# Muslims View of God as a Predictor of Ethical Behavior in Organizations: Scale Development and Validation

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**Abstract**

While there is a widespread acceptance of the link between religiosity and ethics, there is less certainty how this influence occurs exactly, necessitating further research into these issues. A main roadblock to our understanding of this influence from an Islamic perspective is the absence of a validated measurement tool. The purpose of this study therefore is to develop a Scale of Muslims' Views of Allah (SMVA). This article discusses how the SMVA was developed through the following five steps: (1) establishment of content and face validity; (2) application of a cognitive interviewing technique to pretest the SMVA with sixteen participants; (3) pilot testing of the SMVA with twelve participants; (4) administration of the SMVA online to marketing and management professionals (n = 472) via a multi-stage cluster sampling process to verify the scale's reliability and validity; and (5) testing criterion-related validity. The results showed that the newly constructed 13-item scale had adequate psychometric properties. Finally, the implications for organisations, limitations and future research are discussed.

**Keywords**

**Introduction**

While historically morality and religion have grown up together in close union (Everett 1990), the relationship between the view of God and ethics is a tenuous one (Weaver and Angle 2002) as there is a degree of uncertainty how the personal view of God exactly influences ethical behaviours.

Many studies in psychology, criminology and theology have suggested that an individual's view of God is a significant predictor of behaviour both for religious and non-religious people (Bader and Froese 2005; Buchko and Witzi 2003; Evans and Adams 2003; Froese and Bader 2010; Shariff and Norenzayan 2011; Unnever et al. 2005; Unnever et al. 2006). Surprisingly, there is a striking lack of studies linking individual views on God to ethical behaviour in the workplace within organisational research, notwithstanding some notable exceptions (Walker et al. 2012; Hardesty et al. 2010). Moreover, these exceptions solely concern themselves with religious beliefs derived from Western Christianity, and the linking of these beliefs to individual workplace behaviours and ethical outcomes. Empirical inquiries describing and predicting how other religious beliefs and views on God can influence ethics in a non-Western context and from other religious perspectives are scarce. Specifically, studies that link a Muslim individual's view of Allah to ethical behaviour in organisations are missing (Beekun and Badawi 2005; Tracey 2012). However, Islam is one of the world's fastest growing religions (Pew Research Center 2015), a major and fast-growing religion in America and Europe (Esposito 2015) that has become a key public and political concern in recent years (Pew Research Center 2013; Ramadan 2009). Given the globalised nature of business and the increase of religious diversity within the workplace, there is an urgent need for empirical research linking the role that core Islamic beliefs and views on Allah play on a Muslim's ethical behaviour in organisations (King 2008; Smith 2008; Tracey 2012).

A basic prerequisite for conducting such empirical work is finding (or developing) an adequate measurement instrument, which may not exist at present. Such an absence may be a consequence of the inherent difficulties of measuring Muslims' view of God, including the taboo nature of the topic; the problems associated with subjecting religious beliefs to scientifically rigorous investigation; or of the thought that religion is too far removed from the activities of the organisations to form the basis for empirical studies explaining ethical behaviours at work (Chan-Serafin et al. 2013; King 2008; Tracey 2012). Specifically, the existing psychometric scales concerned with views of God have been developed and designed for use with practising Christians and reflect the tradition of Western Christianity. However, on close examination concerns exist about the overall validity of applying and extending such concepts and measuring tools to study Muslim populations (González 2011). These concepts and tools are embedded in confounding variables such as religious language, religious doctrine and practice, and religious values, rendering them unsuitable for use with these populations (King and Crowther 2004).

The importance of instruments that have been validated with other, non-Christian groups grows (Kapuscinski and Masters 2010). Accordingly, the purpose of this article is to propose a process for development and empirical validation of the Scale of Muslims' Views of Allah (SMVA) guided by a new integrative spirituality-based model (ISBM) that the author/s have developed (forthcoming). The ISBM combines the notions of view of God linked to theoretical claims and empirical discoveries in neurocognitive research and moral psychology, drawing on dual-process theories to provide insight into our moral decision-making processes. Generally, dual-process theories suggest two different modes of thinking, referred to here as System 1 and System 2 (Cushman et al. 2006; Damasio 2008; Kahneman 2011; Kahneman and Frederick 2002; Lieberman et al. 2002; Nolte 2002; Reynolds 2006; Stanovich 1999; Stanovich and West 2000). System 1 refers to the intuitive ethical decision-making process, while System

2 refers to the rational process (Bazerman and Gino 2012; Evans 2008; Greene 2007; Haidt 2001; Warren and Smith-Crowe 2008; Weaver et al. 2014). We believe that SMVA is essential in order to test ISBM and to be utilised in business and organisational research to assess the impact of Islamic spiritual beliefs on ethical behaviour.

In doing so, the study is expected to make distinct contributions to existing literature in several ways. First, SMVA will contribute to show how different internalisations of God (views of God) explain the different influences of spiritual beliefs and religiosity on System 1 and System 2 models of ethical decision making. Second, and relatedly, ISBM proposes that spiritual beliefs evolve over time, leading to different internalizations of view of God. Thus, ISBM incorporates the idea of view of God as emerging at the intersection of deeply embedded, unconscious moral intuitions (System 1) and conscious deliberate reasoning (System 2). We argue that this intersection is a key factor influencing religious individuals' ethical decision making. Accordingly, SMVA contribute to explain such mechanism by which Muslim individuals interpret spiritual beliefs differently by describing their dissimilar views of God, which lead them to practice religion uniquely affecting their ethical outcome in organizations differently. Third, to the best of our knowledge, this paper is the first to develop a scale related to the Muslim's view of Allah embedded in the Muslim worldview and Quran-based concepts, which are essential to fully capture the uniqueness of Islamic spiritual beliefs and its potential influence on Muslims ethical behaviours in the workplace. Fourth, to date, this article is unique in providing a measurement tool that may link Islam, a less explored faith, to ethical behaviour in organisations, thereby expanding understanding beyond traditional Western Christian perspectives. It offers a more nuanced view of the Islamic spiritual beliefs: not as a monolithic body of creeds but as theologically diverse faith open to interpretations that could have different impacts on ethical behaviour in the workplace. Fifth, using SMVA may provide evidence on whether specific interpretations of Islamic spiritual beliefs are partly responsible

for unethical behaviour in organisations. This may help explaining the normative gap between Islam's ethical teachings and business practices in some Muslim countries, where corruption proliferates (see Transparency International's Corruption Index 2016).

Such knowledge therefore is of potential practical importance for managing unethical behaviour when conducting ethical training in different business sectors in Muslims countries. Moreover, SMVA may provide a valuable measurement tool for international companies operating in the regions where Islamic beliefs are dominant.  In addition, companies operating in Western countries where Muslims are one of the largest religious groups may use this scale as a source of useful information for ethics training and education. Lastly, SMVA may be useful in other variety of lines of research (e.g., psychology, criminology, education and healthcare).

The remainder of this paper is organised as follows.  First, we review related literature, identifying gaps and weaknesses in relation to the view of God scales and ethics.  Second, we introduce the theoretical framework and research methods used to design the scale.  We then report and analyse our empirical results.  Finally, we summarize our conclusions and discuss further research and the implications and limitations of the study.

