

A PSYCHOLOGICAL MEASURE OF ISLAMIC RELIGIOUSNESS:  
EVIDENCE FOR RELEVANCE, RELIABILITY AND VALIDITY

Hisham Abu Raiya

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Committee:

Kenneth I Pargament, Advisor

Catherine Stein

Annette Mahoney

Mike Zickar

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## ABSTRACT

Kenneth Pargament, Advisor

The purpose of the current investigation was to further develop the Psychological Measure of Islamic Religiousness (PMIR) that was constructed based on previous research and to assess its relevance, reliability and validity as a scientific tool for the study of the psychology of Islam. The sample consisted of 340 Muslim participants from all over the world who completed the online survey of the study.

Overall, the results were noteworthy in several respects. First, the PMIR was relevant to Muslim participants and suggested that Muslims adhere to different Islamic beliefs, adopt various Islamic religious attitudes, and observe a diverse array of Islamic religious practices. Second, Islam is multidimensional; factor analysis of the PMIR resulted in 6 factors (Islamic Beliefs, Islamic Ethical Principles & Universality, Islamic Religious Struggle, Islamic Religious Duty, Obligation & Exclusivism, Islamic Positive Religious Coping & Identification, and Punishing Allah Reappraisal) that possessed good to high internal consistency. The Islamic Religious Conversion subscale that was not subjected to factor analysis had a high internal consistency too. Finally, the subscales of the PMIR demonstrated discriminant, convergent, concurrent, and incremental validity.

These findings highlight the fact that Islam plays a central role in the well-being of Muslims and stress the need for paying more attention to the Islamic religion when dealing with Muslim populations. Other implications of these findings for theory, practice, and research, the limitations of the study, and directions for future research are discussed.

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## INTRODUCTION

Religious practices and beliefs are prevalent and important to people in many countries around the world (Koenig & Larson 2001). For example, Gallup polls indicated that 96% of persons living in the United States believe in God, over 90% pray, 69% are church members, and 43% have attended church, synagogue, or temple within the past 7 days (Princeton Religion Research Center, 1996). A Canadian opinion poll in 1993 found that 78% of Canadians affirmed belief in God, with 67% ascribing to the basic tenets of Christianity (Baetz & Larson et al., 2002). Surveys carried out in Israel revealed that between 15-25 percent of Israeli Jews identify themselves as religious, and 40-50 percent identify themselves as traditional (Peres, 1995; cited in Lazar, Kravetz, & Frederich-Kedem, 2002).

Yet, although religion is an essential ingredient of human culture, it has occupied a marginal position in the mainstream of modern psychiatry and clinical psychology (al-Issa, 2000). The relationship between religion and psychiatry or clinical psychology has been also controversial. Historically, psychologists have taken both sides in the debate on the value of religious experience (for a thorough review, see Wulff, 1997). For example, Freud (1927) associated religious beliefs and practices with the repression of instincts, intrapsychic conflicts and helplessness. On the other hand, Jung (1938) suggested that religion is a source of meaning and stability in an uncertain world and therefore plays a positive role in the lives of people.

Before the 1990's, the relationship between religion and health was largely an "illegitimate" area of research: researchers often buried religious variables in the methods and results sections of their studies (Miller & Thoresen, 2003). More recently, the field of

psychology has begun to display a growing interest in the influence of religion on people's psychological well-being (Tarakeshwar, Pargament & Mahoney, 2003). As we will see shortly, empirical studies have yielded an interesting picture of the relationship between religion and physical and mental health.

However, this research has focused almost exclusively on Christian samples. Other traditional faiths have been largely neglected. One of these traditional faiths is Islam. Although Islam is the second largest religion in the world and in the United States, relatively few empirical studies on the psychology of religion among Muslims have been done. Therefore, there is a need for empirical research among members of this group to better understand the role religion plays in their lives. One of the crucial steps toward this end is developing a valid and reliable measure of Islamic religiousness. In this study, I aimed to further assess the reliability and validity of a psychological measure of Islamic religiousness that was developed based on two previous studies (see Abu Raiya, 2005a-b for further details) and to further evaluate its utility as a scientific tool for the study of the health and well-being among adherents of Islam.

