBM on 'Study on talent and skills requirements for the banking sector in Malaysia (2014)<sup>18</sup>', placed significant importance on the understanding of interpretation and application of *Shariah* principles and concepts such as *Mudharabah*, *Musyarakah*, *Ijarah*, etc. Therefore, this requires Islamic banks to have specialized talent who can understand and interpret specific Islamic banking principles and concepts along with the emerging regulatory requirements. In view of this emphasis, more efforts are needed to help internal auditors in Malaysian IFIs to upgrade or to improve their knowledge and skills as Kasim et al.'s (2009) study found that only 5.9 % of practitioners had adequate IBF, *Shariah* and accounting and auditing knowledge.

Although, all the respondents agreed on the importance of these three types of knowledge, efforts or initiatives by IFIs to improve such knowledge among internal

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<sup>18</sup> The report can be retrieved from <http://read.pwc.com/i/328479-study-on-talent-and-skills-requirements-for-the-banking-sector-in-malaysia>

auditors are still lacking. Further compounding the predicament was that all their organizations did not have any specific training programs to help them improve their knowledge. Apparently, the current key performance indicators (KPI) or policies of the IFIs do not compel their personnel to upgrade their skills or knowledge. More alarmingly, all the respondents reported that there was no specific rules entailing *shariah* audit must be performed by internal auditors with such knowledge. Hence, it is common for IFIs to appoint one or two experienced internal auditors who possess such knowledge as referrals for their colleagues involved in the *shariah* audit process. Furthermore, the current practices also require internal auditors to perform *shariah* auditing for IBF products and operations. The current practices seem inadequate as only a few IFIs have thus far formed dedicated *shariah* audit teams to serve in their internal audit divisions.

Based on the interviews and previous studies (Kasim et al., 2009; Yahya and Mahzan, 2012, 2014; Abdul Ghani, 2014), Malaysian IFIs have been conducting *shariah* auditing at their own discretion using either their own *shariah* auditing framework or an adapted or modified conventional auditing framework. Arguably, this lack of a proper dedicated working framework stems from the existing regulations that do not mandate such use of a proper working structure or framework. For instance, according to Section IV - 7.8 of SGF (2010), *shariah* audit shall be performed by internal auditors who have adequate *shariah* - related knowledge and training. However, the guideline does not explicitly deliberate the term “adequate” in detail with regard to actual *shariah* qualifications needed to conduct *shariah* auditing process reliably. Furthermore, there is no clear indication in this regulation on how to measure the competency of internal auditors.

Thus, investigating the issues of “adequate knowledge” of the current workforce (of which the number of competent internal auditors with such knowledge is low) is greatly

emphasized. This emphasis is made clear by one of the respondents, who is a regulator from the BNM, who stated that internal auditors with sufficient knowledge were needed to spur the growth and sustainability of IFIs in providing better services to the financial industry. In fact, the same respondent opined that for IFIs to grow, only competent internal auditors with specific qualifications (e.g., Master's degree in Islamic Banking and Finance or Master's degree in *Shariah* Principles) be allowed to perform *shariah* auditing. For such auditing to take place, regulating bodies, such as the BNM, must make this requirement clearly spelt out in their regulations.

Enforcing such mandatory requirement that necessitates internal auditors to hold such qualifications may force IFIs to invest huge investment in training, which obviously may stretch their financial capacity to its limit. Therefore, a more practical, viable approach or option is entailed to help produce highly competent and knowledgeable internal auditors. This approach can take the form of formal education at the tertiary level where institutions of higher learning (e.g., universities and colleges) can strengthen existing academic programs by offering programs with certain specialized courses, such as Bachelor in Accounting and Auditing with specialization in IBF and *shariah* disciplines. Hence, students from such academic background can be recruited to help the Islamic banking and finance industry without further training.

In the present study, a series of experiments were carried out to investigate the current level of knowledge of a group of Malaysian IFIs' internal auditors based on the three domains deemed important in *shariah* auditing, namely IBF, *shariah*, and internal auditing knowledge. The experimental approach used in the study was "examination-based approach". In these experiments, the research instrument used contains two sections. The first section consists of items to measure the internal auditors' level knowledge and competency based on task complexity (i.e., Islamic and internal audit

task complexity). The second section comprises items related to the three types of knowledge (i.e., IBF, *shariah*, and internal audit knowledge).<sup>19</sup>

The findings of the experiments indicate that the scores for both sections are quite low. The internal auditors only scored 10.34 out of 23 for high Islamic task, 3.50 out of 10 for low Islamic task, 6.48 out of 19 for high internal audit task, and 3.16 out of 10 for low internal audit task. Similarly, the respondents' IBF knowledge and *shariah* and internal audit knowledge are deemed low as they only managed to attain 5.85 out of 10 and 3.21 out of 10 for the two measures respectively. In addition, the mean score for the total performance is only 23.49, which is relatively low compared to the maximum possible performance score of 62. Clearly, these relatively low scores paint a grim picture of the current level of knowledge of internal auditors in Malaysian IFIs. Moreover, only 9.7 % of total respondents indicated that they had IBF and *shariah* qualifications.

The above findings are consistent with other research findings, which found the same lack of knowledge among internal auditors (Kasim et al., 2009; Yahya and Mahzan, 2012; Abdul Ghani, 2014). However, the above findings run contrary to the findings reported in PwC report's entitled *Shariah* audit: Industries' Insights, in which about 80% of the financial institution respondents claimed that their internal audit staff were adequately trained in Islamic banking and financing products, and about 60 % of the respondents reported that their internal auditors were adequately trained in *shariah* auditing. Furthermore, 70% of the respondents expressed that they had a sufficient number of competent staff to perform *shariah* audit effectively. Nonetheless, a closer examination of the descriptive results from this study revealed that the above claims

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<sup>19</sup> Please see section 4.4.2.5 for detailed discussion of development experimental instrument.

seem over inflated as 78.8 % of the respondents had working experiences of less than five years, and about 70.5 % of them did not hold any IBF and *shariah* qualifications. Moreover, only 9.7 % of total respondents from the experiments indicate that they have IBF and *shariah* qualifications.

In view of the above findings, more efforts need to be carried out by IFIs, regulators, and learning institutions to enhance internal auditors' level of knowledge and competency. Such efforts may involve the establishment of training centers, workshops, or programs that can cater to the needs of IFIs to produce more competent and knowledgeable internal *shariah* auditors. Likewise, relevant regulators may also develop appropriate *shariah* auditing frameworks to guide IFIs to perform auditing exercises, including the formulation of competency requirements, more effectively. Such frameworks may also serve as a mechanism to harmonize the *shariah* auditing practices among IFIs in Malaysia. Clearly, the findings of this study suggest that having IBF, *shariah*, and internal audit knowledge is not only desirable but equally important to help improve the current *shariah* auditing process. With such knowledge, internal auditors will be able to make accurate, well-informed judgment.

### **6.3.2 The Effects of Spirituality on *Shariah* Auditing Judgment Performance: The Testing of the Second Research Hypothesis, H2**

The second research question is concerned with the effect of spirituality on audit judgment performance among internal auditors in IFIs in Malaysia. Based on the regression analysis, the result showed that spirituality had a significant effect on *shariah* audit judgment performance,  $t = 2.91$ ,  $P = .004$ ,  $p < .01$ . This finding was further supported by the analysis of items correlation based on Pearson correlation procedure, indicating that spirituality and audit judgment performance were significantly and



positively correlated,  $r = .24$ ,  $p < .01$ . Thus, the above findings provide evidence to support the second research hypothesis that spirituality has a significant effect on judgment performance.

The above results are consistent with previous findings that showed significant effects of spirituality on organization performance, work performance, individual performance, among others. (Ashmos and Duchon, 2000; Neck and Milliman; 1994; Giacalone and Jurkiewicz, 2003; Kolodinsky et al., 2008; Karakas 2009; Petschawang and Duchon, 2009; and Nasina and Pin Pin, 2011). Likewise, the present results run parallel with the findings of previous studies that found significant and positive relations among spirituality, individual performance, personality, job performance, and board performance (Hawa, 2004; Rulindo and Mardhatillah, 2008; Kamil et al. 2009,2012; Usman and Danish, 2010; Tsafe and Abdul Rahman, 2014). The above findings have significant implications in the Islamic practices that emphasize spirituality, which is an important element bestowed by Allah (SWT) on humans, to harmonize the relations between the Creator and the created (Rulindo and Mardhatillah, 2008).

Therefore, the present research findings reinforce the emphasis on spirituality as the driving force that can help transform ordinary humans into responsible, committed individuals – the traits that are cherished in both Western and Islamic societies – the effects of which will bring a host of benefits to their organization and society. However, there is a slight difference between the Islamic perspective and western perspective of spirituality, where the former conceptualizes spirituality as a religious dimension that must be expressed, nurtured or maintained by observing *shariah* principles. In essence, to be spiritual means such individuals will always adhere to Allah's (SWT) commands so that they will discharge their duties with upmost care. Thus, to uphold Islamic

principles and preserve *Maqasid as-shariah*, which are the objectives of IFIs, internal auditors are expected to embrace high spiritual values to guide them make better *shariah* audit judgement. In addition, they are also expected to be more prudent in performing judgmental process in the IFIs, the industry that prizes Islamic compliance and principles.

The results of the present study are also consistent with the findings of JDM research focusing on determinants of performance, namely Bonner and Lewis's (1990), Abdolmohammadi's (1991), Bonner and Pennington's (1991), Libby's (1995), Libby and Tan's (1997), Solomon et al.'s (1999), Tan and Kao's (1999) and M. Iskandar and M. Sanusi's (2011) studies. Nonetheless, these researchers did not focus on spirituality as a motivation or self-regulatory factor in their studies. Thus, this present study was conducted to address such research gap by examining spirituality as a motivation or self-regulatory factor that might inspire internal auditors in their undertaking that would result in better judgment performance. In fact, Bandura (1997) claims that spirituality can help individuals to be steadfast and persistent in dealing with difficulties or setbacks.

The findings of the present study can also be explained from the premise of the social cognitive theory (SCT), which was introduced by Bandura (1986). He defined SCT as a psychological model of behavior that emphasizes that learning occurs in a social context and that much of what is being learned is gained through observations. Thus, the specific objectives of IFIs and Muslim stakeholders' expectations, which have to be fulfilled, will compel highly spiritual internal auditors to perform audit tasks with a high degree of diligence and scrupulousness, thus improving their *shariah* audit judgement performance.

Results from the experiments also found that the IFIs' internal auditors perceived spirituality as an important factor that had affected their judgement process, efforts, and their lives. All these particular findings were found to be significant, with each mean score exceeding the value of 5.0, as summarized in Table 6.1. Clearly, these findings suggest that highly spiritual internal auditors will be able to achieve better audit judgement performance. In addition, the credibility of these findings is enhanced by the interview results, which adds finer details to the experimental findings. In particular, most respondents found spirituality to be an important factor that would help enhance the effectiveness and efficiency of Islamic banking operations in accordance with the *shariah* principles.

**Table 6.1: Spirituality Post Questionnaires**

Measures	Mean	Std. Deviation	t-value	df	p-value
<b>Spirituality affects judgment</b>	5.518	1.464	-11.662	132	0.000**
<b>Spirituality and effort</b>	5.417	1.523	-12.023	133	0.000**
<b>Importance of spirituality</b>	6.029	1.192	-9.494	135	0.000**

To sum up, the findings reinforce the importance of spirituality as an important factor that can affect *shariah* audit judgement performance of internal auditors in IFIs. Thus, the workforce of IFIs should consist of individuals, especially those acting as internal auditors, with a deep sense of spirituality to ensure activities and processes carried out are *shariah* - compliant. Furthermore, IFIs should conduct training programs to continually improve the level of spirituality of their personnel, including the top management, so that business undertakings can be further enhanced. In this study, experiments were limited to examining the effect of spirituality on the *shariah* audit judgement performance of internal auditors. Similar studies can be replicated, but they should focus on investigating such effects on *shariah* audit judgement performance of

external auditors, *shariah* committee members, *shariah* officers, risk managers, and others.

### **6.3.3 Spirituality and Moderating Effects of Task complexity, Knowledge and Professional Ethics on *Shariah* Audit Judgment Performance: The Testing of the Third Research Hypotheses H3 (a), H3 (b), and H(c)**

The third research question focuses on the moderating effects of task complexity, knowledge, and professional ethics on the relation between spirituality and *shariah* audit judgment performance. Three sub hypotheses, namely H3 (a), H3 (b), and H3(c) that had been formulated were tested accordingly, revealing mixed results. The first sub hypothesis states that there will be a significant moderating effect of task complexity (categorized as high and low) on the relation between spirituality and *shariah* auditing performance. In this study, the effects of spirituality, knowledge, and ethics on *shariah* audit judgement performance were analyzed separately to detect any specific relations of these variables with *shariah* audit judgement performance at the different levels of complexity.

The analysis showed that for tasks under high task complexity, spirituality did not improve *shariah* auditing judgement performance of internal auditors who lacked IBF, *shariah* and internal auditing knowledge, or ethics. In contrast, for tasks under low task complexity, spirituality did improve *shariah* audit judgement performance of internal auditors who had high IBF and *shariah* knowledge and high ethics. Clearly, this evidence shows that there was a significant moderating effect of task complexity on the relation between spirituality and *shariah* auditing performance. These particular findings suggest that spirituality may not necessarily improve performance if internal

auditors lack knowledge at the high task complexity level. In essence, as the level of task complexity increases, an internal auditor's judgement performance decreases.

One possible explanation for this inverse relation is that in performing tasks of high complexity, internal auditors will be overwhelmed with many perplexing, unfamiliar issues under an extremely stressful situation, thus impairing their audit judgement performance. This finding concurs with other findings that have highlighted similar explanations. For example, Ashton (1990) investigated the performance of auditors on a bond-rating task (operationalized as the presence of a decision aid) based on their perceived ratings. He found that auditors' performances in such task with increasing level of task complexity were severely affected when they were required to provide justification for their ratings. He noted that one of the reasons that had led to such effect was attributed to the level of experience of the auditors, which might be low, in bond rating assessment.

In the present study, the level of experience of internal auditors' did not have an impact on the *shariah* auditing process. Arguably, their opinions or comments during the experiments did not take experience into account, but their views were solely based on their current level of IBF, *shariah* and internal audit knowledge and understanding. Hence, without the appropriate level of knowledge to deal with tasks of high complexity, *shariah* auditing judgement performance of the internal auditors was badly affected. This finding is quite similar with Tan and Kao's (1990) research finding that found respondents (who were external auditors) with poor knowledge did not perform well in task assessment of medium complexity that entailed high accountability.

The study also further examined the moderating effects of task complexity on the relationship between spirituality – *shariah* audit judgment performance by separating

two types of task namely : Islamic / *shariah* audit high and low task complexity and internal audit high and low task complexity. Results reported similar findings with the previous analysis (total combination of Islamic / *shariah* audit and internal audit high and low task complexity). The significant moderating effect can only be found when internal auditors performed the Islamic low task complexity ( $P < 0.05$ ). In other words, the effects specify that when internal auditors' have high spirituality, high Islamic knowledge and high professional ethics within Islamic audit low task complexity condition, the respondents had better *shariah* audit judgement performance. But then, similar significant relationship and interaction effects do not exist for internal audit low task complexity. This may indicate that the respondents found the task assigned is still difficult to handle despite that this task has been claimed by experts in IBF as normal and simple task in *shariah* audit procedures.