### Literature Review and Rationale for the Development of SMVA

Many believers reference their God as a key role model for their behaviour (Froese and Bader 2007, 2010) while an individual's connection to, and views related to, Allah or God (the sacred) are essential parts of many religions and the basis of an adherent's spirituality (Smith, 2009). Specifically, an individual's view of God provides us with a straightforward proxy for understanding different interpretations individuals hold regarding beliefs in the divine (Bader and Froese 2005; Buchko and Witzig 2003; Evans and Adams 2003; Froese and Bader 2004; Hardesty et al. 2010; Kurt et al. 2016; Shariff and Norenzayan 2011; Walker et al. 2012). An

individual's view of God therefore constitutes the ontological basis of a person's sense of self and society (Bader and Froese 2005), which might in turn influence his/her attitudes and behaviours in work and business situations in organisations. However, core religious beliefs or spiritual beliefs (defined as an individual's view of, and relationship with God independent of active participation in organised religion) collectively form one key variable yet to be adequately studied in relation to ethical outcomes (Parboteeah et al. 2008). This suggests that a better understanding of how individuals view God can build a greater knowledge of how religiosity and spiritualty can affect ethical behaviour within organisations. However, to date only two studies (Walker et al. 2012; Hardesty et al. 2010) have examined the relationship between a person's view of God and its impact on ethical judgment and conscientiousness at work. Both studies have focussed exclusively on Christian samples and relied on notions derived from a Judeo-Christian perspective that may not apply to other religions.

The scarcity of this type of research makes it particularly important to examine this issue within non-Western contexts and from a variety of religious views to better understand the connections between views of God and ethical decision making and behaviour in organisations. In particular, empirical studies that link views of God to ethical behaviour in organisations from an Islamic perspective are missing (Beekun and Badawi 2005; Tracey 2012); such work is scarce in spite of the clear need (Ali and Al-Aali 2014; Beekun and Badawi 2005; Chan-Serafin et al. 2013; author/s forthcoming; Tracey 2012).

Our review has identified the existing psychometric scales concerned with views of God, which have been developed and designed for use with practising Christians and reflect the tradition of Western Christianity. The Shariff and Norenzayan (2011) scale was developed to examine the relationship between individual views of God as "positive" (e.g., loving, compassionate) or "negative" (e.g., punishing, vengeful) and cheating behaviour in an anonymous setting. Other religiosity scales have been designed for research and clinical

applications for individuals. These include the God Image Inventory and God Image Scales (Lawrence 1997) and the scale developed by Ironson et al. (2011), which utilises a subset of 12 items related to views of God from interviews in patients with cardiovascular disease, cancer, or HIV/AIDS. Moreover, Baylor University's Institute for Studies of Religion developed four images of a God matrix, varied across different denominations and religious traditions within Christianity. These images comprise the Authoritarian God, the Benevolent God, the Critical God, and the Distant God, resulting in a 2 × 2 matrix of anger and engagement. According to the Baylor study (p.26), God's level of engagement reflects "the extent to which individuals believe that God is directly involved in worldly and personal affairs." By contrast, God's level of anger reflects "the extent to which individuals believe that God is angered by human sins and tends towards punishing severe and wrathful characteristics." This scale was developed to examine the relationship between the image of God held by American citizens and their moral and political attitudes (Baylor Institute for Studies of Religion 2006). However, applying and extending such Western Christianity's concepts and measuring tools to study Muslim populations is raising questions about its validity (Hodge 2003; González 2011). These concepts and tools are embedded in confounding variables such as religious language, religious doctrine and practice and religious values, rendering them unsuitable for use with Muslim populations (King and Crowther 2004).

One key reason why existing scales are inappropriate for Muslim populations relates to the use of language. As previously highlighted, most of these scales employ non-Islamic language in the phrasing of scale items; they base their operational definitions on non-Islamic doctrine and are imbued with non-Islamic religious and philosophical concepts. For example, in the image of the God matrix developed by Baylor University's Institute for Studies of Religion, four images of God were described: (1) the Critical God, (2) the Authoritarian God, (3) the Benevolent God, and (4) the Distant God. The fourth image, for instance, cannot be

used with a Muslim population, because Muslims do not perceive God to be distant but rather understand Him as taking part in their everyday affairs.

These types of differences can lead to theoretical and methodological problems (Jana-Masri and Priester 2007). Moreover, linguistic differences between cultures can lead to semantic inconsistencies when translating research instruments because of cultural and religious differences as well as differences in literal meanings (De Cremer et al. 2010). To provide an example, a more recent study by Schneider et al. (2011) measured the religiosity of Muslims and Christians in Germany and Turkey to compare consumer ethical behaviours using the Religious Orientation Scale (ROS) of Allport and Ross (1967). However, this scale was specifically designed to be used in Western Christianity contexts - the strict division between extrinsic-intrinsic religiosity greatly reduces its usefulness for the evaluation of other religions, and even for other denominations within Christianity (Cohen et al. 2005; Graham and Haidt 2010; Hill 2005). Furthermore, many international studies have utilised and merely extended Christian measures to study Muslim individuals by replacing the word "church" with "mosque," "God" with "Allah," or "Jesus" with "Mohammed." When used to measure the level of a Muslim's religiosity, such adapted scales could lead to invalid findings that differ from study to study or even contradict each other.

Secondly, values that are expressed as measures in scales not specifically designed to reflect Islam may not be consistent with the values and principles of Islamic philosophy and religious beliefs. It may therefore be difficult to fully capture the uniqueness of Islamic religiosity (Sue 1992) given that Islamic theological concepts differ from those of Christianity.

In particular, the main theological concept concerning the nature of God differs between Islam and Christianity. From an Islamic point of view, God is the only one God in the most basic, simple, and elementary meaning of the word. God has no children, no parents, and no equal. In Islam, God is known by the name "Allah" and more than ninety-nine other venerated

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names, such as "The Watchful One" and "The Merciful." Furthermore, Allah has many attributes, such as "Allah is strict in torment" and "Allah is severe in punishment." It is thus obligatory for a Muslim to believe in all of Allah's specific names and attributes found in Islamic teachings. Each name and attribute may nourish a kind of consciousness and guide a Muslim's behaviours. Thus, using existing Christian-based measures to study Muslim individuals' beliefs may also lead to social desirability biases. For instance, existing scales such as the Shariff and Norenzayan (2011) View of God Scale provide lists of adjectives describing God and ask respondents to rank each adjective from what they feel best or least describes God. These scales are not adequate for understanding views of God from an Islamic viewpoint because a Muslim cannot rank the attributes of God. More specifically, the View of God Scale by Shariff and Norenzayan (2011) asks participants to indicate to what degree (with 1 signifying "not at all characteristic" and 7 signifying "completely characteristic") one believes traits like "loving" or "punishing" apply to his or her God. If we apply this to a Muslim they will probably similarly rate both traits (7, for "completely characteristic"), as it is compulsory for Muslims to have the same absolute belief for all of Allah's names and attributes. Therefore, measuring a Muslim's view of Allah/God using direct questions carries potentially high social desirability biases and self-deceptions that could lead to unreliable findings.