## CHAPTER I: A BRIEF REVIEW OF THE PSYCHOLOGY OF RELIGION

### Definition of Religion

What is religion? According to Wulff (1997), the word “religion” originated from the Latin *religio*, which some scholars say was initially used to designate a greater-than human power that requires a person to respond in a certain way to avoid some dreadful consequences. Smith (1963) postulates that the word *religio* referred to “something that one does, or that one feels deeply about, or that impinges one’s will, exacting obedience or threatening disaster or offering reward or binding one into one’s community” (p. 20). Social scientists and theologians have offered numerous definitions of religion, but have failed to reach a consensus which led sociologist J. Milton Yinger (1967) to conclude, “any definition of religion is likely to be satisfactory only to its author” (p. 108).

Pargament (1997) asserts that because religion is so complex and personal, no single definition is likely to be completely adequate. Therefore, our task is to construct a definition of religion that is relevant to the phenomena of interest. In other words, because of the multidimensionality of religion, a broad concept of religion may not be useful unless it is operationally defined (al-Issa, 2000).

Because the focus here is on the psychology of religion, an operational definition of religion is needed that is appropriate for psychological research. Pargament offers such a definition. According to Pargament (1997), religion is a “search for significance in ways related to the sacred” (p. 32). This perspective is tailored to the psychological venture, and it excludes concerns about the nature of the sacred that have little to do with significant human issues (Pargament, 2002).

This definition includes two important elements: *search for significance*, and the *sacred*. The search refers to the process of discovery of the sacred, conservation of the sacred once it has been found, and transformation of the sacred when internal or external pressures require a change (Pargament, 1997; Pargament & Mahoney, 2002). The search can also be understood in terms of the multiple pathways people take to reach their goals and the goals themselves. Religious pathways can be manifested through multiple dimensions in which the sacred is involved, such as ideology, ethical conduct, emotional experience, social intercourse, and study. The goals to be reached are just as diverse. They include achieving personal ends, such as meaning in life and self-development, social ends, such as intimacy with others and just in the world, and sacred ends, such as closeness to God and living a moral and ethical life (Tarakeshwar, Pargament & Mahoney, 2003).

According to the Oxford Dictionary, the sacred refers to the holy, those things that are “set apart” from the ordinary and deserve veneration and respect. Pargament and Mahoney (2002) define the sacred as divine beings, higher powers, or God and other aspects of life that take on divine character by virtue of their association with the divine. According to this definition, any aspect of life can take on extraordinary character through its association with, or representation of, divinity. Little and Twiss (1973) summarize this point well:

It may be a quality (e.g., wisdom, love), a relation (e.g., harmony, unity), a particular natural entity (e.g., sun, earth, sky, river, animal), a particular individual or group (e.g., king, the dead), nature as a whole, a pure

form or realm of pure forms (e.g., good, truth, all Ideas),  
 pure being (e.g., One, Being Itself, Ground of Being), a  
 transcendent active Being (e.g., Allah, Yahweh, God (pp. 64-65).

What makes religion distinctive is the involvement of the sacred in the pathways and destinations that define the individual's search for significance.

Because Pargament's definition of religion is applicable to people of different faiths, it contributed to the conceptual foundation of this study.

### Evidence of Religious Multi-Dimensionality

One of the pivotal characteristics of religion as reflected by the definition of Pargament is its multi-dimensionality. Theorists and researchers have generally viewed religion as a multi-dimensional phenomena though they do not necessarily agree on the content of these dimensions (for a thorough review, the reader is referred to Wulff, 1997; Batson et al., 1993; Pargament, 1997). Psychologist Gordon Allport, in a classic work, distinguished between two religious orientations: the *extrinsic* and *intrinsic*. These two orientations, in spite of conceptual and psychometric difficulties, have won widespread acceptance. According to Allport and Russ (1967), the extrinsic orientation is characteristic of those who:

are disposed to use religion for their ends. The term is borrowed from axiology, to designate an interest that is held because it serves other, more ultimate interests. Extrinsic values are always instrumental and utilitarian. Persons with this orientation may find religion useful in variety of ways- to provide security

and solace, sociability and distraction, status and self-justification. The embraced creed is lightly held or else selectively shaped to fit more primary goals. In theological terms, the extrinsic type turns to God, but without turning away from self (p. 441).

On the other hand, the intrinsic orientation characterizes those who:

find their master motive in religion. Other needs, strong as they may be, are regarded as of less of ultimate significance, and they are, so far as possible, brought into harmony with the religious beliefs and prescriptions. Having embraced a creed, the individual endeavors to internalize and follow it fully. It is in this sense that he lives his religion (p. 441).