One of the possible explanations for the above finding is that the respondents level of knowledge was extremely low such that even simple tasks were deemed difficult. In the present study, all the test questions are based on basic and moderate levels of task difficulty pertaining to IBF, *shariah* principles and internal audit knowledge. Hence, the research H3(a) was partially supported as the level of task complexity was found to have a significant positive effect on the relation between spirituality and *shariah* audit judgement performance only for low task complexity condition but not for high task complexity condition.

Of the three moderators (task complexity, knowledge and ethics), knowledge was deemed to be the most important because many of the questions tested in the experimental instruments required the internal auditors to at least possess basic to moderate level of knowledge in IBF, *shariah* and internal audit knowledge. Furthermore, the research hypothesis H3 (b) is also related the first research objective

and question. Therefore, research on knowledge is important to be explored to help understand the potential differences in knowledge and memory between experts and novices (or between experienced and inexperienced auditors). Finding from such research can help practitioners to develop appropriate training programs or treatments to assist novice auditors to perform auditing tasks effectively at the same level of the experts (Trotman, 1995).

Nevertheless, in this study, the moderating effect of knowledge on the relation between spirituality and *shariah* audit judgment performance was not found to be significant. This finding is unexpected as it is reasonable to presume that there will be such a significant effect given the importance of IBF, *shariah* knowledge and internal audit knowledge in the auditing process. The imperative for such knowledge is made more demanding in a specialized area of audit – the *shariah* audit – necessitating internal auditors to have sufficient knowledge in the three domains. Thus, this particular finding seems contrary to the widely held assumptions reported in the literature

Prior research focusing on industrial specialization, such as Solomon et al.'s (1999) and Wright and Wright's (1997) studies, found that specialized knowledge would have an impact on industrial specialization. Another study by Bedard and Biggs (1991) found that auditors with vast manufacturing experience or specific industry-related experience, involving physical inventory (e.g., wholesale, retailing, and manufacturing), were more competent in identifying inventory errors. Arguably, the difference in the findings between the present study and previous studies lies with the different focuses of research. The former involved examining *shariah* internal auditing practices in IFIs; whereas, the latter dealt with the practices of external auditors in external audit firms. Additionally, past research has been carried out based on different perspectives to investigate the moderating effects of different variables. For example Tan and Kao

(1990) investigated the moderating effects of task complexity, knowledge, and problem-solving ability on the relation between accountability and audit judgment performance.

In the present study, two regression analyses were performed to detect if there was a significant moderating effect of knowledge. The first analysis was carried out by treating separately the IBF, *shariah* knowledge and internal audit knowledge. The second analysis was performed on the same three types of knowledge as a single knowledge construct. The findings indicate that the moderating effect of knowledge was not significant. The lack of evidence to support a significant moderating effect of knowledge may partly be attributed to the respondents' low level of knowledge, prohibiting them to answer the experiment questions with precision. This contention is not without reason as the descriptive analysis of the experimental data showed that the respondents' mean scores of the three types of are relatively low. For example, their scores are 5.86 out of 10 and 3.21 out of 7 for IBF and *shariah* knowledge and internal audit knowledge tests respectively, which clearly reflect their poor *shariah* audit judgment performance. In view of these low test scores, the respondents might be less competent in answering questions that require sound knowledge in a diverse range of disciplines.

Alternatively, the above findings could be attributed to the samples used in the present study. The respondents were drawn from diverse backgrounds, with each of them having different working experiences and academic qualifications. Effectively, this diversity of backgrounds might have introduced huge variability to the knowledge construct, causing limited observations to render any significant results. Hence, more research is needed to ascertain the moderating effects of IBF, *shariah* knowledge and internal audit knowledge on relevant variables, such as level of experience and academic achievement.



Findings from previous research studies indicate that industrial experience, and not general experience, can help improve audit judgments (Taylor, 2000). Nonetheless, such experience can only become useful if the internal auditors know how to use it in a proper context, and this appropriate utilization relies on internal auditors' knowledge (Libby and Luft, 1993). Together, they can help internal auditors to discharge the duties effectively that will lead to better performance. As emphasized by Libby and Luft (1993), experience is another important factor that can have an impact on internal auditors' judgment performance. Future research focusing on this experiential factor should be carried out to learn more about its effects on internal auditors' knowledge in IBF and *shariah* knowledge.

The following discussion deals with the research hypotheses H3(c), which states that the moderating effect of ethics (based on two levels: high and low) on the relation between spirituality and *shariah* auditing judgement performance is significant. The analysis performed to test this hypothesis failed to provide evidence to support such hypothesis. Moreover, the analysis also showed that there was no main effect of ethics on *shariah* auditing judgement performance. The above findings are not consistent with previous studies, such as Giacalone and Jurkiewicz's (2003) and McGhee and Grant's (2008) studies, which found a significant relation between spirituality and ethics. These researchers contend that higher spirituality will lead to greater ethical concerns.

Despite the conflicting results, the present findings are consistent with Johari et al.'s (2012) and Douglas et al.'s (2001) findings that suggest individuals' ethical orientations do not significantly affect their judgment performance. However, these researchers' non-significant findings have to be considered cautiously as the method used to measure such constructs was based on a questionnaire adopted from Ziegenfuss and Singhapakdi's (1994) instrument, which might be ineffective in their research context.

Thus, future research should use an updated or new instrument to measure the ethics of internal auditors.

In addition, a series of regression analyses was conducted on each combination of factors to contrast the variances among respondents based on 16 experimental observations. This additional analysis was mainly performed to test the third research hypothesis, H3. Initially, an ANOVA analysis wanted to be carried out to contrast the variances for each of the experimental observations. However, due to the insignificant moderating effects on *shariah* auditing judgement performance, further ANOVA analyses were not pursued as it would be fruitless to continue doing so.

Based on the 16 experimental observations, only five were observed to have significant findings. In all these five findings, there was an interaction effect of high level knowledge and low level task complexity that impacted *shariah* auditing judgement performance. This finding shows that respondents whose knowledge was high were only able to answer questions of low-level task complexity. Clearly, their inability to answer more complex questions in the test is a reflection of their poor IBF, *shariah* knowledge, and internal audit knowledge. Moreover, the finding of this additional analysis is supported by the finding obtained from the regression analysis conducted to test the research hypothesis H3 (b). In addition, the finding of the additional analysis also indicates that respondents with high spirituality were accompanied by high ethics and high knowledge that significantly affected their *shariah* audit judgment performance, regardless of whether the tasks performed were of high task complexity or low task complexity. In essence, this particular finding reinforces the contention that spirituality is a critical factor that guides individuals' actions and deeds based on universally accepted or religious norms.

In summary, the three moderators, namely task complexity, knowledge, and ethics are important factors as attested by their significant interaction (moderating) effects based on the certain levels of these constructs. Furthermore, such moderating effects on the relation between spirituality and judgment performance will only be realized under certain conditions, depending on the characteristics and complexities of the audit tasks.

#### 6.4 Implications of the Current Study

Discussion in this section is presented in the following diagram;



**Figure 6.3 : Implications of the Current Study**

The discussion in this section comprises two sub sections. The first sub section discusses the implications of the research findings to the body of knowledge in *shariah* audit research. The second sub section discusses the contributions of such findings to the current practices. These sub sections are presented as follows:

##### 6.4.1 Implications of Findings to Body of Knowledge in *Shariah* Audit Research

The research findings can help further enrich the body of knowledge in several ways. First, as highlighted in Section 1.4 of Chapter 1, the main aim of this study was to extend previous studies by examining spirituality and factors that influence audit judgment performance in the Islamic context. In particular, the study attempted to address existing gaps in the literature due the lack of empirical evidence in spirituality research and JDM research as well as in Islamic banking and finance research. The study contributes to the understanding of how internal auditors of Malaysian IFIs

perceive the dynamics involved in *shariah* auditing practices. Such understanding helps both researchers and practitioners to articulate the objectives of *shariah* auditing and to identify and investigate factors that may influence internal auditors' judgment performance. The research findings of this study have several implications that are critical to the improvement of *shariah* auditing process.

First, in the Malaysian context, spirituality significantly affects *shariah* auditing judgment performance of internal auditors. Spirituality can be considered as one of the important intrinsic elements to guide individuals' course of actions along some universally prescribed norms or standards, the effect of which helps them make better judgment in every task that they perform.

Previous research in spirituality and psychology has thus far addressed the effects of spirituality on job satisfaction, work performances, organizational performance, and individual performances, among others. In this regard, the present study was carried out to examine the effect of spirituality on internal auditors' *shariah* auditing judgment performance that would help achieve the objectives or "*maqasid as-shariah*" of *shariah* auditing. Lessons learned from this study can be applied in other important contexts by conducting future research in JDM by examining the effects of spirituality on accounting and auditing judgment process involving accountants, audit managers, or finance managers. Through such new research in JDM, the incorporation of intrinsic elements, such as spirituality, with other psychological elements can provide better insights into the understanding of the complex nature of behaviors of practitioners, such as accountant and auditors.

Second, the findings of the study provide support for the hypothesis that internal auditors of IFIs should have adequate knowledge in at least three domains namely, IBF

knowledge, *shariah* knowledge, and internal auditing knowledge. Although, the internal auditors involved in this study have different working experiences and academic qualifications, they unanimously agreed on the importance of these three domains of knowledge. In this study, the moderating effects of task complexity and knowledge were found to be not significant, which might have been attributed to the internal auditors' poor knowledge in these three domains. In fact, their mean scores of tests were quite low regardless of their reported IBF and *shariah* knowledge and internal auditing knowledge. The findings provide empirical evidence to assert that the current level of competency among Malaysian internal auditors is precariously low, which if not resolved can lead to poor *shariah* audit judgment performance. These empirical findings also provide more convincing evidence compared to previous findings that were based on the analysis of data elicited from participants' perceptions through survey questionnaires and interviews.

In this respect, the current study addressed the limitations of previous studies by explicitly measuring the competency of internal auditors through task complexity and knowledge questions (case study) as well as observing possible moderating effects. To sum up, more efforts are needed by the Malaysian IFIs and regulators to raise the current level of competency, especially in the three knowledge domains, among internal auditors such that the *shariah* audit process can be further improved.

Third, the principles espoused by the social cognitive theory (SCT) were used to conceptualize spirituality as an important factor and to examine its relations with three moderating variables used in this study, namely task complexity, knowledge, and ethics. The basic precepts of this theory are that people are neither driven by inner forces nor automatically shaped and controlled by the environment. In other words, there are other factors that can spur people's desire to achieve their desired goals. Thus, this theory

provided the theoretical underpinnings to formulate the appropriate framework to guide this research, by identifying relevant factors, such as spirituality, task complexity, knowledge, and ethics, which can wield a tremendous impact on the *shariah* audit judgment performance.

Research focusing on the above factors has been lacking, and thus the present research findings can further enrich the body of knowledge in audit research by providing greater insights regarding the effects of “determinants of performances” (i.e., task complexity, knowledge, and ethics) on the relation between an intrinsic element (i.e., spirituality) and *shariah* audit judgment performance. From the JDM literature, spirituality is considered as a motivation or intrinsic factor that has been found to be critical to help individuals to discharge their duties effectively, thus improving the productivity of the organization.

The emphasis on spirituality and ethics as influential factors were confirmed based on the analysis performed on the respondents’ opinions or comments from the interview sessions. They also affirmed that spirituality and the moderating variables were important elements in the *shariah* auditing practices due to different objectives and knowledge requirements imposed by the *shariah* auditing process, which are different from the conventional auditing process. Thus, based on the SCT premise, the above intrinsic factors (e.g., spirituality and ethics) will be able to motivate internal auditors to perform auditing tasks more conscientiously, which will consequently lead to better *shariah* audit judgment.

#### **6.4.2 Implications to the Practices of IFIs**

Currently, the emphasis on studying spirituality in the context of Malaysian IFIs has not been addressed appropriately as evident by the lack of such research in Islamic

banking and finance, JDM and internal audit. The present study is both descriptive and exploratory in nature in order to establish relations and patterns among the relevant factors, the findings of which can help other researchers to undertake such research in the future. In particular, such findings can help stakeholders of IFIs to recognize the important and significant relation between spirituality and their workers' judgment performance. Additionally, the present findings can also help IFIs' administrators to set up conducive working environments to nurture spiritual and ethical values among their personnel.

Interestingly, the respondents registered their strong opinions regarding the proper care and support that they expected to be provided by their employers in helping the former to fulfill their spiritual needs. Therefore, helping the Islamic banking and finance industry to provide *shariah* - compliant services and products will entail a workforce that values the importance of spirituality. To help embrace spiritual values, relevant bodies, such as the IFIs, regulators, standards setters, IHLs, and training affiliations, can carry out training programs to help IFIs' personnel to develop a deep sense of spirituality and to practice such spiritual values in their workplace. And as a result, business activities performed will be guided by a deep conviction to uphold *shariah* compliance, which leads to improved working performance

Another significant finding of the study is that respondents and respondents perceived IBF knowledge, *shariah* knowledge, accounting, and auditing skills to be important requirements to conduct *shariah* auditing successfully. Thus, it is important for regulators to strengthen the regulations. A possible recommendation could be made to relevant regulators to set a minimum academic or certification requirement among internal auditors and external auditors before they are allowed to conduct *shariah* audit. In addition, results in this study also indicate that the scores obtained by internal

auditors in the tests of IBF and *shariah* knowledge in the experiment are below average. The finding should caution relevant IFIs or training affiliations to the pressing need to carry out training programs and workshops to enhance the level of IBF and *shariah* knowledge among internal auditors in IFIs as the success of any kind of endeavors depends on the knowledge or competency of the workers. Therefore, to achieve success in *shariah* audit will require knowledgeable auditors who can plan and review such an exercise more systematically (Shafii et al., 2010). The findings also reaffirm the call to establish a dedicated *shariah* auditing function in IFIs to enhance the effectiveness and efficiency of the *shariah* auditing process in providing assurance of *shariah* compliance of their clients' operations. Lastly, these findings may assist IFIs, regulators, and standard setters (i.e., BNM, IIAM, and MIA) to improve or to revamp existing guidelines and *shariah* auditing framework.

## **6.5 Research Limitations and Future Research**

The present study was carried out based on the mixed methodology based on the quantitative and qualitative approaches. Invariably, such research methodology presents several challenges to many researchers due to the inevitable limitations given the varying contexts in which studies are being conducted. Obviously, a particular research context has its fair share of limitations. The following are the limitations of the present research that the researcher encountered.

**The sample** - The research sample was only limited to internal auditors from IFIs without differentiating their level of expertise and experience in each of the IFIs. Spirituality and factors affecting judgment performance, namely task complexity, knowledge, and ethics, might differ considerably in each of these groups. Furthermore, the sample also did not specifically make any distinctions between a group of internal



auditors who were specifically assigned to conduct *shariah* auditing process and a group of internal auditors who were tasked to only assist the *shariah* auditing process.

Findings from the interviews indicated that even though most of the IFIs do not have any dedicated *shariah* audit unit to conduct *shariah* auditing, but most of their internal audit departments did appoint one or two internal auditors as referrals to give counsel if problems arise. This group of internal auditors normally possess Islamic finance certifications or relevant academic qualifications and adequate working experience in *shariah* auditing. Perhaps, by having a control group in future research, it would help examine the impacts of different levels of knowledge, expertise or experience on audit judgment performance.