It has been suggested that existing religious scales are based on a set of assumptions grounded in the values and religious beliefs of particular religious groups (Moberg 2002). Therefore, a one-to-one translation or rewording of a scale will only result in outcomes with considerable bias because of the beliefs and assumptions inherent in any scale originating from one intended for use with Christianity. Such a scale used in Muslim individuals will contradict Islamic views of God. Consequently, many studies acknowledge the need for better measures of religiosity with a non-Christian culture (González 2011). According to King and Crowther (2004, p.98) "there should be a specific set of items or measures only for those who self-

identify as Muslim." The need to develop a scale related to the Muslim's view of Allah embedded in the Muslim worldview and Quran-based concepts becomes essential to fully capture the uniqueness of Islamic religiosity.

As mentioned earlier, Muslims typically affirm a culturally distinct value system (Graham et al. 2010). Islam provides adherents with a unique way of life that represents a distinct worldview differing from Western Christianity (Smith 2003). However, while various contextual variables affects understandings of Islam (Dwairy 2006) such as cultural heritage, educational status, interpretative tradition, nation of origin, and many other factors can shape beliefs and values at the level of Muslim individual, a number of tenets are widely affirmed among Muslims. At the heart of the Islamic value system is belief in God/Allah (Kobeisy 2004). Allah is the omniscient Creator. Accordingly, Muslims are expected to carry out Allah's will rather their own. Indeed, the word Islam means submission to the will of Allah. This belief in Allah form the core of a wider Islamic belief system that typically includes other values, such as work ethics (Husain and Ross-Sheriff 2011; Hardesty et al. 2010; Walker et al. 2012).

In light of the distinctive Islamic value system, the importance of using measures that have been validated with Muslims population has been widely noted (Ghorbani et al. 2007; Jana-Masri and Priester 2007; Ji and Ibrahim 2007; Kapuscinski and Masters 2010; King and Crowther 2004). Individuals perceive reality through their respective worldviews. These worldviews shape beliefs and practices. In turn, they influence how people interpret and respond to the questions that comprise specific measures (De Klerk et al. 2009). The importance of culturally relevant measures is underlined by the size of the Muslim population. The Pew Research Centre (2015) places Islam at one of the world's fastest growing religions, a major and fast-growing religion in America and Europe (Esposito 2015) that has become a key public and political concern in recent years (Pew Research Centre 2013; Ramadan 2009).

In keeping with Muslims growing, some religion measures have been validated with Muslim sample (Abu-Raiya and Hill 2014). A case in point is the Islamic Behavioural Practices scale (Jana-Masri and Priester 2007). As the name implies, this measure taps common religious beliefs and practices within Islam. Similarly, both the belief and the practice dimensions are part of all existence Islamic scales such as Muslim Religiosity Personality Inventory (MRPI) by Krauss et al.; 2006, and Short Muslim Practice and Belief Scale (SMPBS) by Al Marri et al. (2009), and several others (see, Berghammer and Fliegenschnee, 2014, p.91, for review). Scale that measures spiritual beliefs is missing. Spiritual belief is an individual's worldview represented by the different views of God. In other words, spiritual beliefs is an individual's convictions about self, others, and the world along with the values regarding moral conduct derived from these convictions.

**Religiosity and Spirituality**

Increasingly, however, efforts have been made to differentiate spirituality from religiosity (Pargament 2013). Conventionally, religiosity and spirituality have been perceived as identical constructs. Indeed, people use the two terms in an essentially interchangeable manner (Zinnbauer et al. 1997). However, scholars tend to conceptualize spirituality and religiosity as overlapping but distinguishable entities (Kapuscinski and Masters 2010). In short, religiosity is typically referred to held beliefs and the practices of those beliefs (Berghammer and Fliegenschnee 2014). Conversely, spirituality refers to one's subjective relationship with God, or transcendent dimension of existence (Hodge and Zidan 2015).

Spirituality plays a central role in the lives of many Muslims (Hall 2012). As implied above, submission to Allah is perhaps the most important tenant in Islam (Badawi 2001; Greeley 1997; Kobeisy 2004). The way in which individuals view Allah may strongly influence the value systems and traditions in which individuals become socialised. These systems and

traditions can help shape the psychological processes of individuals, which form part of a person's sense of self and influence his/her attitudes and behaviours. Even though individual Muslim's relationship with God can and does vary, Islam posits that Allah's will should guide and direct Muslims' lives (Badawi 2001). In spite of the importance of spiritual beliefs in the lives of many Muslims, there is no instrument that has been developed from Islamic perspective and validated with Muslim population. Therefore, the present study aims to develop and validate an Islamic-theory based, rigorously constructed, valid and reliable Scale of Muslims' Views of Allah (SMVA).

**Conceptualisations of an Islamic View of God**

As indicated earlier, religious individual views of God can provide us with a straightforward proxy for understanding different interpretations individuals hold regarding spiritual beliefs in the divine, and so how religiosity can affect ethical behaviour within organisations. Belief is the core dimension of individual religiosity, reflecting the ideological aspect of religion (Faulkner and De Jong 1966), and is considered a prime indicator of an individual's religiosity (Angelidis and Ibrahim, 2004; Cornwall et al. 1986). A central part of the belief dimension for people is the spiritual belief in God (Greeley 1997), which is considered to be the most central religious belief that one can hold and the foundation upon which other religious beliefs are built. Thus, understanding how an individual views God and how God is evoked in particular situations can provide us with a meaningful snapshot of one's religious beliefs and how these could influence individual ethical behaviour (Froese & Bader, 2008). The significance of believers' view of God in understanding their behaviours has been long noted by sociologists (Glock and Stark 1965; Greeley 1991, 1997; Stark and Glock 1968).

Views of God are depicted as theological narratives that influence the thoughts and attitudes of persons from a wide range of religious as well as non-religious backgrounds

(Greeley 1997). In understanding conceptualisations of the view of God construct, two approaches - *the God concept* (a theological perspective) and *the God image* (a psychological notion) - have been utilised in this article (and in other studies by the author/s) to demonstrate the complexity involved in understanding people's beliefs and experiences of God (Hoffman et al. 2005).

The first approach, *the God concept*, is a person's cognitive understanding of God. This tends to be based on what a person learns about God through cognitive means (such as through formal religious education), and it develops primarily through what a person is taught (Bader and Froese 2005; Gorsuch 1968; Gorsuch et al., 1996). The second approach taken by researchers, *the God image*, has focused on a person's emotional experience of God; in other words, on a person's experiential understanding of God or on how a given individual imagines God to be (Kaufman 1981; Lawrence 1997). This is transferred via affective attachments to important others (e.g., parents) and social norms (e.g., community values). The psychological conceptualisation of God was developed by Ana-Maria Rizzuto (1979) primarily based on Freud's conception of religion and God (Freud 1961). It has been argued that the God image is primarily affective or emotionally based (Rizzuto 1979) and often remains undifferentiated as an unconscious process that emerges from a child's relationship with their parent (Rizzuto 1979; Spero 1992). However, it is now more commonly recognised that other relationships and experiences, such as upbringing and the influence of culture and social experience impact the development of the God image (Gibson 2008; Hill and Hood, 1999; Hoffman et al. 2004, 2008;Tanner 1997). While the God image develops in parallel to the God concept, the two constructs are concurrently arrived at through different psychological and interpersonal processes (Moriarty and Hoffman 2014).