Allport and Ross measured extrinsic and intrinsic religion by the Religious Orientation Scale (Batson et al., 1993). Actually, this scale consists of two subscales, one designed to measure extrinsic religion (items such as “the primary purpose of prayer is to gain relief and protection,” and “occasionally I find necessary to compromise my religious beliefs in order to protect my social and economic well-being”), and one to measure intrinsic religion (items such as “it is important for me to spend periods of time in private religious thought and meditation,” and “quite often I have been keenly aware of the presence of God or the divine being”). This scale is still widely used.

Allen and Spilka (1967) suggested a slightly different distinction. They differentiated between *committed religion* and *consensual religion*. They defined

committed religion as a discerning, highly differentiated, candid, open, self-critical, abstract, and relational approach to religious questions. Moreover, for the committed individual, religion is a central value. They defined consensual religion as the opposite of each of these characteristics.

Daniel Batson and his colleagues (1993) introduced a third orientation to religion. This orientation grew out of some dissatisfaction with Allport's work. While they did not argue with Allport's conceptualization of the extrinsic orientation, they claimed that his conceptualization of the intrinsic orientation is rigid and dogmatic, and does not leave room for other factors central to the religious experience. As a result, Batson et al. (1993) suggested a third orientation:

religion as a *quest*, an “approach that involves honestly facing existential questions in all their complexity, while at the same time resisting clear-cut, pat answers. An individual who approaches religion in this way recognizes that he or she does not know, and probably never will know, the final truth about such matters. Still, the questions are deemed important, and however tentative and subject to change, answers are sought. There may or may not be a clear belief in a transcendent reality, but there is a transcendent, religious aspect to the individual's life” (p. 166).

Based on a factor analysis, Batson et al. (1993) developed a measure of religion that includes three scales: means (extrinsic), ends (intrinsic) and quest. While the extrinsic

and the intrinsic scales are highly similar to those of Allport's scales, the quest was a new scale. This scale was designed to measure the basic component of the quest dimension—the degree to which an individual's religion involves an open-ended, responsive dialogue with existential questions raised by the contradictions and tragedies of life. This scale includes items, such as “as I grow and change, I expect my religion to grow and change,” and “questions are far more central to my religious experience than are answers.”

Empirical evidence is consistent with the theoretical view of religion as multi-dimensional. Glock and Stark (1966) developed a comprehensive way of measuring religiousness. Their work is considered a key step in the evolution of sociologically oriented attempts to measure religion. Using factor analysis with a sample of 1,976 participants who took part in the National Opinion Research Center (NORC) survey in 1964, they identified five dimensions of religiousness. These dimensions are the *experiential* (subjective and emotional religious experience as an expression of personal religiousness), the *ideological* (acceptance of the belief system), the *ritualistic* (participation in religious activities and practices), the *intellectual* (knowledge of the belief system), and the *consequential* (ethical consequences of these dimensions and the prescriptions derived from them).

Based on the factor analysis, they developed the Dimensions of Religious Commitment Scale. The consequential dimension was omitted from this scale because it was not strictly a measure of religiousness itself. The remaining four dimensions are assessed by 48 different items, many with multiple subsections.

Working with four independent Christian samples, Ryan, Rigby and King (1993) concluded that two types of internalization (the process through which an individual

transforms a formerly externally prescribed regulation or value into internal one) characterize the interplay between the individual and religion. The first is *introjection* and represents a partial internalization of religiousness based on self and other-approval-based pressures. The second is *identification* which represents adoption of beliefs as personal values. They found relations between these two constructs and measures of mental health and self-related outcomes. For example, positive relations between introjection and anxiety and depression were demonstrated, and a positive relation between identification and identity integration was found. They also found that evangelical teenagers scored higher on both introjection and identification measures than controls.

Idler, Musick, Ellison, George, Krause, Ory, Pargament, Powell, Underwood and Williams (2003) developed an instrument to measure religiousness and spirituality, intended explicitly for studies of health. They tested the instrument in a nationally representative sample of Americans from the 1998 General Social Survey (N = 1,445). Drawing on existing theory and research, they identified nine dimensions of religiousness and spirituality that were correlated with variables of physical and mental health: *public religious activities, private religious activities, positive religious coping, negative religious coping, religious intensity, forgiveness, daily spiritual experience, beliefs and values, and giving-to-income ratio*.