In the present study, only a particular group of personnel, the internal auditors, was recruited. Nonetheless, external auditors and members of *shariah* committee are also expected to assist or conduct the *shariah* auditing process. Thus, future research should also include such groups of IFIs' employees to examine their audit judgment performance in relation to internal auditors' audit judgment performance. Comparing or contrasting the performances of internal auditors, external auditors, and members of *shariah* committee will help researchers or scholars learn the potential differential effects of spirituality and moderating variables based on dissimilar worker profiles.

**Small sample size** - The experiment used four independent variables, with each consisting of two levels, thus rendering a multi-factorial model with "2 x 2 x 2 x 2" interactions. This model would result in  $2^4$  observations, requiring at least 16 experimental observations among the respondents. Ideally, 160 respondents were needed to provide sufficient observations based on 10 respondents for each observation. To achieve the target number, the researcher contacted 16 CIAs to seek their support in

nominating at least 10 internal auditors (thus totaling 160 subjects) from each organization to participate in the experiments. However, only 148 internal auditors were recruited as others failed to commit in the experiments due to undisclosed reasons. Though a bit short, the available number of respondents was adequate for many statistical analyses, such as regression analysis.

Preferably, a larger sample size would be desirable to provide more data for the statistical analyses to produce findings that are more representative of the larger population. Therefore, future studies may involve the participation of other relevant agencies to collaborate with researchers in helping to recruit enough research subjects as desired. These agencies may include regulating bodies, Islamic banking and finance organizations, and learning institutions, such as the BNM, ISRA, Association of Islamic Banking Institutions Malaysia (AIBIM), Islamic Banking and Finance Institute Malaysia (IBFIM), Malaysia International Islamic Financial Center (MIFC), and Institute of Bankers Malaysia (IBBM).

**Measurements** - The measurements of some of the variables, such as spirituality, knowledge, task complexity and ethics, might not have been perfectly precise due to the qualitative nature of some of these variables. Thus, quantifying such variables in discrete form might have introduced errors, which might not be detected by the research instruments used in the study. For example, the scoring procedures in determining the level of spirituality, knowledge, task complexity and ethics of the internal auditors could be less refined to measure such variables accurately. Perhaps, other alternative methods, such as a series of case studies, can be explored to capture sensitive information more effectively. In addition, future research based on grounded case study approach can be conducted at the IFIs. Such an approach can help researchers to collect both qualitative

and quantitative from diverse sources, such as surveys, interviews, experiments and case studies.

**Research Instruments** - The categorization of the spirituality and moderating variables (task complexity, knowledge, and ethics) into two levels, namely “high” and “low” – which is effectively a “two-point” scale – might have been too simplistic to help the internal auditors to express accurately their opinions on their current levels of such variables. Using such a scale would give rise to problems if research subjects are more particular in expressing their opinions in either direction. They should be given more options to state their judgment of, as examples, their knowledge or ethics more objectively. Alternatively, researchers should provide detailed explanation of the categories of such variables to research subjects such that the latter will be to state their opinions more confidently.

Thus, future research can use a range of instruments, such as multiple choice questions (MCQ) test items or instruments based “seven-point” Likert scale that will be more sensitive to capture complex information or data. In the present study, the use of the research instrument for the experiments was also found to be quite exhausting by some of the respondents, which might cause internal validity threats, such as maturation. Hence, in the future, researchers should design a more concise, specific case study to examine important variables as outlined by the “determinants of performance” framework.

**Qualitative Evidence** - In the present study, only 15 interviews were conducted on a group of internal auditors to provide the qualitative data, which were later analyzed to test one of the research hypotheses. Though the amount of such data may be sufficient for the qualitative analyses used, having additional data may add more credibility to the

discussion of the effects of moderating variables. Future research may involve interviews with other groups of IFIs' workforce, such as external auditors and *shariah* review officers, together with internal auditors, to establish a more solid samples. Such samples can provide researchers with sufficient, rich data for relevant statistical analysis, the findings of which will not only be more reliable but generalizable. Furthermore, the involvement of additional groups consisting of external auditors or *shariah* review officers, will provide greater insights into the understanding of the current auditing practices based on different perspectives.

To further enrich the body of knowledge and improve current practices, comparative research on *shariah* audit practices based on nationality dimension or factor can be carried out. For example, such studies can focus on *shariah* audit activities as practiced in other Islamic countries, such as Indonesia, Pakistan, Brunei, Bahrain, and Qatar, or countries that also offer Islamic banking services, such as Singapore and the United Kingdom. Differences, if any, in the *shariah* practices of these countries can help researchers to understand better the impact of cultural factors on *shariah* audit.

## **6.6 The Conclusion of the Study**

This chapter provide the discussion on the research findings, implications and contributions to current practices, limitations of the study, and recommendations for future research. Overall, the main finding of this study suggests that spirituality is an important factor that will have a huge impact on audit judgment performance. Furthermore, knowledge pertaining to IBF, *shariah* principles, and internal auditing is also a critical factor that will also have an impact on such judgment. Thus, helping internal auditors to acquire a high level of knowledge in these three domains should

become the imperative of IFIs so that they can carry out *shariah* audit more successfully.

From the practical standpoint, the findings of the study provide concrete evidence regarding the relatively low level of knowledge among the internal auditors, which clearly needs improvement, to enhance the current practices. Relevant enforcement and regulating agencies, such as the BNM, IIAM, and MIA, can use such findings to help them refine existing guidelines or formulate a new *shariah* auditing framework. In addition, such agencies can also plan and conduct appropriate training programs or workshops to help employees of the Islamic banking and finance industry to attain an adequate level of spirituality, which has been demonstrated in this study to be a significant factor in the *shariah* audit process. Such attainment of this intrinsic attribute will be able to guide internal auditors to perform *shariah* audit with deep conviction and zeal, thus improving their performance

In the present study, some of the hypotheses were not supported, thus entailing further empirical work to gain more insight into the relations of spirituality, task complexity, knowledge, and ethics with *shariah* audit judgment performance. Nevertheless, the research that was based on both quantitative and qualitative approaches revealed interesting and useful findings. For the qualitative approach, the interviews involving a group of internal auditors served as an effective means to elicit detailed information or data regarding the current *shariah* audit practices in Malaysian IFIs, which would be quite problematic if other approaches had been used instead. For the quantitative approach, the experiments carried out provided new or latest empirical evidence regarding the current level of knowledge of internal auditors of IFIs.

Therefore, the present study is unique compared with other previous research, especially with regard to the methodological approach used. As mentioned earlier, the present study was based on mixed-method approach; whereas previous studies were solely based on either quantitative or qualitative approach. Arguably, the former approach was more robust in collecting refined, rich data compared with the latter approach that could only gather relatively coarse data. Overall, the empirical findings of this study further enrich the relevant body of knowledge in JDM, and IBF research, particularly in spirituality research. In addition, the same findings highlight the importance of the SCT in guiding the researcher to examine all the relevant factors and their relations and effects that ultimately will lead to better understanding of factors that can help IFIs achieve their unique objective – *Maqasid as-shariah*.

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## APPENDICES

### APPENDIX A: Interviews Guidelines

This discussion is about *shariah* audit and factors affecting *shariah* audit judgement performance among internal auditors in Malaysia's Islamic financial Institutions (IFIs)

- Comparative studies of Islamic Banking and Finance
- The need and demand of *shariah* audit? Why *shariah* audit is important?
- The development of *shariah* audit (objective, definition, scope and extent, governance and current practices)
- How bank regulate and monitor *shariah* audit and *shariah* review?
- What is important knowledge that needs to be possessed by internal auditor to conduct *shariah* audit effectively?
- What are successful factors of *shariah* audit implementation?

<b>QUESTIONS/STATEMENTS</b>
<b><i>Shariah</i> review function refers to regular assessment on <i>shariah</i> compliance in the activities and operations of the IFIs by qualified <i>shariah</i> officers</b>
<b>Criteria to be a qualified <i>shariah</i> officer</b>
<b>The scope that should be cover by <i>shariah</i> review – i.e. the end to end product development process (from product structuring to product offering)</b>
<b>The function also involves the examination and evaluation of the IFIs level of compliance to the <i>shariah</i> and remedial to resolves non <i>shariah</i> compliance</b>
<b><i>Shariah</i> review conducted based on <i>shariah</i> review plan/program</b>
<b><i>Shariah</i> officer should always obtaining and making reference to relevant sources i.e. SAC's published rulings, the <i>shariah</i> Committee decision and fatwas, the <i>shariah</i> audit results and the <i>shariah</i> review checklist.</b>
<b>Timing to perform <i>shariah</i> review.</b>
<b>Any outcome from <i>shariah</i> review such as non <i>shariah</i> compliance should be communicated to <i>shariah</i> committee and management.</b>
<b>.</b>
<b><i>Shariah</i> audit is refer as periodical assessment conducted from time to time to provide an independent assessment and objective assurance – to add value and improve the degree of compliance (to ensure a sound and effective internal control to fulfil <i>shariah</i> compliance).</b>

<b><i>Shariah</i> auditing framework is different from conventional auditing framework.</b>
<b><i>Shariah</i> auditing is different from <i>shariah</i> compliance review.</b>
<b>Timing to perform <i>shariah</i> auditing and <i>shariah</i> compliance review.</b>
<b>As an internal auditor, the main objective of <i>shariah</i> audit is to ensure <i>shariah</i> compliance rather than independent assessment on the adequacy of internal controls in safeguarding <i>shariah</i> principles</b>
<b>Internal auditor should always obtaining and making reference to relevant sources i.e SAC's published rulings, the <i>shariah</i> committee decision and fatwas, the <i>shariah</i> audit results and the internal <i>shariah</i> checklist.</b>
<b><i>Shariah</i> audit should be performed based on (periodical or based on materiality or risky area) which is also following normal internal audit activity risk assessment.</b>
<b>How the bank monitors and controls the <i>shariah</i> auditing effectiveness and efficiency in terms of managing <i>shariah</i> non-compliance risks.</b>
<b>What are criteria to be <i>shariah</i> internal auditor?, Any specific qualifications or important knowledge that need to be possessed by internal auditors?</b>
<b>Qualification of internal auditor to perform <i>shariah</i> audit – by having adequate <i>shariah</i> – related knowledge and training (paper qualification or sufficient training – to what extent?).</b>
<b>Issues on staff competency to perform <i>shariah</i> auditing i.e. lack of <i>shariah</i> knowledge and experience in Islamic banking and finance</b>
<b>To what extent the relationship between <i>shariah</i> officer and internal auditor while conducting <i>shariah</i> audit?</b>
<b>Roles of <i>Shariah</i> Committee regarding <i>shariah</i> audit</b>
<b>To what extent the relationship between <i>shariah</i> committee and internal auditor while conducting <i>shariah</i> audit or developing the <i>shariah</i> audit internal manual ?</b>
<b>The scope of <i>shariah</i> audit shall cover all aspect of the IFI's business operation – such as audit of financial statements, compliance audit on organisational structure, people, process and information technology and review of adequacy of the <i>shariah</i> governance process</b>
<b>Any outcome from <i>shariah</i> audit such as non <i>shariah</i> compliance and significant audit findings should be communicated to <i>shariah</i> committee and audit committee</b>
<b>As an internal auditor, the main objective of <i>shariah</i> audit is to ensure <i>shariah</i> compliance rather than audit assurance?</b>



**The important factors should the internal auditor possess when they need to perform *shariah* audit (is it IBF, *shariah* knowledge and internal audit knowledge are really important knowledge to be gained by internal auditor? Or they just can follow audit programme/plan designed by the department? ).**

**Is there any professional certification need to be possessed by internal auditor such as professional qualifications in accounting and auditing (such as ACCA and CIFP?)**

**Challenges and limitation in *shariah* audit practices?**

**Roles of *shariah* committee and management in upholding *shariah* auditing practices and functions**

**Roles of regulator (BNM) in harmonizing and regulating *shariah* auditing practices among IFIs**

**Roles of External auditor in upholding *shariah* auditing practices and functions**

**The level of acceptance and readiness of IFIs in adopting and implementing *shariah* auditing functions**

**What are successful factors which you think important to be implemented in ensuring the successful of *shariah* audit function**

## APPENDIX B: Experimental Instrument

### EMPIRICAL STUDIES ON JUDGEMENT DECISION MAKING (JDM) BY INTERNAL AUDITORS IN MALAYSIA ISLAMIC FINANCIAL INSTITUTIONS

Dear Sir/Madam,

Your kind participation in this experiment is highly valued and appreciated. If you have any questions or inquiries about completing the questionnaire or about being in this study, please do not hesitate to contact Ms. Yazkhiruni Yahya at [yazkhiruni@um.edu.my](mailto:yazkhiruni@um.edu.my) or Dr.Nurmazilah Dato' Mahzan at [nurmazilah@um.edu.my](mailto:nurmazilah@um.edu.my).

Thank you for your kind cooperation.

**Yazkhiruni Yahya**

**Phd Student**

Faculty of Business and Accountancy

University of Malaya

Kuala Lumpur

[yazkhiruni@um.edu.my](mailto:yazkhiruni@um.edu.my)/ 03-7967 3802

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#### **Instruction;**

**There are six (6) sections of this packet. Please complete all six (6), as the research will not be of any benefits otherwise.**

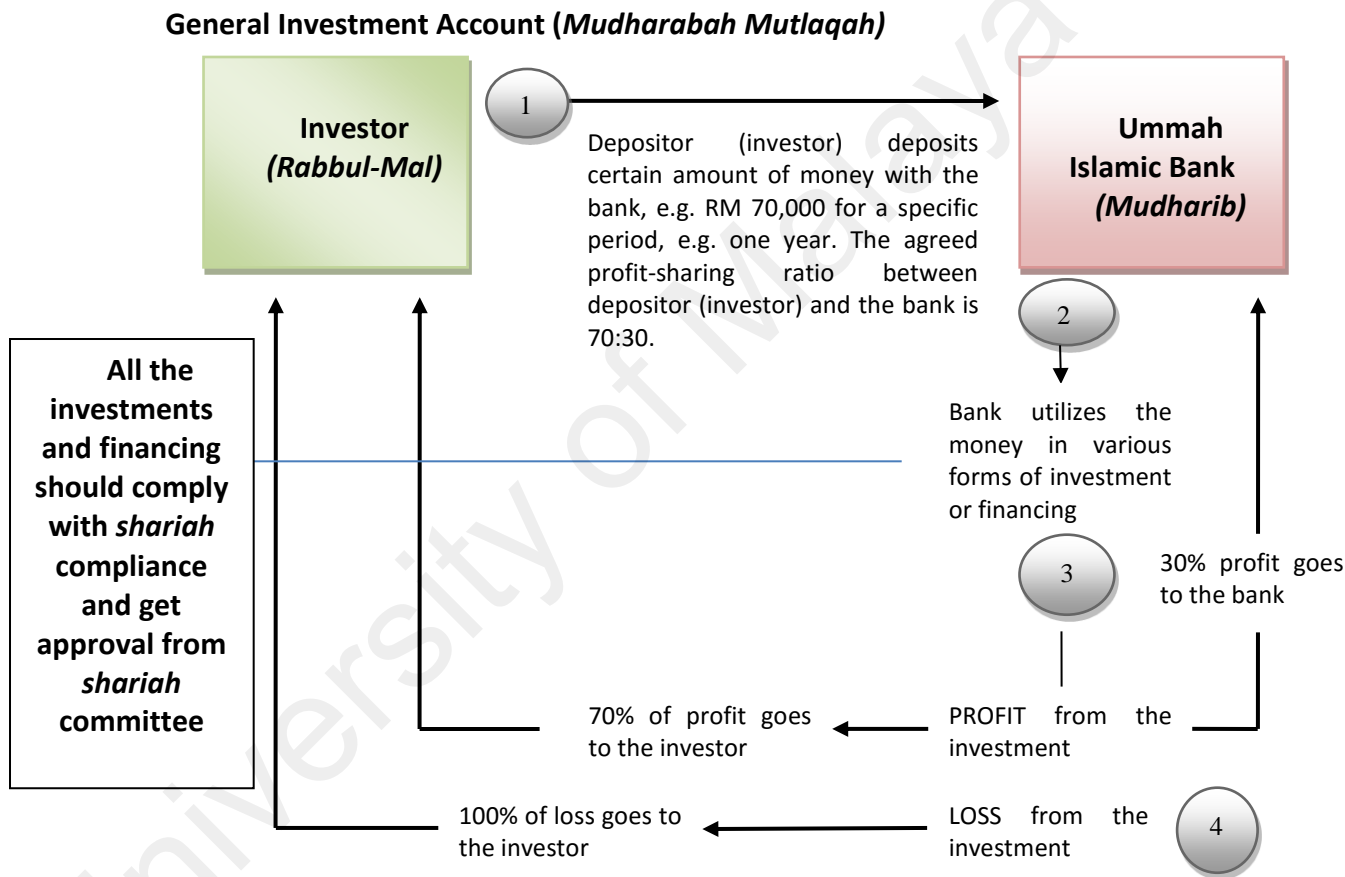
**We are interested in learning factors affecting internal auditor's judgement decision making process while they are conducting *shariah* audit. Once the research is published, there will be no way for any person to know your identity or any other information that is connected to you through these profiles. Your responses to the materials will be aggregated and averaged with the responses of others to determine the general characteristics on the factors affecting internal auditor's judgement. However, if you would like to know about your competency/knowledge level and ability skill, we will send you that information if you indicate your name and office address at the bottom of this page. Please be assured that none of this information and your answer will be seen by anyone. Please do not discuss your answers with your colleagues. Again, thank you for the time and attention to this research.**