Moreover, arguing that the God image and concept develop largely independently with little influence upon each other is an oversimplified view of the processes by which these

constructs are arrived at. Conscious and unconscious processes (both cognitive and emotional) have direct and indirect influences upon each other (Moriarty and Hoffman 2014), suggesting that while varying degrees of independence may exist among these constructs, complete separation of them will never exist (Moriarty and Hoffman 2014). In other words, cognitive and emotional processing of concepts and conscious and unconscious processes have direct and indirect influences upon each other (Moriarty and Hoffman 2004). It is essential to emphasise here that we do not claim to measure a Muslim's image of God fully independent or separate from a Muslim's individual concept of God. Our aim is rather to design an instrument capturing an integrative Muslim's view (including both the image and concept) of Allah.

From an Islamic perspective, we know little about how different understandings of God emerge. Recently, (author/s) developed an integrative spiritualty-based model (ISBM) describing different views of God in Islam, although ISBM is presumed to be universal across religions and cultural contexts, and to guide empirical research on the links between religiosity and spiritualty, and ethical judgment and behaviors in organisations. Specifically, the ISBM conceptualises different spiritual relationships of Muslims' with God as mediated by religious practice, emotion and knowledge, affect their ethical judgment within organisations. In this model, the author/s argue that deeply held spiritual beliefs in Allah's Names and Attributes and different Islamic interpretations may help shape a Muslim individual's view of Allah. The view itself is composed of three fundamental dimensions: (i) as punishing (a "Fearful View"), (ii) as benevolent and forgiving (a "Hopeful View"), or (iii) as a combined view balancing both aspects (a "Balanced View"). Our development of the SMVA in this study derives from these foundational beliefs and values drawn from the ISBM on views of God to guide us through the subsequent stages of scale development. In other words, SMVA assesses the degree to which spirituality functions as a Muslim's master motive, or perhaps more simply the degree to which

Muslim's spirituality guides and directs Muslim's life. This aligns with the Islamic tenet that Muslims' relationship with Allah should guide and direct their lives. Below we describe the process used to develop our scale.

**Scale development**

In constructing the items for The Scale of Muslims' Views of Allah (SMVA), we followed the approach and criteria proposed by Hill (2005) for scale development of psychological religious measures as well as advice on general measurement issues concerning religion (Moberg 2002). This process has also been informed by the approaches most recently used to construct validity assessments (Arthaud-Day et al. 2005; DeVellis 2012; Ladd and Spilka 2006; Netemeyer et al. 2003; Seidlitz et al. 2002).

To develop and validate the SMVA, we followed four steps. In the first step, the initial version of the SMVA was reviewed by experts to establish the content and face validity. Secondly, the SMVA was pre-tested with a small sample of sixteen marketing professionals, applying a cognitive interviewing technique to refine and improve the scale. In the third step, the SMVA was pilot tested with another small sample of twelve marketing professionals, reapplying a cognitive interviewing technique to refine the final version of the SMVA. Fourthly, the SMVA was administered online using a multistage cluster sampling technique with a larger sample (n = 472) of marketing and management professionals from Saudi Arabia to verify the scale's reliability and validity. All items were tested in Arabic.

Moreover, we test criterion-related validity. This is no "gold standard" spiritual belief instrument currently exists in Arabic. Consequently, previous validation studies have used established religion measures to assess criterion validity. Following this practice, criterion validity was assessed using the religiosity Scale of Al Sanî (1989). Guided by ISBM, it was hypothesized that the Hopeful View would correlate strongly with low level of religious

practice, while the Fearful View and the Balanced View should predict a high level of religious practice.

**Content and Face Validity**

An often overlooked, yet critical step in the scale-development process is the assessment of content and face validity (Hinkin and Tracey 1999). To assess content adequacy and face validity for the created SMVA, we followed face validity and content adequacy assessment methods that have been described in the research methods literature (e.g., DeVellis 2012; Nunnally and Bernstein 1978). This assessment allowed us to delete items that were conceptually inconsistent with the focal constructs of "Hopeful View" or "Fearful View". One commonly used method requires participants to categorize items based on their matching of construct definitions. Participants are provided with construct definitions and are asked to match items with a corresponding definition. An agreement index is compared to a standard that is identified prior to the sorting task. Moreover, sorting techniques can utilise a rating process for determining item retention (Hinkin and Tracey 1999). We reworded the 40 identified items to ensure that they reflected latent trait variance.

As the phrasing of items can exert a deep impact on the construct measured (Watson and Clark 1984), items were worded very carefully and initially tested with a small convenience sample of three university students from Saudi Arabia in the UK. To ensure well-constructed, simple items that could be easily understood by respondents, the Arabic used in writing the items was in line with the reading and comprehension levels of the target population for the scales. Next, in order to establish content adequacy and face validity, items were reviewed by an independent panel of six Islamic and psychology of religion scholars from six different universities in Saudi Arabia. These reviews were essential to determine any discrepancies between what the items intended to measure and what they appeared.  Each

member of the panel was provided with hard copies of the SMVA item pool with operational definitions for each of the dimensions and the 40 items. The experts were then asked to rate each item according to the following criteria: (1) clarity, (2) accuracy and conciseness, (3) relevance to the different Muslim views of Allah, (4) similarity to other items. For the ratings, a 1 represented a very low score for a given criterion, while a 10 represented the highest possible score. Accordingly, 13 items were eliminated as they were rated low (below 5 out of 10) by the majority of experts.

**Cognitive Interviews**

We used cognitive interviews to refine and improve the scale. A number of methodological researchers have recommended the cognitive approach as an interviewing technique to provide insight into the subject's perceptions, as study participants are invited to verbalize their thoughts and feelings regarding the information provided. These techniques help improve the quality of the questionnaire and instrument design (Campanelli 1997; Campanelli et al. 1991; Sirken 1999; Willis et al. 1991; Willis and Schechter 1997). The model by Tourangeau (1984) provides us with a theoretical background underlying the cognitive interviewing technique to refine a scale or survey. The model generally consists of four processes.

First, with respect to comprehension of the item or question, we asked (to provide examples): "What does the respondent or the subject believe the item or question to be?" and, "What do specific items or words in the question asked mean to the subject?" Second, with respect to the recall of relevant information, we asked: "What type of information does the subject need to recall in order to answer the item or question?" and "What kinds of strategies were used to evoke such information?" Third, we asked questions related to decision-making processes. Understanding decision-making processes is significant, as it can help remedy

sensitivity and social desirability bias from items in a newly developed scale. For example, we asked: "Did [the respondent] have to exert mental effort to answer the item accurately?" and, most importantly, "Does [the respondent] want to reveal intimate information about himself/herself? Or does he or she prefer to convey something that would make him/her feel or look 'better'?" Fourth, we asked questions in relation to response processes. For instance, we asked respondents: "Can you match your intended answer to the response categories given by the scale items?"

We followed the general guide of Tourangeau's (1984) theoretical framework on conducting the cognitive interviewing process. Two kinds of cognitive interviewing methods, described as *think-aloud interviewing* and *verbal probing techniques*, were used (Ericsson and Simon 1980; Forsyth and Lessler 1991). In the think-aloud technique, respondents are explicitly instructed to "think aloud" as they answer the scale items, while the interviewer notes the processes that the subject uses in arriving at an answer when ranking the scale items (Willis et al. 1999). For the verbal probing technique, the interviewer gives the scale item to be answered by the respondents. The interviewer then asks for other specific information related to the same scale items, or the specific answer given (Ibid, 1999). Accordingly, we pre-tested the 27-item[1] scale with a small convenience sample of marketing practitioners (n = 16) from a diverse set of countries in the region (Saudi Arabia 7, Egypt 5, Libya 2 and Syria 2) using cognitive interviews to refine and improve the scale. The marketing professionals voluntarily participated and informed consent was obtained from all individual participants included in all steps of the study. The average age was 31 years; 25% of respondents were female, and their average work experience was about 4.2 years.