Tarakeshwar, Pargament and Mahoney (2003) developed measures of the religious pathways of a convenience sample of Hindus in the United States. Consistent with Hindu theology, they identified four religious pathways through factor analysis: *path of devotion* (in which the devotee submits himself or herself to the will of God, and

through devotional practices, such as prayer, aims to become one with God and attain spiritual liberation), *path of ethical action* (in which the individual chooses to perform work without attachment to its effects; this attitude purifies his or her mind so that he or she can attain a sense of God-vision), *path of knowledge* (in which the individual dedicates himself or herself to acquiring knowledge that reveals the impermanence and ineffectuality of things in the world, and thereby frees the self from the bondage of ignorance, leading to spiritual liberation), and *path of mental concentration* (in which the devotee practices disciplinary measures that involve physiological and psychological restraints to free the self from all impurities so that the divine self of the person can then manifest itself, leading to spiritual liberation).

Lazar, Kravetz and Fredrich-Kedem (2002) examined the content and structure of self-reported motivation for Jewish behavior. Through factor analysis in a sample of 323 Jewish participants from different religious orientations, they identified five reliable factors: *belief in divine order*, *ethnic identity*, *social activity*, *family activity*, and *upbringing*.

To sum, theoretical and empirical evidence indicate that people practice religion in different ways, connected to their thoughts, emotions, actions and relationships. Religion can be individualistic as well as collectivistic, and provides various pathways to various destinations.

#### The Link between Religion and Mental/Physical Health: Empirical Evidence

A large body of empirical research has demonstrated links between religious and spiritual involvement and physical health, drug/alcohol abuse, and mental health. Cross-sectional and longitudinal studies have consistently found significant associations

between religious attendance and health status indicators, including specific conditions such as hypertension, general measures of functional disability, and overall mortality (Koenig et al., 2001). For example, McCullough, Hoyt, Larson, Koenig and Thoresen (2000) conducted a meta-analysis of data from 42 independent samples examining the association of a measure of religious involvement and all causes of mortality. They found that religious involvement was significantly associated with lower mortality, indicating that people with higher religious involvement were more likely to be alive at a follow-up than people lower in religious involvement. McClain, Rosenfeld, and Bretibat (2003) found that greater spiritual well-being was related to lower desire of a hastened death, hopelessness and suicidal ideation among terminally ill patients with life expectancy of less than three months.

There is consistent evidence that religiousness and substance use are negatively related to each other. For example, of 38 studies covered in a review by Benson (1992), 29 indicated a negative relationship between religiousness and alcohol use, and 26 with marijuana use. Daugherty and Mclarty (2003) examined the relationship between religious coping and types of drinking motivation among 178 college students. Participants completed the Ways of Religious Coping Scale and Drinking Motives Questionnaire. They found that greater religious coping was tied to less alcohol use. Working with high school students, Corwyn and Benda (2000) found that a measure of personal religiousness (e.g., private prayer, evangelism) was a significant predictor of lower levels of drug use. Investigations of tobacco use and illicit drug use also show a negative relationship with religion. Wuthnow (1978) compared the rates of “being high” from drug/alcohol among people from different religious affiliations who manifested five

religious orientations. The nonreligious reported higher rates of “being high” than those with conservative, liberal, or nominal religious orientations.

In a meta-analysis of 100 studies examining the relationship between religiousness and mental health conducted by Koenig and Larson (2001), religious beliefs and practices were related to greater life satisfaction, happiness, positive affect and higher morale in 79 (nearly 80%) of the studies. Of 12 prospective cohort studies identified in their meta-analysis, 10 reported a significant relationship between greater religiousness and greater well-being. Similar levels of positive association were found between religiousness and hope, optimism, purpose and meaning; of 14 studies examining these relationships, 12 reported significant positive associations among these variables and two found no association with religion.

Salutary effects of religion have also been demonstrated with other dimensions of mental health and illness, such as self-esteem and mastery (Krause & Tran, 1989), depressive symptoms (Koenig et al., 1988), anxiety (Atkinson & Malony, 1984), and emotional adjustment (Blazer & Palmore, 1976). Overall, this literature indicates that there is a positive relationship between religious and spiritual involvement and well-being.

#### Religious Coping and Mental/Physical Health

The relationship between religion and coping is the subject of a growing body of psychological research. For many people, religion appears to be an important resource in coping. Numerous studies have revealed the extensive use of religious coping methods in stressful situations (for a comprehensive and detailed review of these studies, see Pargament, 1997). For example, Conway (1985-1986), Gilbert (1989), Greil, Porter,

Leitko, and Riscilli (1989), and Pargament, Ensing et al. (1990) found that religion is used in coping by the large majority of their participants, with prevalence figures reaching as high as 91%.