***"This research is funded by High Impact Research (HIR) Grant University of Malaya"***

## SECTION 1 (A)

### QUESTION 1

The following diagram describes the process flow of the Islamic deposit product based on *Mudharabah* principles:



Please prepare;

**1. (a) The *Shariah* audit program for the above Islamic financial product. The audit program should specify clearly (i) the audit objective(s); (ii) the *Shariah* objective; (iii) the source documents or policies to audit; and (iv) brief audit process.**

**(i) Audit Objectives**

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**(ii) *Shariah* Objectives**

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**(iii) Sources of documents or policies to use (i.e. Agreement and Listings)**

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**(iv) Audit Process (i.e. Examination and review process)**

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1. (b) Discuss on the appropriate action that can be taken by the internal auditor of the Ummah Islamic bank for the following scenario:

After the internal auditor performed *shariah* auditing on the list and criteria of the Investment company allowed by the Ummah Islamic bank, it was found that in 2009, Ummah Islamic Bank has invested in Maslahah Berhad with the purchased of 2,000,000 units of ordinary shares at the price of RM2.00 each. They have referred to the Securities Commission (SC) list, and the company was considered at that time of purchase, as a *Shariah* compliance company. In January 2012, the SC has withdrawn Maslahah Berhad from the *Shariah* compliance's list. This was due to one of the newly acquired subsidiary of Maslahah indirectly involved in the liquor business. The present quoted price as August 2012 is RM 2.20. However, the head of investment unit requested that the internal auditor to omit the findings from the final engagement communication with an assurance that the Maslahah Berhad will be taken out from the investment portfolio after year end because of analyst prediction that the price will increase by 20 %, the current investment will be hopefully sold as a profit before year end. The head of investment also gives an assurance that the profit gained from the non-halal investment will be purified 'tainted' according to the *Shariah* requirements. As such, what is the appropriate action that can be taken by the internal auditor? Should he/she report the finding to the *Shariah* committee or just drop the findings because the investment will be sold anyway. Which is being scheduled on June 2013?

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\*\*\* Please tick the circle for each of the following:

1) How much mental effort did the questions require of you?

Very little effort ☐ ☐ ☐ ☐ ☐ ☐ ☐ A great deal of effort

2) Rate the complexity for this section.

No at all complex ☐ ☐ ☐ ☐ ☐ ☐ ☐ Extremely complex

**QUESTION 2**

**2. (a) Identify and discuss each case/ whether the practice is *Shariah* compliant or not.**

The internal auditor is required to conduct *shariah* audit on the structure of *Bay Bithaman Ajil* (BBA) and he found that the contract is operated as follows:

- The customer identifies a house he wishes to buy from a housing developer. At this stage, the customer normally enters into a sale and purchase agreement with developer and pays the deposit (which at this stage, the customer is deemed to have a beneficial ownership of the house).
- The customer then approaches the bank for financing the remaining balance. The bank purchases the requested house and pays in full – which will be disbursed directly to the housing developer.
- The bank then sells the house to the customer at a marked – up price and the customer will pay the sale price on an installment.
- The selling price of the house sold to the customer would be fixed at a profit rate known as ‘the ceiling profit rate’. The difference between the ceiling rate and effective variable rate (normally reflective of the movement of the market interest rate) is the amount of *ibra’* (rebate), which is to be returned to the customer at the end of each month. However, if the market interest rate exceeds the contracted ceiling rate, the Islamic bank would adjust their effective rate above the ceiling rate after getting an approval from *Shariah* committee.

The abovesaid contract using *BBA* structure is (Please tick accordingly):

(i) *Shariah* Compliance ( please state your justification).

Justification

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(i) *Shariah* Non - compliance. (If the contract is *shariah* non - compliance, please state your justification).

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Justification

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2. (b) Another important and popular segment of Islamic retail financing is through Islamic credit card facilities. The most common structures of Islamic credit cards are '*inah* based, *tawarruq* based and *Ujrah* based. The *shariah* internal auditor is responsible to audit the structure of the product which is based on *Ujrah* concept. Please certify whether the following structure is *shariah* compliance or not.

- The customer applies for a credit card from a bank.
- The bank provides a credit card account based on the customer's credit worthiness.
- The customer pays the merchants for the goods from a credit card account.
- The bank provides '*Qard*' to the customer for the purchased goods.
- The customer pays the purchase amount and the fee to the bank. The customer then will be charged a fixed fee structure such as a monthly service fee which is based on the actual cost of managing the transaction and an annual service fee based on the benefit rendered by the bank. The bank is allowed to earn profit from the service fee and also commissions from the merchants (if any).

The abovesaid *Ujrah* structure contract is (Please tick accordingly):

(a) *Shariah* Compliance (please state your justification).

Justification

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(b) *Shariah* Non - compliance. (If the contract is *shariah* non - compliance, please state your justification).

Justification

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\*\*\* Please tick the circle for each of the following:

1) How much mental effort did the questions require of you?

Very little effort    ☐ ☐ ☐ ☐ ☐ ☐ ☐    A great deal of effort

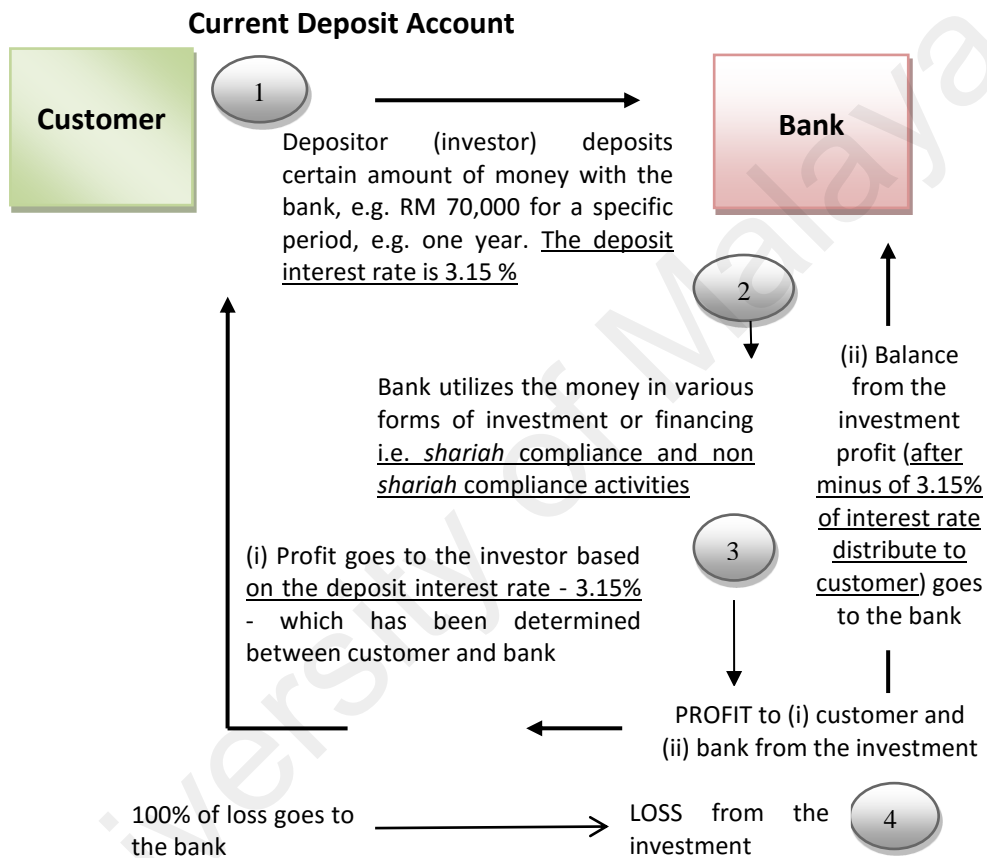
2) Rate the complexity for this section

No at all complex    ☐ ☐ ☐ ☐ ☐ ☐ ☐    Extremely complex

## SECTION 1 (B)

### QUESTION 1

The following diagram describes the process flow of the current deposit account





Please prepare;

**1. (a) The internal audit program for the above product. The audit program should specify clearly (i) the audit objective(s); (ii) the source documents or policies to audit; and (iii) the audit checklists of each of the auditing process.**

**(i) Audit Objectives**

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**(ii) Sources of documents or policies to use (i.e. Agreement and Listings)**

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**(iii) Audit Process (i.e. Examination and review process)**

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**1. (b) Discuss on the appropriate action that can be taken by the internal auditor of ONE MALAYSIA Bank for the following scenario;**

Joshua an internal auditor in the group internal audit of the ONE Malaysia Bank has been assigned to audit treasury unit of the bank. During the course of the audit, Joshua found that some of the dealings/investments have breached of current trading and exposure limit imposed by the board. However, according to the Head of investment unit, the finding should be omitted from the final engagement communication with a provision that the dealings/investments conforms to the Asset Liability Management Strategy (ALM) approved by the board of directors and the dealings/investments are contributed high returns to the bank.

As such, what is the appropriate action that can be taken by the internal auditor? Should he report the finding to the audit committee or will agree with the Head of investment's argument?

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\*\*\* Please tick the circle for each of the following:

**1) How much mental effort did the questions require of you?**

Very little effort    ☐ ☐ ☐ ☐ ☐ ☐ ☐    A great deal of effort

**2) Rate the complexity for this section.**

No at all complex    ☐ ☐ ☐ ☐ ☐ ☐ ☐    Extremely complex

## **QUESTION 2**

### **2. (a) Identify and discuss the case/ whether the practice violates internal auditing practices or not**

Adam, an internal auditor of the BERSATU BANK was aware that one of the housing construction company stated in one of the customer housing loan application form is facing precarious financial condition. He knew this would cause a problem to the customer if the bank proceeds with the loan. However, because the issue is not within his audit scope (as the risk is not related to the inherent risk of borrowers – ‘repayment capacities’), he chooses not to mention in his audit report and reported the finding satisfactorily.

The abovesaid scenario is (Please tick accordingly):

(i) Violate internal audit practices ( Please state your justification).

Justification

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(ii) Non – violation of internal audit practices. (Please state your justification).

Justification

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### **2. (b) Identify and discuss the case/ whether the practice violates internal auditing practices or not.**

According to a guideline on minimum audit standards for internal auditor of financial institutions issued by Bank Negara Malaysia (BNM), among the audit coverage need to be performed by the internal auditor is to ensure effective credit monitoring system such as i.e. credit policies and procedures are adequate, creditworthiness and repayment capacity of the borrowers are carefully appraised and evaluated prior to the approvals of credit facilities, management review of credit exposures to credit cardholders is carried out periodically and in a timely manner and no credit facilities are granted for self-serving purposes that is, credit facilities to nominees of the directors and officers of the banking institutions.

However, during the internal audit process, the internal auditor found that one director of the bank had his credit card limit extended and in excess of the single customer limit as being stipulated by BNM. The Head of Credit Card department justified that the director is entitled to get an extension of his credit limit as a part of his entertainment allowance. The extension of his credit card limit also been approved and permitted by Board of director. As such, the internal auditor chooses not to mention in his audit report and reported the finding as satisfactory. The scenario is (Please tick accordingly):

(a) Violate internal audit practices (Please state your justification).

Justification

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(b) Non – violation of internal audit practices. (Please state your justification).

Justification

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\*\*\* Please tick the circle for each of the following:

**1) How much mental effort did the questions require of you?**

Very little effort

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A great deal of effort

**2) Rate the complexity for this section.**

No at all complex

☐☐☐☐☐☐☐

Extremely complex

## SECTION 2 (A)

1. The objective of *Shariah* principles of *Muamalat* includes the following except:
  - a. Circulation of wealth.
  - b. Maximization of profit.
  - c. Fairness of wealth circulation.
  - d. Financial transparency.
2. Which of the following statements refers to the primary sources of *shariah* principles?
  - I. Through the words of *Allah (Quran)* revealed to the last prophet Muhammad SAW
  - II. Through *sunnah* (what is narrated from the prophet including his action, sayings and tacit approval) from the last prophet Muhammad SAW
  - III. *Qiyas* (Analogical deductions)
  - IV. *Ijma'* (Consensus)
  - a. I only.
  - b. I and II only.
  - c. I, II and III.
  - d. All of the above.
3. To undertake anything blindly without sufficient knowledge or to risk oneself in a venture not knowing exactly what will be the final outcome. The above statement refers to:
  - a. Gambling (*Maisir*).
  - b. Usury (*Riba*).
  - c. Uncertainty (*Gharar*).
  - d. Producing and selling impure goods.
4. The following items are common pillars elements of a valid *Muamalat* contract except:
  - a. Contracting parties.
  - b. Documentation.
  - c. Subject matter.
  - d. Offer and Acceptance.
5. Bank A gives personal financing to Mr. Lokman amounted to RM 50,000.00 with the condition that Mr. Lokman must return the money with extra charges and excess of the *qard* amount for a certain period. The above scenario violates the *shariah* principles in terms of:
  - a. Gambling (*Maisir*).
  - b. Usury (*Riba*).
  - c. Uncertainty (*Gharar*).
  - d. Producing and selling impure goods.

**6. Which one of the following is incorrect?**

- a. In an operating lease, the lessee has no intention to purchase the asset.
- b. In a financial lease, the lessee intends to own the asset.
- c. *Al-Ijarah thumma al-bay'* is a hybrid of operating and financial leasing.
- d. *Al-Ijarah thuma al-bay'* is financing leasing that uses Islamic principles.