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[1] We start the creation of an initial item pool by wording 40 items and in the first step (the content and face validity), 13 items were eliminated. Accordingly, 40 – 13 items = 27-items are the remaining.

The strategy of cognitive interviews was used for its potential to not only explore each participant's understanding regarding each of the two constructs in the scale (that is, hope and fear) but also to explore the decision-making and cognitive processes that respondents used to answer each item. Therefore, the interviews primarily focused on covert processes that are normally hidden to capture the real Muslim View of God. The cognitive interviews were conducted using the concurrent, think-aloud, and verbal probing techniques (Willis et al. 1999). Before the actual pre-interview, we asked the respondents a few "warm-up" questions to introduce them to the think-aloud process. The "think aloud" method allows for understanding and noting of the processes that participants use in arriving at their answers. Participants were also sometimes asked to convey what they were thinking about the scale items, in particular if they appeared confused or paused over a specific item. Moreover, we asked each participant whether he or she understood each question in terms of its relevance to their view of Allah. During this process, two forms of questions were asked: (i) those that explored the participants' comprehension of the phrases, which may elicit various meanings among participants regarding the view of Allah; and (ii) those that asked the participant to rate to what degree they believed the attributes from the SMVA scale could be attributed to Allah. Further participants were asked follow-up questions probing for more information on the answers provided. In doing so we tried to use both scripted and spontaneous probes as both are noted as effective techniques when trying to capture relevant information (Willis 2004).

Analysis of the cognitive interviews highlighted two challenges. First, there were eight items that appeared somewhat ambiguous for the majority of participants; these items were omitted, so the remaining of the 27-iems were 19-items. Second, and most importantly, we found the majority of the participants answered questions by providing information related to their knowledge about Allah or what they have been taught to believe about Allah rather than by relating their own personal views related to Allah. Given this, we would argue that the

God Concept was the more dominant factor for participants when answering the scale items. Specifically, this is because the majority of participants (14 out of 16) ranked the attributes of Allah related to the Hope dimension (such as merciful, forgiving) as strongly agree and, in the same vein ranked attributes of Allah related to the Fear dimension (such as punishing, harsh in judgment) as strongly agree as well.

The cognitive interviews elicited two issues: a lack of awareness that the questions intended to evoke participants' personal views of Allah rather than their what they believed about Allah; and, more importantly that it is socially desirable for the respondents to indicate that, as Muslims, they had to accept and believe in all of God's Names and Attributes as specified in the original Islamic sources, the Quran, and the Sunnah. In other words, Muslims should believe that "Allah is forgiving and merciful" (Quran 5, p.98) while to the same degree accepting that "Allah is severe in punishment" (Quran 5, p.98). A social desirability bias was uncovered in which participants tended to answer the scale questions in a manner that would be viewed favorably by others. In other words, it is not religiously or socially acceptable among many Muslims to say "I believe that God/Allah will not punish me" or "Allah will not forgive as a result".

The initial scale developed did not reflect their actual perception regarding Allah, but rather their knowledge concerning Allah or what they were taught to believe about Allah. Therefore, the wording of the questions was modified, and the same questions were asked indirectly to stimulate both the cognitive and the more deeply held beliefs about the view of Allah to overcome the social desirability bias. The revised question became: "In whatever you do at work, to what extent do you evoke (recall) the meanings of the following names and attributes of Allah" such as "Verily, Allah is Oft-Forgiving, Most Merciful-Verily, Allah is Severe in punishment" (ranging from "I never evoke the meaning at work [1]" to I always evoke the meaning [7]" [appendix]), instead of "Please indicate how much you agree or

disagree with each statement in relation to your work" for items such as "Despite my shortcomings, I feel I will be forgiven-I am afraid Allah will judge me harshly for what I have done-etc." (ranking from strongly disagree [1] to strongly agree [7]). Accordingly, the revised version of the scale was pilot-tested with another group to ensure the quality of the final SMVA version, reapplying the same procedures of the cognitive interviewing techniques. The revised version was piloted with another small convenience sample of marketing professionals (n = 12) from Saudi Arabia (n=4), Egypt (n=3), Sudan (n=2), and United Arab Emirates, Algeria, and Oman (n=1 for all three countries). Once again, cognitive interviews were used to refine and improve the scale. The marketing professionals participated on a voluntary basis. The average age was 29 years; 16% were female, and average work experience was about 2.6 years. These professionals were asked to provide feedback in terms of how they understood the questions, the wording of the items, and the relevance of their content.

The analysis of the cognitive interviews highlighted that five participants provided similar responses to three items as they thought these items were very similar to each other and somehow confusing. On this basis, and to enhance the likelihood of participant completion, three items were excluded and the scale was refined to a 16-item scale[2]. No other problems emerged, so we moved to the next step. Following the development and refinement of the SMVA, we proceeded to assess other major requirements for establishing construct validity: reliability (internal consistency), convergent and discriminant validity, and criterion-related validity. We performed a confirmatory factor analysis on the 16 items according to the recommendation of Anderson and Gerbing (1988). Goodness-of-fit indices (GOF) and validity and reliability of the measurement model were all evaluated in order to test the model through first-order CFA. Regression weights, loading estimates, modification indices, and standardized

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[2] In the previous step, the remaining were 19-items and we excluded three items in this step. So, the scale was refined to a 16-items scale.

residual covariances were used in assessing the refined measurement model, following the process delineated in several other studies (Byrne 2013; Hair et al. 2006; Kline 2005). To test the convergent validity, Average Variance Extracted (AVE) was calculated. A value of .50 or above was considered acceptable (Anderson and Gerbing 1988; Hair et al. 2006; Henseler et al. 2009).

In order to test the discriminant validity, the square root of the AVE for each construct was compared to all squared inter-factor correlations (SIC). Factors with AVE values greater than the SIC value were considered to have adequate discriminant validity (Hair et al. 2006; Fornell and Larcker 1981). Further, maximum shared variance (MSV) and average shared variance (ASV) were calculated and compared to the AVE. Lower values for ASV and MSV compared to the value of AVE indicated adequate discriminant validity (Hair et al. 2006).

To assess reliability, a composite reliability (CR) was computed for each factor. For this assessment, the factor's CR was considered acceptable if it exceeded the minimum threshold of 0.70, with values above .90 ultimately being preferred (Bagozzi and Yi 1988; Byrne 2013; Hair et al. 2006; Nunnally and Bernstein 1994). To test criterion-related validity, adopted items from the religiosity Scale of Al Sanî (1989) were administered with the SMVA to the target population, which was specifically developed for Arabic speaking individuals to measure the practice of religious activities using a 3-point scale (see the appendix for a fully translated English version).

We used these to examine the relationship between different practitioners' view of Allah and their level of religious practice. According to the ISBM, the Hopeful View should be associated with a low level of religious practice, while the Fearful View and the Balanced View should predict a high level of religious practice.