Empirical studies of diverse groups facing a variety of life stressors indicate that religious coping methods have significant implications for well-being (see Pargament 1997, for review). Pargament, Smith, Koeing and Perez (2000) identified two higher-order patterns of religious coping: one pattern made up of positive religious coping methods and the other made up of negative religious coping methods. The positive religious coping methods reflect a secure relationship with God, a belief that there is a greater meaning to be found, and a sense of spiritual connectedness with others. In contrast, the negative religious coping pattern involves expressions of a less secure relationship with God, a tenuous and ominous view of the world, and a religious struggle to find and conserve significance in life.

Several studies have demonstrated significant links between positive and negative religious coping methods and various psychological and physical outcomes. More specifically, positive and negative religious coping methods have been linked to better mental health and greater distress respectively (Pargament, Smith, Koeing & Perez, 1998). For example, Smith, Pargament, Brant and Oliver (2000) examined the relationship between religious coping by church members and psychological and religious outcomes following the 1993 Midwest flood. They found that religious dispositions (e.g., religious salience), attributions (e.g., God's love or reward), and coping activities (e.g., discontent, good deeds) were related to both positive and negative psychological and religious outcomes. They also found that religious attributions and

coping activities predicted psychological and religious outcomes both 6 weeks and 6 months post-flood, after controlling for exposure and demographics. In their study of 586 church members coping with a major negative life event, Pargament et al. (1990) reported that members who adopted a collaborative form of religious coping (in which the individual and God are both active participants in coping) reported better outcomes on all measures of psychological adjustment. Tarakeshwar and Pargament (2001) assessed the role of religion in the coping of families of children with autism. They found that positive religious coping was associated with better religious outcomes (e.g., changes in closeness to God/church and spiritual growth), whereas negative religious coping was associated with greater depressive affect and poorer religious outcomes.

#### Limitations of the Existing Research

As demonstrated above, the existing scientific research on psychology of religion has offered numerous insights about the relationship between religion and physical and psychological well-being. However, this research is not free of limitations. There are four major weaknesses in this body of research. First, as mentioned earlier, much of the research is either atheoretical or lacks an overarching theoretical perspective. Second, current scientific findings are overwhelmingly based on a few items as indices of the multi-faceted complex domain of religion (Mahoney, Pargament, Swank & Swank, 2003). For example, Mahoney (2001) found that 83% of the studies published in journals in the past 20 years on religion, marriage and parenting relied on one or two items to assess family members' general religiousness (e.g., denominational affiliation, church attendance) or conservative Christian beliefs. Third, possible harmful aspects of religion are generally not considered, with the exception of studies of religious struggles. Fourth,

the studies that have been conducted and the measures that have been developed have focused almost exclusively on Christian samples (Hill & Pargament, 2003), and have been geared largely to members of Judeo-Christian traditions (Gorsuch, 1988). Other traditional faiths, Islam in particular, have been neglected for the most part.

Links between Religious Beliefs and Practices and Physical and Mental Health among Muslims

Although an extensive amount of mental health research has been carried out in the Muslim countries, most of this research has not considered the role of religion in mental health (al-Issa, 2000). Furthermore, this research has relied almost exclusively on clinical observations and anthropological methods of inquiry. For example, in an anthropological study of a small village in Morocco, Macphere (2003) observed that the recitation of Qura'nic verses offered housewives a way to manage emotions associated with recent social changes-emotions that distressed the heart (an organ that links spiritual, emotional and physical experience in the Islamic tradition) and the body. Metaphorically, these women called the Qura'n the "medicine of the heart." Based on their work with Muslim immigrant women in the United States, Carter and Rashidi (2003) developed a theoretical model of psychotherapy that could fit the needs of Muslim women suffering from mental illness. Their model incorporates "western" therapeutic elements as well as Islamic practices and beliefs (prayer, reading the Qura'n, using sayings of the prophet Muhammad). Sayed (2003) found that, within the Islamic world, many people continue to seek the help of a religious healer who can drive out the "evil spirit" and the "evil eye."