**7. *Ijarah* installments – in Operating *Ijarah* – shall be allocated over the financial periods of the lease term and shall be recognized in the financial period in which these installments are due. *Ijarah* installments (in the book of the lessee) shall be presented as:**

- a. *Ijarah* revenue.
- b. *Ijarah* expense.
- c. *Ijarah* financing.
- d. None of the above.

**8. In a *Murabaha* transaction, if a client decides to have early settlement before the due date, the Islamic bank may deduct part of the profit to be agreed upon between the Islamic Bank and the client at the time of the settlement. The deducted amount**

- a. shall be debited to the *Murabaha* receivables account.
- b. shall be treated as a liability.
- c. shall be excluded from the profit related to the installment being prepaid.
- d. shall be credited to the *Murabaha* payables account.

**9. In a Bay Bithaman Ajil (BBA) home financing transaction, the bank and the customer have executed Property Purchase Agreement and Property Sale Agreement for the purchase of property. The transaction details are;**

**I. Property located in Gombak, Selangor**

**II. Seller: Mr. Iskandar Mohammed (The customer)**

**III. Purchaser: Bank Islam (the bank)**

**IV. Bank purchase price – between RM 300,000.00 – RM 400,000.00**

**Based on the above details, the transaction is prohibited due to the element of *gharar* in the agreement. Which of the above details have the said prohibition?**

- a. I only.
- b. I and IV only.
- c. I, II and III.
- d. All of the above.

**10. Majdi purchased a house from a developer - Shah Alam Properties through an Islamic financing facility. If the contract of the facility is based on *Murabaha*, which of the following scenarios would be valid:**

- a. The Islamic bank establishes a Special Purpose Company which would collect the equal proportions of capital from both the Islamic bank and Majdi before

- purchasing the house from Shah Alam Properties. The title of ownership is shared by both parties until Majdi purchases off the entire ownership.
- b. Majdi pays Shah Alam Properties a down payment and gets the Islamic bank to finance the remaining amount. The title of ownership is passed to Majdi upon making the down payment.
  - c. The bank purchases the house from Shah Alam Properties and subsequently sells the house to Majdi at cost plus a mark-up. The ownership is passed to Majdi upon concluding the sale agreement.
  - d. The bank purchases the house from Shah Alam properties and subsequently sells the house to Majdi a cost plus a markup. The title of ownership is retained by the Islamic bank until full settlement.

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## **SECTION 2 (B)**

**1. The primary objective of internal auditing is to;**

- a. Find errors and fraud within the company.
- b. Perform the preliminary work of external financial statement audit.
- c. Provide an opinion about the accuracy and completeness of the quarterly financial statements.
- d. Help the employees of the company effectively perform their jobs.

**2. One of the purposes of the International Standards for the Professional Practice of Internal Auditing (“The Standards”) is to;**

- a. Encourage the professionalization of internal auditing.
- b. Establish the independence of the internal audit activity and emphasize the objectivity of internal auditing.
- c. Encourage external auditors to make more extensive use of the works of internal auditors.
- d. Establish the basis for evaluating internal auditing performances.

**3. Which of the following is an essential factor in evaluating the efficiency of information? The information must;**

- a. Be well documented and cross referenced in the working paper.
- b. Be based on references that are considered competent.
- c. Bear a direct relationship to the observation and include all of the elements of an observation.
- d. Be convincing enough for a prudent person to reach the same decision.

**4. Which of the following statements is true with respect to due professional care?**

- a. An internal auditor should perform detailed tests of all transactions before communicating results.
- b. An item should not be mentioned in an engagement communication unless the internal auditor is absolutely certain of the item.
- c. An engagement communication should never be viewed as providing an infallible truth about a subject.
- d. An internal auditor has no responsibility to recommend improvements.

**5. An audit of the electronic data interchange area of a banking group revealed the facts listed below. Which one indicates the need for improved internal control?**

- a. Employees may only access the computer system via an ID and an encrypted password.
- b. The system employs message sequencing as a way to monitor data transmissions.
- c. Certain types of transactions may only be made at specific terminals.



- d. Branch office employees may access the mainframe with a single call via modem.

**6. Which of the following is a false statement about materiality (CPA Adapted)**

- a. The concept of materiality recognizes that some matters are important for fair presentation of financial statements in conformity with GAAP, while other matters are not important.
- b. An auditor considers materiality for planning purposes in terms of the largest aggregate level of misstatements that could be material to any one of the financial statements.
- c. Materiality judgments are made in light of surrounding circumstances and necessarily involve both quantitative and qualitative judgment.
- d. An auditor's consideration of materiality is influenced by the auditor's perceptions of the needs of a reasonable person who will rely on the financial statement.

**7. Analytical procedures is:**

- a. Considered direct information about the assertion being evaluated.
- b. Involve such tests as confirmation of receivables.
- c. May provide the best available information for the completeness assertion.
- d. Are never sufficient by themselves to support management assertions.

**8. During the course of an engagement, an internal auditor makes a preliminary determination that a major division has been inappropriately capitalizing research and development expense. The engagement is not yet completed and the internal auditor has not documented the problem or determined that it really is a problem. However the internal auditor is informed that the chief audit executive has received the following communication from the president of the organization:**

**"The controller of division B informs me that you have discovered a questionable account classification dealing with research and development expense. We are aware of the issue. You are directed to discontinue any further investigation of this matter until informed by me to proceed. Under the confidentiality standard of your profession, I also direct you not to communicate with outside auditors regarding this issue".**

**Which of the following is an appropriate action for the CAE to take regarding the questionable item?**

- a. Immediately report the communication to the IIA and ask for an ethical interpretation and guidance.
- b. Inform the president that this scope limitation will need to be reported to the board.
- c. Continue to investigate the area until all the facts are determined and document all the relevant facts in the engagement records.
- d. Immediately notify the external auditor of the problem to avoid aiding and abetting a potential crime by the organization.

**9. An internal auditor for a large regional bank was asked to serve on the board of directors of a local bank. The bank competes in many of the same markets as the regional bank but focusses more on consumer financing than on business financing. In accepting this position, the internal auditor;**

- i. Violates the IIA Code of ethics because serving on the board may be in conflict with the best interests of the internal auditor's employer**
- ii. Violates the IIA Code of ethics because the information gained while serving on the board of directors of the local bank may influence recommendations regarding potential acquisitions.**

- a. i only.
- b. ii only.
- c. i. and ii.
- d. Neither i nor ii.

**10. An internal auditor is reviewing the organization's policy regarding investing in financial derivatives. The internal auditor normally expects to find all of the following in the policy except;**

- a. A statement indicating whether derivatives are to be used for hedging or speculative purposes.
- b. A specific authorization limit to the amount and types of derivatives that can be used by the organization.
- c. A specific limit on the amount authorized for any single trader.
- d. A statement requiring board review of each transaction because of the risk involved in such transactions.

### SECTION 3

**Instruction:** Below is a series of statements. Please state the extent of your agreement by **ticking** on the following scale;

<b>1 – Never</b>	<b>2 – Almost never (in less 10% of the chances when I could have)</b>	<b>3 – Occasionally (in about 30% of the chances when I could have)</b>	<b>4 – Sometimes (in about 50% of the chances when I could have)</b>	<b>5- Frequently (in about 70% of the chances when I could have)</b>	<b>6.Usually (in about 90% of the chances when I could have)</b>	<b>7. Almost Constantly</b>
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STATEMENTS		SCALE						
		1	2	3	4	5	6	7
1	I experience a sense of the sacred in living things.							
2	I experience a sense of connection with other living things.							
3	I set aside time for personal reflection and growth.							
4	I find meaning in life by creating close relationship.							
5	I experience a feeling of being whole and complete as a person.							
6	I listen closely when people tell me their problems.							
7	I read articles on health and inner peace.							
8	I share my private thoughts with someone else.							
9	I put the interests of others before my own when making a decision.							
10	I actively seek a sense of purpose in my life.							
11	I feel guilty when I don't tell the truth.							
12	I enjoy guiding young people.							

**Instruction:** Below is a series of statements. Please state the extent of your agreement by **ticking** on the following scale;

<b>1 – STRONGLY DISAGREE</b>	<b>5 – SOMEWHAT AGREE</b>
<b>2 - DISAGREE</b>	<b>6 - AGREE</b>
<b>3- SOMEWHAT DISAGREE</b>	<b>7 – STRONGLY AGREE</b>
<b>4 - NEUTRAL</b>	

STATEMENTS		SCALE						
		1	2	3	4	5	6	7
1	I value the relationship between all living things.							
2	Being truthful is important to a successful life.							
3	We should give to others in need.							
4	It is important that we be sensitive to pain and suffering.							
5	It is important that each of us find meaning in our lives.							
6	All forms of life are valuable.							
7	I feel sad when I see someone else in pain.							
8	I find the world of nature is boring.							
9	I believe that rituals (prayer, meditation) are important in my spiritual life.							
10	I always visit place of worship (church, kuil, mosque, temples and etc.) to perform my ritual obligation.							
11	I belief and read my Holy Book (Bible, Holy Quran, Sutras, Vedas and etc.).							
12	I spend time to engage in my spiritual practice.							
13	I am committed to my religion (Buddhism, Christian, Hinduism, Islam and etc.).							

## SECTION 4

**Instructions:** Below is a series of statements. Please state the extent of your agreement by **ticking** on the following scale;

<b>1 - NOT AT ALL IMPORTANT</b>	<b>5- MODERATELY IMPORTANT</b>
<b>2 – UNIMPORTANT</b>	<b>6. VERY IMPORTANT</b>
<b>3 – SLIGHTLY IMPORTANT</b>	<b>7. EXTREMELY IMPORTANT</b>
<b>4 – NEUTRAL</b>	

	STATEMENTS	SCALE						
		1	2	3	4	5	6	7
1	I exercise honesty, objectivity and diligence in the performance of my duties and responsibilities.							
2	I exhibit loyalty in all matters pertaining to the affairs of my organization or to whom ever I may be rendering a service. However, I not knowingly be a party to any illegal or improper activity.							
3	I not knowingly engage in acts or activities which are discreditable to the profession of internal auditing or my organization.							
4	I refrain from entering into any activities which may be in conflict with the interest of my organization or which would prejudice my ability to carry out objectively my duties and responsibilities.							
5	I not accept anything of value from an employee, client, customer, supplier or business associates of my organization which would impair or be presumed to impair my professional judgement.							
6	I undertake only those services which I can reasonably expect to complete with professional competence							
7	I adopt suitable means to comply with the Standards for the Professional Practices of Internal Auditing							
8	I be prudent in the use of information acquired in the course of my duties. I shall not use confidential information for any personal gain nor in any manner which would be contrary to law or detrimental to							

	the welfare of their organization.							
9	I, when reporting on the results of my work, reveal all material facts known to them which, if not revealed, could either distort reports of operations under reviews or conceal unlawful practices.							
10	I continually strive for improvement in my proficiency and in the effectiveness and quality of my services.							
11	I, in the practice of their profession, be ever mindful of my obligation to maintain the high standards of competence, morality and dignity promulgated by the Institute. I abide by the <i>Bylaws</i> and uphold the objectives of the Institute							

## **SECTION 5**

**Instructions: Please choose and circle the best answer to the following items;**

**(1) Designation (Internal Audit Department)**

a. Chief Audit Executive (CAE)
b. Deputy CAE/Vice president
c. Manager
d. Assistant manager
e. Senior auditor
f. Audit Executive
g. Not an IA Please state your designation_____

**(2) Years of working experience?**

a. Less than 1 years
b. 1 years – 5 years
c. 5 years to 10 years
d. 10 years to 20 years
e. More than 20 years

**(3) How many years of your experience in performing *shariah* auditing or auditing Islamic banking products and Islamic banking operation?**

a. Less than 1 years
b. 1 years – 5 years
c. 5 years to 10 years
d. 10 years to 20 years
e. More than 20 years

**(4) What types of organization are you working with?**

a. Full - fledged local Islamic financial institution
b. Full – fledged foreign Islamic financial institution
c. Islamic banking subsidiaries of conventional banks - local financial institution
d. Islamic banking subsidiaries of conventional - foreign financial institution

**(5) Qualifications**

a. PhD
b. Master degree
c. Degree
d. Professional certificate (i.e. ACCA and CIA )
e. Diploma
f. Others ; Please indicate your qualifications _____

**(6) Shariah qualifications**

a. Master degree specialization in Islamic banking and finance
b. Certificate in Islamic financial planner (CIFP)
c. Degree in Islamic Studies
d. Degree in Islamic Law/ <i>Shariah</i> Law
e. Others ; _____ (Please indicate your qualification)
f. None

**(7) Religious denominations**

a. Buddha
b. Christian
c. Hindu
d. Islam
e. Others; _____ (please indicate your denomination)

**(8) On a scale 1 - 7, please circle how important is religion to you?**

<b>1 – Not at all important</b>	<b>2 – Unimportant</b>	<b>3 – Slightly important</b>
<b>4 – Neutral</b>	<b>5 – Moderately important</b>	<b>6 – Very important</b>
<b>7 – Extremely important</b>		



## **SECTION 6**

Please respond to the following questions by ticking the circle that best corresponds to how you actually feel.

1. **My sense of spirituality significantly affected my judgments when I performed the *shariah* audit.**

Not significant ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very Significant

2. **My sense of spirituality affected my effort.**

Not significant ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very Significant

3. **How important is spirituality to you?**

Least important ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very important

4. **How important is ethics to you?**

Least important ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very important

5. **How much effort did you exert on the experiment?**

Very little ☐ ☐ ☐ ☐ ☐ ☐ ☐ a great deal of effort

6. **How important is *shariah* knowledge to you while performing *shariah* audit?**

Least important ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very important

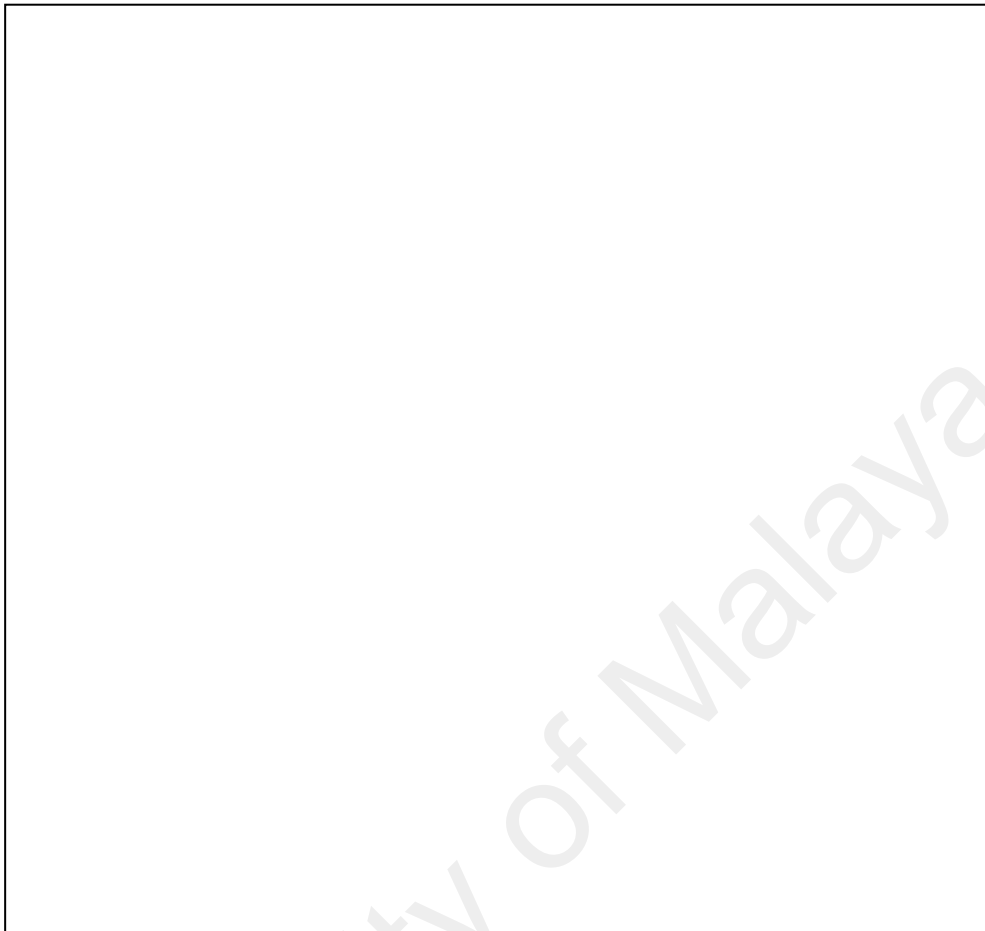
7. **I found the task and material in this study to be;**