## Method Procedures and Sampling

An online cross-sectional survey with multi-stage cluster sampling was conducted to verify the reliability and validity of the final SMVA. The questionnaire was designed to only include marketing and management professionals who had at least 2 years of work experience. The aim was to represent real populations of professionals in terms of age and culture as recommended by Parboteeah et al. (2008). With the help of the Chamber of Commerce & Industry (CCI) in Saudi Arabia, we first collected email lists for marketing and management professionals working in Saudi companies.

First-stage sampling included a simple random sample to select 10 Saudi companies located across five regions (Riyadh, Abha, Jeddah, Tabuk, and Dammam) in Saudi Arabia (two companies each). In the second stage, we randomly selected three email lists (6,482 emails) from the 10 companies. From these lists, we randomly selected 604 individual emails; the survey link was then sent to these email addresses. Participants were contacted via a brief email with a URL link and asked to participate in the online survey that contained the SMVA and the criterion-related validity items. The 16-item SMVA included measures for the two dimensions of hope and fear (that is, the dimensions comprising "Hopeful View" and "Fearful View"; "Balanced View" is a second-order construct measure created via the hope and fear dimensions).

A total of 493 individuals completed the online survey, representing a response rate of 81.6%. However, 21 individuals were excluded because of partially completed surveys, resulting in a final sample size of 472. Of the respondents, 69% were male; most participants (96%) were between the ages of 18 and 45 years, with 70% being unmarried. The sample participants had fairly high levels of educational attainment, with 51% being holders of Bachelor's degrees and 24% holding Master's or Doctorate degrees. The majority of

participants (62.6%) had 2 to 5 years of work experience, while 33.5% had 6 to 10 years of experience; only 3.8% had more than 10 years of experience.

## Results

Descriptive statistics of the means, standard deviations, Skewness, and Kurtosis and the intercorrelations among the scale factors and items are presented in Table 1, Table 2A and Table 2B. As indicated in the table, the correlations between the dimensions of the Hopeful View (HV) and Fearful View (FV) scales were significantly but weakly positively correlated (.164), while the correlations between these two scales' dimensions and the latent verbal Balanced View (BV) were significantly and strongly positively correlated (.743 and .782; both of these correlations were significant at the .01 level).

Moreover, a univariate normality test for each factor was performed focusing on kurtosis, as our scale is based on Likert-type scales (Byrne 2013). The kurtosis for the two factors (HV & FV) was less than +/- 1.00, indicating that the data were normally distributed (Kline 2005; Hair et al. 2010).

Further, the Hopeful View of Allah was negatively skewed to a greater degree (-.419) than was the Fearful View of Allah (-.105).

Table 1 *Means, Standard Deviations, and Correlations for Study Variables*

|    | M    | SD   | 1       | 2       | 3       |
|----|------|------|---------|---------|---------|
| HV | 4.54 | 1.36 | -       | .164**  | .743**  |
| FV | 4.13 | 1.46 | .164**  | -       | .782**  |
| BV | 4.34 | 1.08 | .743**  | .782**  | -       |

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

Table 2A *Means, Standard Deviations, Skewness, and Kurtosis for SMVA items*

| | Mean | | Std. Deviation | Variance | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|
| | Statistic | Std. Error | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| FV1 | 3.96 | .080 | 1.734 | 3.007 | .126 | .112 | -.904 | .224 |
| HV1 | 4.56 | .076 | 1.645 | 2.705 | -.275 | .112 | -.617 | .224 |
| FV2 | 4.12 | .084 | 1.821 | 3.317 | .030 | .112 | -.901 | .224 |
| FV3 | 3.60 | .102 | 2.220 | 4.928 | .429 | .112 | -1.345 | .224 |
| HV2 | 4.68 | .072 | 1.575 | 2.480 | -.275 | .112 | -.755 | .224 |
| HV3 | 4.74 | .073 | 1.585 | 2.514 | -.304 | .112 | -.734 | .224 |
| FV4 | 3.97 | .089 | 1.940 | 3.764 | .102 | .112 | -1.091 | .224 |
| HV4 | 4.13 | .091 | 1.967 | 3.868 | .208 | .112 | -1.251 | .224 |
| HV5 | 4.31 | .080 | 1.748 | 3.054 | .199 | .112 | -1.137 | .224 |
| FV6 | 4.24 | .077 | 1.673 | 2.800 | -.201 | .112 | -.710 | .224 |
| HV6 | 4.81 | .083 | 1.807 | 3.266 | -.369 | .112 | -.912 | .224 |
| HV7 | 4.81 | .079 | 1.715 | 2.942 | -.677 | .112 | -.174 | .224 |
| FV8 | 3.77 | .094 | 2.036 | 4.146 | .051 | .112 | -1.241 | .224 |
| Hope View | 4.5772 | .06335 | 1.37633 | 1.894 | -.395 | .112 | -.597 | .224 |
| Fear View | 3.9449 | .07163 | 1.55630 | 2.422 | .060 | .112 | -1.034 | .224 |

Table 2B *correlation matrix for SMVA items*

| | FV1 | FV2 | FV3 | FV4 | FV6 | FV8 | HV7 | HV6 | HV5 | HV4 | HV3 | HV2 | HV1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FV1 | 1.000 | | | | | | | | | | | | |
| FV2 | .813 | 1.000 | | | | | | | | | | | |
| FV3 | .540 | .528 | 1.000 | | | | | | | | | | |
| FV4 | .701 | .670 | .553 | 1.000 | | | | | | | | | |
| FV6 | .624 | .568 | .449 | .659 | 1.000 | | | | | | | | |
| FV8 | .604 | .611 | .437 | .680 | .680 | 1.000 | | | | | | | |
| HV7 | .053 | .043 | .083 | .097 | .035 | .065 | 1.000 | | | | | | |
| HV6 | .094 | .106 | .089 | .091 | .104 | .122 | .599 | 1.000 | | | | | |
| HV5 | .085 | .039 | .077 | .115 | .097 | .116 | .535 | .488 | 1.000 | | | | |
| HV4 | .037 | .021 | .010 | .084 | .114 | .099 | .604 | .531 | .662 | 1.000 | | | |
| HV3 | .013 | .027 | .013 | .067 | .096 | .104 | .630 | .555 | .601 | .623 | 1.000 | | |
| HV2 | .013 | .056 | -.004 | .099 | .046 | .091 | .622 | .539 | .599 | .644 | .746 | 1.000 | |
| HV1 | .020 | .012 | .058 | .051 | .049 | .071 | .556 | .507 | .502 | .524 | .544 | .593 | 1.000 |

Condition number = 28.324
Eigenvalues
4.758 3.808 .685 .563 .521 .494 .454 .383 .342 .311 .291 .223 .168

## Evaluation of the Measurement Model (model fit) for SMVA

To test the a priori measurement models, a confirmatory factor analysis (CFA) was run using AMOS (for Analysis of Moment Structures) software version 20. The GOF

indices of the initial test were ($\chi$2 = 4007.846, df = 2393; p= .000; CMIN/DF = 1.675; AGFI = .770, IFI = .930; TLI = .927; CFI = .930; RMSEA = .040; RMR = .123; PCLOSE = 1.000), showing imperfect fit (Hair et al., 2006; Hu & Bentler, 1999; Tabachnik & Fidell, 2007). Accordingly, the model was further refined. Regression weights, loading estimates, modification indices, and standardized residual covariances were used in assessing the refined measurement model.