Surprisingly, relatively few empirical studies have been carried out among Muslims, and very few have examined the role of Islam with respect to physical and psychological well-being. Moreover, most of these empirical studies have been comparative in nature, and do not focus exclusively on Muslims. For example, Kamal and Loewenthal (2002) examined the impact of religious-cultural tradition on suicide-related beliefs in non-clinical samples of 40 young Hindus and 60 Muslims living in the United Kingdom. Using qualitative analysis of semi-structured interviews, they found that Muslims endorsed moral considerations (e.g., “my religious beliefs forbid it”) more strongly than Hindus. The authors noted that the condemnation of suicide within the tradition of Islam is reflected in the beliefs of young Muslims. Loewenthal and Cinnirella (1999) studied the views of 59 adult women from five cultural-religious groups in Britain (black Christian, white Christian, Hindu, Jewish and Muslims) regarding the efficacy of different forms of help for depression and schizophrenia. Of the possible religious interventions, prayer was most often seen as helpful by all the groups. However, between group differences were noted. Most of the Muslims considered prayer as very effective in treating depression. Some of the answers of Muslims regarding prayer were “prayer saves me from going into deep depression,” “if you pray you will suffer less,” and “it does not matter how depressed you are, if one can divert your attention towards prayer your low feelings can disappear...giving all problems to Allah and having faith in Him is very therapeutic.” Further, most of the Muslims believed that medicine is the most effective way of dealing with schizophrenia. Working with psychiatric inpatients suffering from some form of psychotic illness, Atallah, El-Dosoky, Coker, Nabil and El-Islam (2001) assessed the changes in frequency and pattern of religious symptomatology over the time

span from 1975 to 1996. They found significant fluctuation in the frequency of religious symptoms over the period of the study. They interpreted the results in light of the fluctuating emphasis on religion and religious affiliation in everyday life in Egypt over the years. Eugene and Amany (1996) surveyed 121 well-educated and highly religious Muslims in the United States regarding their universal and mental health values. The results showed that the participants highly valued benevolence and conformity, and generally devalued power, hedonism, and stimulation. In the domain of mental health values, Muslim respondents obtained higher scores than people from other traditions on self-rating of positive human relations, traditional religiousness with regulated self-control, compassionate responsiveness, disciplined living with rational thinking, forgiveness, and spirituality. Ai, Peterson, Huang (2003) collected information about religiousness, war-related trauma, religious-spiritual coping, optimism, and hope from a sample of 138 Muslims who escaped from Kosovo and Bosnia and settled in the United States. Applying Pargament's (1997) concept of religious-spiritual coping and using a path model, they found that optimism was positively associated with positive religious coping, which in turn was related to increased religiousness and higher education. Hope, on the contrary, was positively related to education, and negatively associated with negative religious coping, which in turn was predicted by more severe trauma. Al-Sabwah and Abdel-Khlek (2006) examined the relationship between religiousness and death distress (death anxiety, death depression, and death obsession) among a sample of 570 Egyptian women nursing undergraduates, mainly Muslims. They found that greater levels of religiousness were tied to lower levels of death anxiety and death depression.

One of the reasons for the absence of empirical research about Islamic religiousness may be the unavailability of a relevant, valid, and reliable psychological scale. Wilde and Joseph (1997) tried to develop such a scale. They devised, in English, a “Muslim Attitudes Towards Religion” (MARS) scale and validated it in a sample of 50 British university Muslims students (31 males and 19 females). This scale includes 14 items and three factors. The first is called the *personal help* factor, and includes items such as “I find it inspiring to read the Qura’n,” and “Allah helps me.” The second is labeled *Muslim worldview* factor, and includes items such as “I believe Allah helps people,” and “I think the Qura’n is relevant and applicable to modern days.” The third is named the *Muslims’ practices* factor, and includes the following items “I pray five times a day,” “I fast the whole month of Ramadan,” and “I observe my daily prayer in the mosque.” However, it is difficult to evaluate this measure. The authors did not report how they generated the items or which statistical procedures they used to generate the factors. Furthermore, they validated the scale in a very small sample size, and did not report evidence of validity.

Ghorbani, Wtason, Framarz, Ghramaleki, Morris and Wood (2000) used a sample of 178 Iranian university students (76 women and 102 men) to evaluate the validity of a Persian version of the MARS. They found that the three factors of the scale were internally consistent, and were positively correlated with Allport’s extrinsic and intrinsic religious orientations. However, the MARS failed to predict self-reported psychiatric symptoms (such as depression, anxiety and psychoticism). They concluded that the MARS was a reliable measure of Iranian religiousness, but expressed concern about the predictive validity of the scale.