Very uninteresting ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very Interesting

8. **I found the task and material in this study is relevant to my job scope.**

Very irrelevant ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very relevant

**Comments and suggestions for future research**



**STATE THE TIME YOU COMPLETE THE TASK:**

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**Thank you for your time. Your assistance is greatly appreciated.**

**APPENDIX C: List of Islamic Banks in Malaysia Issued by BNM as at 12 November 2009 and No. of Internal Auditors in Malaysia**

<u>NO</u>	<u>LIST OF ISLAMIC BANKS IN MALAYSIA</u>	<u>TOTAL INTERNAL AUDITOR - POPULATION</u>	<u>OWNERSHIP</u>
1	OCBC Bank (Malaysia) Berhad (OCBC Al-Amin Bank Berhad)	30	F
2	Asian Finance Bank Berhad	<u>6</u>	F
3	Affin Bank Berhad (Affin Islamic)	<u>25</u>	L
4	Alliance Bank Berhad (Alliance Islamic)	<u>30</u>	L
5	AmBank Group (AmIslamic)	<u>86</u>	L
6	Bank Islam Malaysia Berhad	<u>30</u>	L
7	Bank Muamalat Malaysia Berhad	<u>42</u>	L
8	CIMB Bank Berhad (CIMB Islamic)	<u>169</u>	L
9	Hong Leong Bank Berhad (Hong Leong Islamic)	30	L
10	HSBC Bank Malaysia Berhad (HSBC Amanah)	<u>16</u>	F
11	Kuwait Finance House (Malaysia) Berhad	<u>12</u>	F
12	Malayan Banking Berhad (Maybank Islamic)	<u>80</u>	L
13	Al Rajhi Banking and Investment Corporation (Malaysia) Berhad	15	F
14	Public Bank Berhad (Public bank Islamic)	<u>110</u>	L
15	RHB Bank Berhad (RHB Islamic)	<u>100</u>	L
16	Standard Chartered Bank Malaysia Berhad (Saadiq)	<u>7</u>	F
	Total population no of internal auditor	788	

\*\*\* No. in red colour and underlined represents real no of internal auditors in the Islamic banks as at 30<sup>th</sup> April 2013.

\*\*\* **F**: Foreign Bank and **L**: Local Bank

**APPENDIX D: Meta-Analysis Table (Sample from Respondent 1 – 5)**

Interviewees	P1	P2	P3	P4	P5
<b><u>Demographic Details</u></b>					
Gender	Female	Male	Female	Male	Female
No of years with Firm	More than 5 yrs	5 yrs	3 yrs	6 yrs	5 years
No of Years as and internal auditor	More than 20 yrs	More than 20 yrs	11 yrs	12 yrs	5 Years
<b><u>Background of Companies</u></b>					
Full Fledged Islamic Banks		✓			
Windows of Islamic Banks	✓		✓	✓	✓
<b>(i) Research Questions - What should be the definition of <i>shariah</i> audit</b>					
- To validate and give assurance that the internal control of the company is effective and efficient to preserved and comply with <i>shariah</i> principles	Yes	Yes	Yes	Yes	Yes
- To reduce risk for bank	Yes	Yes	Yes	Yes	Yes
- Give consulting i.e. to advise and consultation in setting up internal control	Yes	Yes	Yes	Yes	Yes
- Similar to conventional/normal audit i.e. in terms of Audit Methodology used (audit program and checklist)	Similar to conventional -but the internal auditor is strongly	Similar to conventional - but the internal	Similar conventional - but for P3, the difference of <i>shariah</i> audit is due to the the	Similar conventional to - but the internal	Similar conventional - but for P5, the difference of <i>shariah</i> audit is due to the the

	encourage to have good understanding relating <i>shariah</i> knowledge	auditor is strongly encourage to have good understanding relating <i>shariah</i> knowledge	main objective of <i>shariah</i> audit which is to consider the importance of complying <i>shariah</i> principles. Therefore, the audit methodology or program design must specifically design for <i>Shariah</i> audit  P3 also agreed that it is important for the internal auditor to have good understanding relating <i>shariah</i> knowledge	auditor is strongly encourage to have good understanding relating <i>shariah</i> knowledge	main objective of <i>shariah</i> audit which is to consider the importance of complying <i>shariah</i> principles. Therefore, the audit methodology or program design must specifically design for <i>Shariah</i> audit  P5 also agreed that it is important for the internal auditor to have good understanding relating <i>shariah</i> knowledge  At her organization, they have a dedicated unit of <i>shariah</i> audit and she is specialized in <i>shariah</i> audit
<b>(ii) Research Question - What is the current practices of <i>shariah</i> audit ?</b>					
<b><u>(1) Scope and extent of <i>Shariah</i> auditing</u></b>					
(1a) Practices of <i>shariah</i> auditing	Perform by Group	Perform by Group	Perform by Group	Perform by Group	Perform by Group

	Internal audit	Internal audit	Internal audit	Internal audit	Internal audit
	Yes	Yes	Yes	Yes	Yes
(1b) Perform in all activities that encompasses Islamic banking operation and structures (covers in all Islamic banking systems)	Only at their windows	All operation	Only at their windows	Only at their windows	Only at their windows
(1c) Existence of one dedicated unit to perform <i>Shariah</i> audit	<p>No – every internal auditors need to perform <i>shariah</i> audit</p> <p>- but they have person in charge to be act as referral point for any <i>shariah</i> audit issue</p>	<p>No - every internal auditors need to perform <i>shariah</i> audit</p> <p>- but they have person in charge to be act as referral point for any <i>shariah</i> audit issue</p> <p>- The bank is full fledge Islamic bank – therefore, they perform <i>shariah</i> auditing</p>	<p>No - every internal auditors need to perform <i>shariah</i> audit</p> <p>- but they have person in charge to be act as referral point for any <i>shariah</i> audit issue</p>	<p>No - every internal auditors need to perform <i>shariah</i> audit</p> <p>- but they have person in charge to be act as referral point for any <i>shariah</i> audit issue</p>	<p>Yes – they have 5 internal auditors perform <i>shariah</i> auditing</p>
(1d) Level of current practices of <i>shariah</i> auditing in IFIs	Already in placed but need to cater and add some audit programe that can check <i>shariah</i> compliance issues	Already in place and didn't facing difficulties since their bank is full fledge and solely following <i>shariah</i> principles.	Already in place but they are only leveraging the conventional audit methodology and program. The interviewee in opinion	Already in place but they are only leveraging the conventional audit methodology and program. The interviewee in opinion	Already in place and didn't facing difficulties since they have one dedicated unit in their internal audit department to perform <i>shariah</i>

	– The interviewee in opinion that <i>shariah</i> auditing framework and practices cab be leveraged from the existing framework - <u>Effective</u>	However he's commented on the relevancy of <i>shariah</i> auditing framework to be used in Full Fledge Islamic bank, since the framework is more incline to Islamic windows bank - <u>Effective</u>	that, the banks should strengthen and improve the way they conduct <i>shariah</i> auditing since it just cover certain area at the surface level.  - still insufficient due to time constraint and resources - <u>Quite effective</u>	that, the banks should strengthen and improve the way they conduct <i>shariah</i> auditing since it just cover certain area at the surface level.  - still insufficient due to time constraint and resources - <u>Quite effective</u>	auditing for IBF products and operations. - <u>Effective</u>
<b><u>(2) Current framework use</u></b>	Shared with Conventional but with certain modification when its relates to Islamic banking system – <u>Shared</u>	Structured and specifically designed audit program for Islamic banking system - <u>Not shared</u>	Structured and specifically designed audit program for Islamic banking system – but very loose - <u>Not Shared</u>	Shared with Conventional but with certain modification when its relates to Islamic banking system - <u>Shared</u>	Structured and specifically designed audit program for Islamic banking system - <u>Not shared</u>
(2a) Based on general audit Plan	Yes – annually	Yes - annually	Yes - annually	Yes - annually	Through – out the year
(2b) Based on Group Internal Audit Risk Assessment	Yes	Yes	Yes	Yes	Yes
(2c) Industry in need to have new framework?	No  But agreed to have one general framework that	No  But agreed to have one general framework that	No  But agreed to have one general framework that can be used to	No  But agreed to have one general framework that can be used to	No  But agreed to have one general framework that can be used to

	can be used to standardized the practices of <i>Shariah</i> auditing among IFIs  - should be considered to have one framework	can be used to standardized the practices of <i>Shariah</i> auditing among IFIs  - should be considered to have one new framework especially a different framework between Full Fledge Islamic bank and Windows of islamic banks	standardized the practices of <i>Shariah</i> auditing among IFIs  - should be considered to have one framework	standardized the practices of <i>Shariah</i> auditing among IFIs  - should be considered to have one framework	standardized the practices of <i>Shariah</i> auditing among IFIs  - should be considered to have one framework
<b><u>(3) Relationship with <i>Shariah</i> review department and <i>Shariah</i> Committee</u></b>					
(3a) Relationship with <i>Shariah</i> review i.e. assisting <i>shariah</i> review department to establish <i>shariah</i> compliance framework and control	Close working relationship	Close working relationship	Close working relationship	Close working relationship	Close working relationship
(3b) Relationship with <i>Shariah</i> Committee	Close working relationship and the SC is their referral point and	Close working relationship and the SC is their	Close working relationship	Close working relationship and the SC is their referral	Close working relationship and the SC is their referral



	in fact, the <i>shariah</i> committee assist the internal audit in developing <i>shariah</i> audit program  - <u>Very close</u>	referral point  - <u>Quite close</u>		point  - <u>Not very close</u>	point  - <u>Quite close</u>
(3c) Understanding of roles of <i>Shariah</i> Review – as stated in SGF	Yes they agreed and understand the <i>shariah</i> review department  Very good understanding	Yes they agreed and understand the <i>shariah</i> review department  Very good understanding	Yes they agreed and understand the <i>shariah</i> review department  Very good understanding	Yes they agreed and understand the <i>shariah</i> review department  Very good understanding	Yes they agreed and understand the <i>shariah</i> review department  Very good understanding
(3d) Roles of <i>shariah</i> committee in BOD and Audit committee	SC sitting in the BOD and invited internal auditor to attend <i>shariah</i> committee meeting. But She in opinion that, the <i>shariah</i> committee can be in BOD as long as they are business	SC was invited to attend in the BOD but not in AC  <u>Quite active</u>  “by invitation”	SC sitting in the AC  <u>Quite active</u>	SC sitting in the AC  <u>Quite active</u>	SC sitting in the AC  <u>Quite active</u>

	savvy				
	<u>Active</u>				
(3d) Reporting and governance structures of <i>Shariah</i> review department	To <i>Shariah</i> Committee and BOD of Bank	To <i>Shariah</i> Committee and BOD of Bank	To <i>Shariah</i> Committee and BOD of Bank	To <i>Shariah</i> Committee and BOD of Bank	To <i>Shariah</i> Committee and BOD of Bank
<b><u>(4) Competency requirement</u></b>					
(4a) Compulsory for the internal staff to posses <i>shariah</i> certification	Yes – Measured in their KPI	No – only strongly encourage	No - only strongly encourage	No – but the internal auditors are required to obtain Certificate in Islamic Law (CIL)	Yes – for <i>shariah</i> internal audit unit (CIFP and CIL)
(4b) The perception regarding the importance of understanding in <i>Shariah</i> Principles – through possessing adequate <i>shariah</i> knowledge	Yes – Very important	Yes – Very important	Yes – Very important	Yes – Very important	Yes – Very important
(4c) The perception regarding whether only Muslim internal auditor can perform <i>shariah</i> audit	Not agreed – but non muslim internal auditor must have adequate <i>shariah</i> knowledge	Not agreed – but non muslim internal auditor must have adequate <i>shariah</i> knowledge	Not agreed – but non muslim internal auditor must have adequate <i>shariah</i> knowledge	Not agreed – but non muslim internal auditor must have adequate <i>shariah</i> knowledge	Not agreed – but non muslim internal auditor must have adequate <i>shariah</i> knowledge
(4d) The perception regarding whether only Muslim can be <i>shariah</i> review officer – and possed Islamic certificate i.e. fiqh muamalat	Yes and agree – due to extensive <i>shariah</i> review which required to be perform i.e. daily basis	Yes and agree	Yes and agree	Yes and agree	Yes and agree – due to extensive <i>shariah</i> review which required to be perform i.e. daily basis
<b><u>(5) Governance and reporting</u></b>	To BOD and AC	To BOD and AC	To BOD and AC	To BOD and AC	To BOD and AC

<b><u>line of shariah internal auditor</u></b>					
<b><u>(6) Challenges and Limitation</u></b>					
(6a) Constraint in terms of resources and expertise	Yes and agree	Yes and agree	Yes and agree	Yes and agree	Yes and agree
(6b) Not competent in terms of possessing <i>shariah</i> and usul fiqh knowledge	Yes and agree	Yes and agree	Yes and agree	Yes and agree	Yes and agree
(6c) Lack of awareness and understanding of conventional and Islamic financial system among internal auditor and <i>shariah</i> officer	Yes and agree	Yes and agree	Yes and agree	Yes and agree	Yes and agree
(6d) Perception and level of acceptance that the <i>shariah</i> auditing is importance to be conducted among the Management	High and encouraging  <u>- Very effective</u>	High and encouraging  <u>- Very effective</u>	Not seen the <i>shariah</i> audit as a major audit process which need to be conducted. This is due to the perception that <i>shariah</i> audit is similar to normal/conventional audit  <u>Not effective</u>	Not seen the <i>shariah</i> audit as a major audit process which need to be conducted. This is due to the perception that <i>shariah</i> audit is similar to normal/conventional audit  <u>Not effective</u>	High and encouraging  <u>- Very effective</u>