Based on these goodness-of-fit indices, three items (HV8 (He is full of pity, kind, and merciful), FV5 (Allah dislikes and hates), and FV7 (He is the Irresistible). [See Figure 1 in appendix, page 33]) were dropped from the model for achieving significant GOF indices. A new measurement model with the dropped items was then re-run. The outcome of the CFA revised model yielded an excellent fit ($\chi$2 = 2740.328, df = 1808; p = .001; CMIN/DF = 1.641; AGFI = .954, TLI = .986; IFI = .990; CFI = .989; RMSEA = .037; RMR = .114; PCLOSE = 1.000) (Hu & Bentler, 1999; Kline, 2005; Tabachnick and Fidell, 2007; Steiger, 2007). Moreover, Table 3 below illustrates that the estimate of most SMAV items are loadings above .70

Table 3 *Standardized Regression Weights for SMAV items*

|     |      |           | Estimate |
|-----|------|-----------|----------|
| HV1 | <--- | Hope_View | .703 |
| HV2 | <--- | Hope_View | .811 |
| HV3 | <--- | Hope_View | .801 |
| HV4 | <--- | Hope_View | .770 |
| HV5 | <--- | Hope_View | .716 |
| HV6 | <--- | Hope_View | .704 |
| HV7 | <--- | Hope_View | .787 |
| FV8 | <--- | Fear_View | .763 |
| FV6 | <--- | Fear_View | .750 |
| FV4 | <--- | Fear_View | .875 |
| FV3 | <--- | Fear_View | .631 |
| FV2 | <--- | Fear_View | .778 |
| FV1 | <--- | Fear_View | .810 |

**Validity and Reliability of the Measurement Scale**

To test for convergent validity, AVE was calculated. The convergent validity of the constructs was supported for both factors, as the AVE was above 0.50 (Anderson and Gerbing 1988; Hair et al. 2010; Henseler et al. 2009); (Table 4). In order to test the discriminant validity in the present CFA model, the square root of the AVE of each construct (on the diagonal in the matrix below) was compared to all SICs.

All factors demonstrated adequate discriminant validity because the AVE values were greater than the SIC value, while both the MSV and ASV were smaller than AVE (Table 4) (Hair et al. 2006; Fornell and Larcker 1981). Moreover, the composite reliability (CR) was computed for each factor. In all factors, the CR exceeded the minimum threshold of 0.70, indicating good reliability in both factors (Bagozzi and Yi 1988; Byrne 2010), as illustrated in Table 4. Moreover, Cronbach's alpha was calculated at .905 for HV and .898 for FV, indicating excellent reliability (George and Mallery 2012; Pallant, 2013).

Table 4 *Validity and Reliability Computations for SMVA*

|      | CR    | AVE   | MSV   | ASV   | HV     | FV    |
|------|-------|-------|-------|-------|--------|-------|
| HV   | 0.849 | 0.681 | 0.539 | 0.203 | 0.775  |       |
| FV   | 0.917 | 0.748 | 0.186 | 0.133 | -0.255 | 0.805 |

*ASV, average shared variance; AVE, average variance extracted; CR, composite reliability; FV, Fearful View; HV, Hopeful View; MSV, maximum shared variance

In order to establish the criterion-related validity (predictive validity) of the scale, a scale of Al Sanî(1989) measuring the related construct of personal religious practice was given to the same sample (n = 472). As expected, the Hopeful View of Allah negatively correlated with religious practice (r = -.162, P = .01). Similarly, the Fearful View of Allah positively correlated with religious practice (r =.202, P = .01).

**General Discussion**

Our findings suggest that the SMVA developed demonstrates appreciably high levels of both reliability and validity. The SMVA is a short scale with thirteen items that, together with the reliability and validity evidence, make it a more appealing measure for use in organisational research. An additional strength of the SMVA is that it was developed using diverse samples, in different step of scale development, from multiple organisations (overall *n* = 521). The SMVA was developed using samples where individuals differed in terms of age, gender, work experience, hierarchical status, functions (management and marketing), and the type of organisation for which they worked. Consequently, the scale should have broad applicability. Moreover, this research used the cognitive interviewing technique as an essential part in establishing construct validity.

The cognitive interviewing approach helped us evaluate sources of response error both within overt and, most important, covert processes (the latter of which are normally hidden during the process of scale development). More specifically, the cognitive interviewing technic shows that the majority of respondents answered the scale questions related to their concept of Allah and what they believed about Allah in terms of what they had been taught to believe rather than according to their own personal views. We argue that this was mainly attributable to the sensitivity of direct questions and the socially desirable responses that respondents felt they needed to provide in such cases (as was mentioned previously). These elements (among others) prove the complexity involved in both an individual's understanding and experience of God, and in measuring an individual's view of God. More importantly, the cognitive interviews successfully picked out systematic errors and socially desirable answers even after establishment of content and face validity, clearly demonstrating the importance of using the cognitive interviewing approach in the development of a new scale.

**Implications**

The article has theoretical and practical implications. One is to the literature on spiritualty and ethics by demonstrating that the view of God is a significant predictor of ethical behaviour (e.g., Buchko and Witzig 2003; Froese and Bader, 2004; Hardesty et al. 2010; Shariff and Norenzayan 2011; Walker et al. 2012). Specifically, the SMVA is essential to tests our ISBM in the context of Islam linking diverse spiritual beliefs internalised as views of God to ethical judgment and behaviours in organizations. The theoretical framework we developed (ISBM) combines the notions of view of God linked to theoretical claims and empirical discoveries in neurocognitive research and moral psychology, drawing on dual-process theories to provide insight into our moral decision-making processes. Generally, dual-process theories suggest two different modes of thinking, referred to here as System 1 and System 2 (Cushman et al. 2006; Damasio 2008; Kahneman 2011; Kahneman and Frederick 2002; Lieberman et al. 2002; Nolte 2002; Reynolds 2006; Stanovich 1999; Stanovich and West 2000). System 1 refers to the intuitive ethical decision-making process, while System 2 refers to the rational process (Bazerman and Gino 2012; Evans 2008; Greene 2007; Haidt 2001; Warren and Smith-Crowe 2008; Weaver et al. 2014). We propose that different internalisations of God (views of God) explain the different influences of spiritual beliefs and religiosity on System 1 and System 2 models of ethical decision making.

Second, and relatedly, ISBM proposes that spiritual beliefs evolve over time, leading to different internalisations of view of God. Thus, ISBM incorporates the idea of view of God as emerging at the intersection of deeply embedded, unconscious moral intuitions (System 1) and conscious deliberate reasoning (System 2). We argue that this intersection is a key factor influencing religious individuals' ethical decision making. Accordingly, SMVA may contribute to test and explain such mechanism by which Muslim individuals interpret spiritual beliefs differently by describing their dissimilar views of God, which lead them to practice

religion uniquely affecting their ethical outcome in organisations differently. Third, to the best of our knowledge, this paper is the first to develop a scale related to the Muslim's view of Allah embedded in the Muslim worldview and Quran-based concepts, which are essential to fully capture the uniqueness of Islamic spiritual beliefs and its potential influence on Muslims ethical behaviours in the workplace. Fourth, to date, this article is unique in providing a measurement tool that may link Islam, a less explored faith, to ethical behaviour in organisations, thereby expanding understanding beyond traditional Western Christian perspectives. It offers a more nuanced view of the Islamic spiritual beliefs: not as a monolithic body of creeds but as theologically diverse faith open to interpretations that could have different impacts on ethical behaviour in the workplace. Thus, our findings indicate that the SMVA may be used in organisational research to help understand the nature of the relationships between different Muslim views of Allah that individuals hold and their ethical behaviours in organisations.