## APPENDIX E: Experts' review

<u>Experts</u>	<u>Comments</u>
<p><b>Assoc. Prof. Dr. Rusni Hassan</b>  <i>Shariah</i> Advisory Council , BNM  Academician</p>	<p>Comment in p7:</p> <ul style="list-style-type: none"> <li>• Arrangements of the items are not according to the list mentioned in the instruction.</li> <li>• Based on this “format” (existing) it is not clear what does “<i>Shariah</i> Objectives” means. Respondent have to refer to instruction to get clear outstanding of what does it mean.</li> </ul> <p>Comment in p9:</p> <ul style="list-style-type: none"> <li>• The diagram illustration is not clear – which type of Wakalah to its purpose either for fixed, floating and combination.</li> </ul> <p>Comment in p10:</p> <ul style="list-style-type: none"> <li>• Murabah – Murabahah.</li> <li>• The diagram supposed to illustrate two concepts which are murabahah and bay al-dyn.</li> <li>• Terminologies used for customer/bank/seller are the same. For example: BUYER – it may cause confusion.</li> </ul> <p>Comment in p12:</p> <ul style="list-style-type: none"> <li>• Not clear whether the product is loan/financing? The question does not provide clear illustration. If it is loan, what is <i>Shariah</i> Audit to do with it? (conventional)</li> <li>• Not clear explanation on the new procedures and the previous procedures and how these are significant to contract requirements.</li> </ul> <p>Comment in p13:</p> <ul style="list-style-type: none"> <li>• Grammar errors.</li> </ul> <p>Comment in p17:</p> <ul style="list-style-type: none"> <li>• Spelling of murabahah is not consistent – murabahah or murabaha.</li> <li>• The questions only cover simple products/concepts on Islamic contract. In reality the products are much more complicated. The questions however do not capture that aspect properly.</li> </ul> <p>Comment in p19:</p> <ul style="list-style-type: none"> <li>• Questions are too simple.</li> </ul> <p>Comment in p22:</p> <ul style="list-style-type: none"> <li>• Question 1 (Mark the arguments..... of the conclusion.): Is this instruction? If yes,</li> </ul>

	<p>then it shouldn't be numbered.</p> <p>Comment p25:</p> <ul style="list-style-type: none"> <li>• Ok.</li> </ul> <p>Comment in p27:</p> <ul style="list-style-type: none"> <li>• Would you like to include full-fledge bank which is stand alone and why is subsidiary to conventional?</li> </ul> <p>Comment in p28:</p> <ul style="list-style-type: none"> <li>• This questions seems to be a bit different than the rest of the questions. The information on demographics data normally doesn't asked about seriousness/perception of respondents on something or some issues which seems to be likely in this question.</li> <li>• Some items have (?) – i.e. 2,3,4, and 8 while others without (?).</li> </ul> <p>Comment in p29:</p> <ul style="list-style-type: none"> <li>• Q1 – performing → perform.</li> <li>• Q2 – answering → answer.</li> <li>• Q3 – answering → answer. If answering then no "1" while answering.</li> </ul> <p>Comment in p30:</p> <ul style="list-style-type: none"> <li>• Q7 – question on Mudharabah is Component 1. In component 1 it says Mudharabah only but here Mudharabah Mutlaqah.</li> <li>• Q8 – component 3 → component 1.</li> <li>• Q10 – component 3 → component 2.</li> </ul> <p>Comment in p31:</p> <ul style="list-style-type: none"> <li>• Some questions stated reference to the question number on the specific information required but some are not. For example: Q7-Q10: specific references to no. of component and questions but others are not.</li> </ul> <p>Recommendation in p34:</p> <ul style="list-style-type: none"> <li>• Component 1 to component 5: it would be good if you can briefly state the objective of each components.</li> <li>• Layout of survey: please standardize font used.</li> </ul>
<b>Prof. Dr. Abdul Rahim Abdul</b>	Comment in p3:

<p><b>Rahman</b> – <i>Shariah</i> Committee and Academician</p>	<ul style="list-style-type: none"> <li>• Does spirituality affect which knowledge and ability?</li> <li>• How to prove spirituality after <i>shariah</i> auditing performance?</li> </ul> <p>Comment in p22:</p> <ul style="list-style-type: none"> <li>• How about religiosity?</li> </ul> <p>Comment in p28:</p> <ul style="list-style-type: none"> <li>• It may take more than 1 hour to complete the survey.</li> <li>• I disagree with HSS as it is developed from secular (non-religion) view point. Islamic spirituality is different from HSS. Islamic religiosity or Islamic accountability could be a suitable measure to that <i>shariah</i> audit performance.</li> <li>• Questions on Islamic Financial Module may be a little bit difficult for internal auditors to answer properly. But then it is good to measure their competency in <i>shariah</i>.</li> </ul> <p>Recommendation in p30:</p> <ul style="list-style-type: none"> <li>• Component 1 to component 5: q2.2 (Islamic Accepted Bills)</li> <li>• Layout of survey: it may take at least 1 hour.</li> </ul>
<p><b>Dr. Uzaimah Ibrahim</b> – <i>Shariah</i> Committee and Academician</p>	<p>Comment in p32:</p> <ul style="list-style-type: none"> <li>• Spirituality measurement deem too conventional. Should there is any Islamic spirituality measurement, the study will be more reliable and outstanding since it could reflect the objective the study.</li> <li>• Component 1(a), I believe is reasonable and reliable.</li> <li>• Component 2 (a), should include a few questions (around 5) of high level difficulty if the assumption that the respondents are having basic knowledge of <i>shariah</i>.</li> </ul>
<p><b>Associate Professor Syed Musa Al-Habshi</b> <i>Shariah</i> Committee and Academician</p>	<p>Comment in p1:</p> <ul style="list-style-type: none"> <li>• Need to be more precise based on underlying theory or principles. Spirituality may be contextual and not universal in its conception, practice and interpretation</li> </ul> <p>Comment in p2:</p> <ul style="list-style-type: none"> <li>• Convolved and to be simplified as determining factors on <i>shariah</i> audit judgement/performance</li> <li>• Describe and not consistent with the process?</li> </ul>

	<p>Comment in p3:</p> <ul style="list-style-type: none"> <li>• Empirical determinants without precise semantic reference may cause dissonance.</li> <li>• For empirical purposes use operationally defined terms such as competency, 'attitude' and 'values' to allow precision.</li> <li>• Operationally knowledge as moderating between competency and performance (problem solving/complexity) or attitude as moderating between competency and performance (problem solving/complexity).</li> </ul> <p>Comment in p4:</p> <ul style="list-style-type: none"> <li>• Is there a conflict or incoherent between judgment which is expressed as an opinion based on criteria that discriminates right from wrong as compared to decision making which is making choices between comparable alternatives based on cost and benefit. Hope prior literature has dealt with this to avoid confusion.</li> </ul> <p>Comment in p5:</p> <ul style="list-style-type: none"> <li>• Do you apply Bloom's taxonomy? How would this affect your finding and analysis?</li> </ul> <p>Comment in p15:</p> <ul style="list-style-type: none"> <li>• Rephrase to Shari'ah non-compliance [global change]</li> </ul> <p>Comment in p17:</p> <ul style="list-style-type: none"> <li>• Complexity test with reference to space, time or culture?</li> </ul> <p>Comment in p19:</p> <ul style="list-style-type: none"> <li>• Would this be more consistent with values rather than spirituality?</li> </ul> <p>Comment in p20:</p> <ul style="list-style-type: none"> <li>• Do you confine to logical (syntactic) what about semantic and pragmatic?</li> </ul>
<b>Dr. Mustafa Omar Mohammed –</b>	Comment in p1:

Academician	<p>Conflict of interest as they are appointed by the executive.</p> <p>Comment in p6:</p> <ul style="list-style-type: none"> <li>100% of <u>profit</u> goes to the investor – Change to Loss</li> </ul> <p>Comment in p9:</p> <ul style="list-style-type: none"> <li><i>Shariah</i> <u>compliance</u> – Change to Compliant</li> </ul> <p>Comment in p10:</p> <ul style="list-style-type: none"> <li>Buyer – Change to Seller</li> <li>Buyer – Change to Bank</li> </ul> <p>Comment in p24:</p> <ul style="list-style-type: none"> <li>Sacred – Change to Sacredness</li> <li>find meaning in life by creating close relationship - With what?</li> </ul> <p>Comment in p33:</p> <ul style="list-style-type: none"> <li>As many of the issues were discussed face to face with the researcher. There is no need for written comment. The researcher has documented all my views on the questionnaires during the face to face discussion.</li> </ul> <p>Recommendation in p34:</p> <ul style="list-style-type: none"> <li>Component 1 to component 5: some questions need language editing.</li> <li>Questions tested seems reasonable and appropriate</li> <li>Layout of survey: reasonable of no. of pages and questions.</li> <li>To complete the experiment more than 1 hour estimated by the researcher.</li> </ul>
<b>Assoc. Prof. Dr. Asyraf Wajdi</b> - Academician, <i>Shariah</i> Committee of IFIs	<ul style="list-style-type: none"> <li>Perhaps the researcher would like to touch in depth on spirituality aspects. Refer to Al-Attas's papers and books.</li> </ul>
<b>Mas Sukmawati Abu Bakar</b>	<ul style="list-style-type: none"> <li>Question 14 states that Ijarah instalments shall be recognised in the period they are due, asks</li> </ul>



Associate Director Islamic Research Malaysian Accounting Standards Board	<p>how they shall be presented by the lessee, and presumably expects the respondent to answer “(b) ijarah expense”. In reality, the answer “(d) none of the above” could be equally correct. The reason is because under IAS 17, lease payments under an operating lease “shall be recognised as an expense on a straight-line basis over the lease term ...” which is not necessarily when instalment is due. If a lease requires a lessee to pay two years’ lease payment up-front, the lessee would spread the expense over the two years, and not recognise the entire lump-sum in Year 1 when payment is due.</p> <ul style="list-style-type: none"> <li>• Question 16 gives the example of a five-year <i>Ijarah Muntahia Bittamleek</i> where, for unstated reasons, the customer does not take ownership. In asking what happens to the car, the respondent is expected to pick an answer from (a) to (d) which all involve the bank recognising either “asset acquired for Ijarah” or “fixed asset”. In Malaysia, a bank is unlikely to recognise any physical asset. Most banks keep records of repossessed items for disposal but not recognise them as assets on-balance sheet; once disposed the proceeds would reduce the amount outstanding if any. [I am not sure whether or not the Hire Purchase Act allows the bank to keep any excess over the amount outstanding.]</li> </ul>
<b>Banker</b>	<p>Comment in p13:</p> <ul style="list-style-type: none"> <li>• Line is not clear.</li> <li>• Who present this? (Islamic Liquidity Management Workshop, GIFF 2010).</li> </ul> <p>Comment in p13:</p> <ul style="list-style-type: none"> <li>• Confuse because all are buyers.</li> </ul> <p>Comment in p28:</p> <ul style="list-style-type: none"> <li>• This is a good instrumentation for PhD research. I just concern with the length of this instrument. There are minor improvement needed for this instrument but in overall it is understandable and reasonable to be tested on the Internal auditors in IFIs from Malaysia’s context.</li> </ul> <p>Recommendation in p30:</p> <ul style="list-style-type: none"> <li>• Component 1 to component 5: I just concern with Wakala financing model and all BBA models. How will you determine it as right or wrong if perception across jurisdiction is</li> </ul>

	vary.
<b>Pn. Suhaily Shahimi</b> – PhD Student	<p>Comment in p26:</p> <ul style="list-style-type: none"> <li>• Spirituality scale should be put in front since this is the most important part as of your contribution of study.</li> <li>• Rearrange the sections/components.</li> <li>• Start with likert scale – spirituality scale (new variable being put in). Next with case study and last with objective questions. Reason to avoid any demotivation to answer the first part if started with case study.</li> </ul>
<b>Lim Ying Zhee</b> – PhD student	<p>Comment in p20 and p21:</p> <ul style="list-style-type: none"> <li>• Font type.</li> </ul> <p>Component in p26:</p> <ul style="list-style-type: none"> <li>• Can the component of ‘spirituality’ be shifted to the earlier part?</li> <li>• Time allocated might be too short to finish the test.</li> </ul>
<b>Isni, PhD student</b> – PhD student	<p>Comment in p26:</p> <ul style="list-style-type: none"> <li>• Please consider time limit for the respondents if the respondents feel tired, could we assess the “knowledge”?</li> </ul>

## APPENDIX F: Analysis - Structured Analysis of Questions and Answer Schema

### QUESTION 2.1 – JUDGMENT ON *SHARIAH* NON – COMPLIANCE ISSUES

#### Level of complexities – Low

#### 2.1 (a) *Shariah* audit for Islamic Home Financing

Identify and discuss each case/ whether the practice is *Shariah* compliant or not.

The internal auditor is required to conduct *shariah* audit on the structure of Bay Bithaman Ajil (BBA) and he found that the contract is operated as follows :

1. The customer identifies a house he wishes to buy from a housing developer. At this stage, the customer normally enters into a sale and purchase agreement with developer and pays the deposit (which at this stage, the customer is deemed to have a beneficial ownership of the house)
2. The customer then approaches the bank for financing the remaining balance. The bank purchases the requested house and pays in full – which will be disbursed directly to the housing developer.
3. The bank then sells the house to the customer at a marked – up price and the customer will pay the sale price on an installment.
5. The selling price of the house sold to the customer would be fixed at a profit rate known as ‘the ceiling profit rate’. The difference between the ceiling rate and effective variable rate (normally reflective of the movement of the market interest rate) is the amount of *ibra*’ (rebate), which is to be returned to the customer at the end of each month. However, if the market interest rate exceeds the contracted ceiling rate, the Islamic bank would adjust their effective rate above the ceiling rate after getting an approval from *Shariah* committee.

The abovesaid contract using BBA structure is (Please tick accordingly) :

(i) *Shariah* Compliance

☐

Justifications

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(i) *Shariah* Non - compliance. (If the contract is *shariah* non - compliance, please state your

☐

### QUESTION 2.2 – JUDGMENT ON INTERNAL AUDIT ISSUES

#### Level of complexities – Low

#### 2.2 (a) Internal audit for Conventional home financing

Identify and discuss each case/ whether violates the internal auditing practices or not

Adam, an internal auditor of the BERSATU BANK was aware that one of the housing construction company stated in one of the customer housing loan application form is facing precarious financial condition. He knew this would cause a problem to the customer if the bank proceeds with the loan. However, due to the issue is not within his audit scope (as the risk is not related to the inherent risk of borrowers – ‘repayment capacities’), he chooses not to mention in his audit report and reported the finding satisfactorily.

The abovesaid scenario is (Please tick accordingly) :

(i) Violate internal audit practices ( Please state your justifications)

Justifications

☐


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(ii) Non – violation of internal auditor practices. ( Please state your justifications)

Justifications

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justifications)

Justifications

Answer Scheme :

**Shariah Non-Compliance due to :**

- if the market interest rate exceeds the contracted ceiling rate, the Islamic bank would adjust their effective rate
- Consist of element of Gharar- violate Islamic principles
- Without customer consent – even though the *shariah* committee give their approval
- Should re-new the contract if the bank make any adjustments to the ceiling rate

Answer Scheme :

**Violation of internal audit practice due to :**

- Reflect the independence and objectivity of internal auditors
- Internal auditors must have an impartial, unbiased attitude and avoid any conflict of interest – as he aware the potential risk
- Must practice/perform with due care and proficiency
- To give assurance that the bank is practicing effective internal control
- To add value for management and shareholders
- Can increase Credit risk and financial risk to the bank
- Should include the finding in his audit report and let the management or audit committee to decide.
- In the BNM Guidelines Min Audit Standards Para 2.3.1 stated that, the most significant risk involved in credit operations is the credit risk of a borrower. The potential inability of the borrowers to meet their repayment obligations will have an adverse impact on the banking institution's profitability, liquidity and solvency

Analysis of the question :

**Shariah audit for Islamic banking product**

In terms of :

Presentation:

Case study

Content of the case :

Islamic Housing facility issue

Number of task required:

1 (whether shariah compliance or not)

Statement which lead to non-compliance 1 statement (statement in red color)

Statements of ambiguity

1 statement (statement in green color & underlined)

**Internal audit for conventional banking product**

Case study

Conventional housing loan issue

1 (whether violate the internal audit practice or not)

1 statement (statement in red color)

1 statement (statement in green color & underlined)

\*\*\* To make sure the question is parallel with the Islamic housing loan question, the study has designed one question which requires the internal auditor to perform normal internal audit - on conventional housing loan - using BNM's Guidelines -Minimum Audit Requirements for Financial Institutions.

### 2.1 (b) *Shariah* audit for Islamic Credit Card

Another important and popular segment of Islamic retail financing is through Islamic credit card facilities. The most common structures of Islamic credit cards are ‘*inah* based, *tawarruq* based and *Ujrah* based. The *shariah* internal auditor is responsible to audit the structure of the product which is based on *Ujrah* concept. Please certify whether the following structure is *shariah* compliance or not.

1. The customer applies for a credit card from a bank
2. The bank provides a credit card account based on the customer’s credit worthiness.
3. The customer pays the merchants for the goods from a credit card account.
4. The bank provides Qard to the customer for the purchased goods
5. The customer pays the purchase amount and the fee to the bank. The customer then will be charged a fixed fee structure such as a monthly service fee which is based on the actual cost of managing the transaction and an annual service fee based on the benefit rendered by the bank. The bank is allowed to earn profit from the service fee and also commissions from the merchants (if any).

The abovesaid *Ujrah* structure contract is (Please tick accordingly) :

(a) *Shariah* Compliance ( please state your justifications)

Justifications

☐

(b) *Shariah* Non - compliance . (If the contract is *shariah* non - compliance, please state your justifications)

Justifications

☐

### 2.2 (b) Internal Audit for Conventional Credit Card

According to a guideline on minimum audit standards for internal auditor of financial institutions issued by Bank Negara Malaysia (BNM), among the audit coverage need to be performed by the internal auditor is to ensure effective credit monitoring system such as i.e. credit policies and procedures are adequate, creditworthiness and repayment capacity of the borrowers are carefully appraised and evaluated prior to the approvals of credit facilities, management review of credit exposures to credit cardholders is carried out periodically and in a timely manner and no credit facilities are granted for self-serving purposes that is, credit facilities to nominees of the directors and officers of the banking institutions.

However, during the internal audit process, the internal auditor found that one director of the bank is being extended his credit card limit and excess of the single customer limit as being stipulated by BNM. The Head of Credit Card department justified that the director is entitled to get an extension of his credit limit as a part of his entertainment allowance. The extension of his credit card limit also been approved and permitted by Board of director. As such, the internal auditor chooses not to mention in his audit report and reported the finding satisfactorily.

The abovesaid scenario is (Please tick accordingly) :

(a) Violate internal audit practices ( please state your justifications)

Justifications

☐

(b) Non – violation of internal auditor practices. ( please state your justifications)

Justifications

☐

**Answer Scheme :**

**Shariah Compliance due to :**

- Follows all *shariah* requirements as they charged a fixed fee structure such as monthly fee
- Administration fees is allowable according to *shariah* and its based on the cost managing the transaction
- Charging annual service fee is also reasonable and allowable as it based on the benefit rendered by the bank – which must be agreeable by the *Shariah* committee

**Answer Scheme :**

**Non - Violation of internal audit practice due to :**

- Credit limit as a part of his entertainment allowance.
- The extension of the credit card limit is been approved and permitted by Board of director

**Analysis of the question:**

In terms of :

**Shariah audit for Islamic banking product**

**Internal audit for conventional banking product**

Presentation/structure:

Case study

Case study

Content of the case :

Islamic credit card issue

Conventional credit card issue

Number of task required:

1 (whether shariah compliance or not)

1 (whether violate the internal audit practice or not)

Statement which lead to non-compliance

None

None

Statements of ambiguity

3 statements (statements in green colour & underlined)

3 statement (statement in green colour & underlined)

## ANSWERS FOR KNOWLEDGE

### COMPONENT 3

<u>Islamic Banking Knowledge - MCQ</u>	<u>Internal Audit Knowledge - MCQ</u>
1. B	1. D
2. B	2. D
3. C	3. D
4. B	4. C
5. B	5. D
6. C	6. B
7. B	7. C
8. C	8. B
9. B	9. B
10. C	10. D

**Instructions:** Below is a series of statements designed to measure spirituality. Please state the extent of your agreement by **circling** on the following scale;

1 – Very untrue of me	2 – Untrue of me	3 – Somewhat untrue of me	4 – Neutral	5- Somewhat true of me	6.True of me	7. Very true of me
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<b>HUMAN SPIRITUALITY (WHEAT, 1990)</b>									
	STATEMENTS	SCALE							
1	I experience a sense of the sacred in living things.	1	2	3	4	5	6	7	
2	I experience a sense of connection with other living things.	1	2	3	4	5	6	7	
3	I set aside time for personal reflection and growth.	1	2	3	4	5	6	7	
4	I find meaning in life by creating close relationship.	1	2	3	4	5	6	7	
5	I experience a feeling of being whole and complete as a person.	1	2	3	4	5	6	7	
6	I listen closely when people tell me their problems.	1	2	3	4	5	6	7	
7	I read articles on health and inner peace.	1	2	3	4	5	6	7	
8	I share my private thoughts with someone else.	1	2	3	4	5	6	7	
9	I put the interests of others before my own when making a decision.	1	2	3	4	5	6	7	
10	I actively seek a sense of purpose in my life.	1	2	3	4	5	6	7	
11	I feel guilty when I don't tell the truth.	1	2	3	4	5	6	7	
12	I enjoy guiding young people.	1	2	3	4	5	6	7	

**Instructions:** Below is a series of statements designed to measure spirituality. Please state the extent of your agreement by **circling** on the following scale;

1 – Strongly Disagree	2 – Disagree	3 – Somewhat Disagree	4 – Neutral	5- Somewhat agree	6. Agree	7. Strongly Agree
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<b>HUMAN SPIRITUALITY SCALE</b>									
	STATEMENTS	SCALE							
1	I value the relationship between all living things.	1	2	3	4	5	6	7	
2	Being truthful is important to a successful life.	1	2	3	4	5	6	7	



3	We should give to others in need.	1	2	3	4	5	6	7
4	It is important that we be sensitive to pain and suffering.	1	2	3	4	5	6	7
5	It is important that each of us find meaning in our lives.	1	2	3	4	5	6	7
6	All forms of life are valuable.	1	2	3	4	5	6	7
7	I feel sad when I see someone else in pain.	1	2	3	4	5	6	7
8	I find the world of nature is boring.	1	2	3	4	5	6	7
9	I believe that ritual activity (i.e. Prayer, meditation) is important for my spiritual life.	1	2	3	4	5	6	7
10	I always visit place of worship (i.e. Mosque, temples, church and <i>kuil</i> ) to perform my ritual obligation.	1	2	3	4	5	6	7
11	I believe and read my Holy Book (Holy Quran, Bible, Vedas and Sutras and etc.).	1	2	3	4	5	6	7
12	I spent time to engage in my spiritual practice.	1	2	3	4	5	6	7
13	I committed to my religion (i.e. Islam, Christian, Buddha, Hindu and etc.).	1	2	3	4	5	6	7

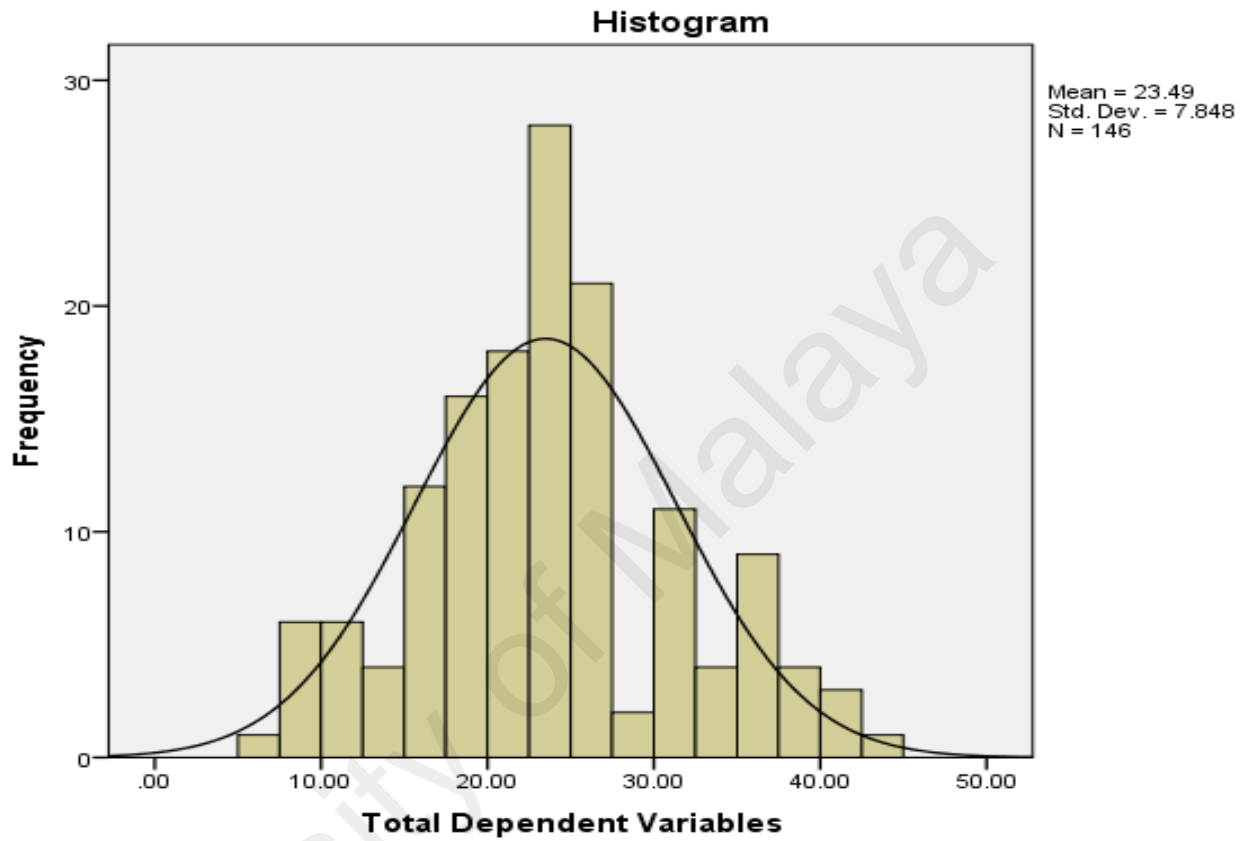
## COMPONENT 4

**Instructions:** Below is a series of statements designed to measure the IIA professional code of ethics. Please state the extent of your agreement by **circling** on the following scale;

1 – Not at all important	2 – Low important	3 – Slightly important	4 – Neutral	5- Moderately important	6. Very important	7. Extremely important
ETHICS – (Ziegenfuss and Singhapadki, 1994)						
	STATEMENTS					SCALE
1	Members and CIAs shall exercise honesty, objectivity and diligence in the performance of their duties and responsibilities.					1 2 3 4 5 6 7
2	Members and CIAs shall exhibit loyalty in all matters pertaining to the affairs of their organization or to whomever they may be rendering a service. However, members and CIAs shall not knowingly be a party to any illegal or improper activity.					1 2 3 4 5 6 7
3	Members and CIAs shall not knowingly engage in acts or activities which are discreditable to the profession of internal auditing or their organization.					1 2 3 4 5 6 7
4	Members and CIAs shall refrain from entering into any activities which may be in conflict with the interest of their organization or which would prejudice their ability to carry out objectively their duties and responsibilities.					1 2 3 4 5 6 7
5	Members and CIAs shall not accept anything of value from an employee, client, customer, supplier or business associates of their organizations which would impair or be presumed to impair their professional judgement.					1 2 3 4 5 6 7
6	Members and CIAs shall undertake only those services which they can reasonably expect to complete with professional competence					1 2 3 4 5 6 7
7	Members and CIAs shall adopt suitable means to comply with the standards for the Professional Practices of Internal Auditing					1 2 3 4 5 6 7
8	Members and CIAs shall be prudent in the use of information acquired in the course of their duties they shall not use confidential information for any personal gain nor in any manner which would be contrary to law or detrimental to the welfare of their organization.					1 2 3 4 5 6 7
9	Members and CIAs, when reporting on the results of their work, shall reveal all material facts known to them which, it not revealed, could either distort reports of operations under review or conceal unlawful practices.					1 2 3 4 5 6 7
10	Members and CIAs shall continually strive for improvement in their proficiency and in the effectiveness and quality of their services.					1 2 3 4 5 6 7
11	Members and CIAs, in the practice of their profession, shall be ever mindful of their obligation to maintain the high standards of competence, morality and dignity promulgated by the Institute. Members shall abide by the <i>Bylaws</i> and uphold the objectives of the Institute					1 2 3 4 5 6 7

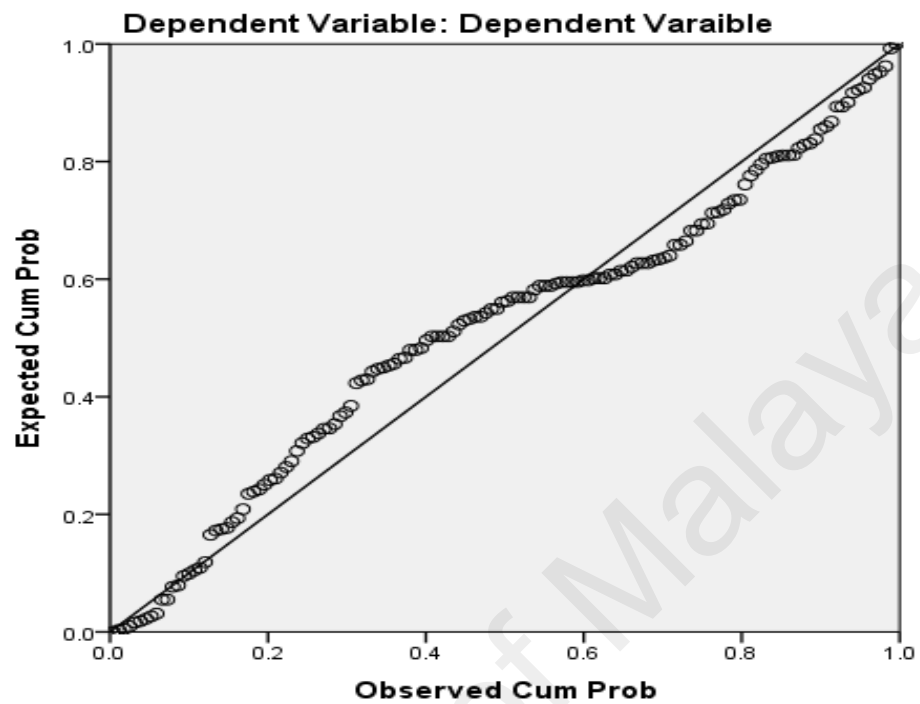
**APPENDIX G: Histogram, Normal P-P Plot of Regression Standardized Residual and Scatter Plot**

**Histogram**



**Normal P-P Plot of Regression Standardized Residual**

**Normal P-P Plot of Regression Standardized Residual**



**Scatterplot**