The predictive validity of the scale indicated that the SMVA might help to forecast the religious practice of Muslims holding different views of Allah. This supports the view that understanding people's beliefs in God may play an important role in how people practice their faith, which has been shown to have an impact ethical outcome in organisations (Weaver and Angle 2002). The SMVA may therefore help organisational scholars examine the mechanism by which Muslims' views of God impacts ethical outcomes in organisations and how this may be mediated by their religious practice. Moreover, SMVA may be useful in other variety of lines of research in order to link different Muslim's views of Allah to different constructs in; for example; psychology, criminology, education and healthcare fields.

In addition to theoretical implications, such knowledge is of potential practical importance for managing unethical behaviour when conducting ethical training in the business sectors of predominantly Muslim countries. Our findings may provide a valuable tool to be

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used by international companies operating in regions where Islamic beliefs are dominant for ethics training and education.

Furthermore, we offer a measurement tool that may use to explain the normative gap between Islam's ethical teachings and the business practices frequently evident in Muslim countries (Transparency International's Corruption Index, 2016), and so may suggest practical strategies for managing unethical behaviour in those countries. For instance, the Anti-Corruption Commission, and similar bodies in other religious countries, could formulate regulations and policies using religion to prevent and combat corruption. SMVA, as a measurement tool, can also be of use for managing ethical failures, by accounting for how religiosity can influence ethics. For example, this could be accomplished by introducing evaluation of ethical decision making and behaviour as a significant component of employee performance appraisals within organisations, as recommended elsewhere (Buckley et al. 2001; Weaver and Trevino 2001).

The SMVA can also contribute to our understanding on how different Muslims' views of God may be linked to many other behaviours and constructs within organisations. For example, the literature shows that different religious beliefs influence ethical leadership (Kriger and Seng 2005); decision-making (Fernando and Jackson, 2006); organisational productivity and commitment (Benefiel et al. 2014; Fry et al. 2005); job sanctification (Walker et al. 2012); entrepreneurial behaviour (Griebel et al. 2014); job satisfaction (King and Williamson 2005); emotional intelligence, depressed mood, and work-related outcomes (Prati et al. 2007); discrimination at the workplace (Syed and Van Buren 2014); and job performance (Giacalone and Jurkiewicz 2003). SMVA provides a valid tool to test these relationships. Moreover, our tool is potentially useful for both diversity management and international management: it provides a valuable aid for comparative studies needed to discover the similarities and

differences between the impacts the God view in different faiths may have on ethical decision-making in organisations.

**Conclusions and Directions for Future Research**

Although this research provides evidence supporting the high reliability and validity of the new measurement instrument, there are some limitations that warrant attention. First, the data in this study was mainly collected from organisations in one country (Saudi Arabia) and so may not be representative of other countries with Muslim populations. Moreover, the average age of the sample participants was young. Age may influence the maturity of the response. We should emphasize, however, that the present study represents a first step in the process of demonstrating construct validity of the SMVA. Future studies should examine whether the SMVA can be used with other samples and settings in Islamic societies by replicating the results obtained to establish norms for the newly developed measurement tool. Second, the SMVA was originally developed in the Arabic language to measure Muslims' view of Allah. As such, future studies should validate any translated version of the SMVA with the target population to be utilised. For instance, future studies could validate the English translated version of the SMVA with English Muslim speakers. Despite these limitations, the findings of this study can help initiate a new line of research that explores the relationship between different Muslim's views of God and ethical behaviours within organisations. We hope that the SMVA will provide a tool to facilitate such research.

**Appendix**

Figure 1
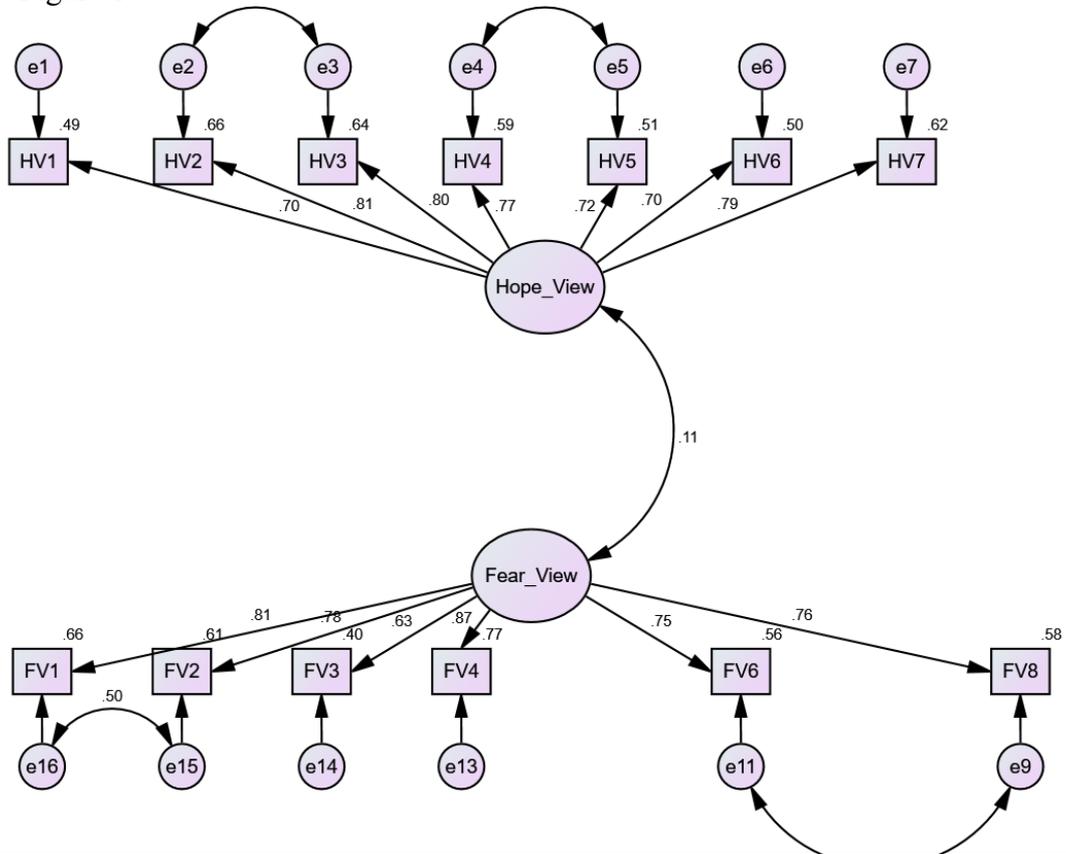


**Note**

[1]Allah for Muslims refers to the One and Only Creator, Sustainer and Cherisher of the Universe. In this article, we consider the terms "Allah" and "God" to be synonymous and use them interchangeably.

**Ethical approval**: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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