In general then, the research suggests that there may be a link between Islamic beliefs and practices and Muslims' well-being. However, this research is based almost exclusively on clinical and anthropological observations. Very few empirical studies have been conducted. One of the fundamental reasons for the lack of research on this significant topic of interest may be the absence of a valid and reliable measure of Islamic religiousness that is relevant to physical and mental health. The ultimate goal of the current study was to develop such a measure.

Preliminary Steps toward the Development of a Psychological Measure of Islamic Religiousness

This study was the third step in a program of research designed to develop and validate a measure of Islamic religiousness that is relevant to health and well-being. The purpose of the first step (see Abu Raiya, 2005a for further detail) was to identify domains of Islam that are relevant to physical and mental health based on a review of literature within the general psychology of religion, a review of Islamic religion, and 25 semi-structured interviews conducted with Muslims in Israel and the United States.

The conclusions of that study were as follows. First, Islam seems to affect almost every domain in Muslims' lives. Second, it might be valuable to measure religious conversion in Islam and to compare conversion within Islam to conversion within other religious traditions. Third, five dimensions of Islam appear to be potentially relevant to physical and mental health: *beliefs* (the belief in Allah, predestination, the Day of Judgment, heaven and hell, etc.), *practices* (prayer, pilgrimage, almsgiving, fasting, reading the Holy Qura'n, etc.), *ethical conduct-dos* (being humble, honoring the parents, treating people equitably, helping relatives and neighbors, etc.), *ethical conduct-don'ts*

(not eating pork, not drinking alcohol or using other drugs, not having sex outside marriage, etc.), and *Islamic universality* (viewing every Muslim in the world as a brother or sister, identifying with every Muslim's suffering, etc.). Fourth, adhering to the Islamic faith in general and specific elements of this faith in particular appear to play a pivotal role in Muslims' ability to *cope with difficult situations in life*. Fifth, in adhering to Islam, some Muslims appear to experience *religious struggle*. Though divine struggle was rarely reported, struggle regarding different aspects of Islam, and familial conflicts related to religious topics were prevalent. In general, reports of any kind of religious struggle appeared to have negative consequences. Sixth, most of the participants in this research appeared to be intrinsically motivated to practice Islam. However, because the participants may have been motivated to present Islam in a favorable light, and because research has found extrinsic religiousness to be applicable to almost every religious faith (Pargament, 2002), it seems important to assess *religious motivation* among Muslims. Finally, because research has shown that the level of *religious exclusivism* has the potential to predict prejudice (Altemeyer & Hunsberger, 1992), it seems important to assess this dimension among Muslims. Overall, these findings underscored the need for a measure of Islamic religiousness that could be used to develop an empirically-based understanding of the influence of Islam on the health and well-being of Muslims.

Toward this end, in the second step of this program of research (see Abu Raiya, 2005b for extended discussion), eight domains of Islam were articulated (Islamic religious dimensions, Islamic religious conversion, Islamic positive religious coping, Islamic negative religious coping, Islamic religious struggle, Islamic religious internalization-identification, Islamic religious internalization-introjection, and Islamic

religious exclusivism), and an initial outcome measure (general Islamic well-being) were developed, and subscales were developed or adapted to assess these domains. A survey based on these subscales was constructed and then two steps were followed. First, feedback on the measure was gathered from a sample of Muslim participants in the United States and Israel. Second, modifications of the measure were conducted and the revised survey was administered to 64 Muslim participants in Israel and in the United States. The purpose of this step was to answer three major questions. First, how relevant are each of the items and subscales of the measure to Muslim participants? Second, to what degree do Muslim participants vary in their responses to each item and subscale? Third, how internally consistent are the items included in each subscale?

Overall, the results of that study showed that the subscales were relevant to Muslims, demonstrated variability, and, possessed good reliability.

### The Present Study

The purpose of the current investigation was to further develop the Psychological Measure of Islamic Religiousness (PMIR). Specifically, working with a Muslim sample from all over the world, I examined evidence of internal consistency and factor-analytic support for the subscales of the PMIR. Further, I assessed the intercorrelations between the PMIR and diverse criteria of well-being including measures of physical and mental health. I also examined the evidence for incremental validity of the PMIR; that is, the degree to which the PMIR predicts well-being beyond the effects of demographic variables and social desirability. The following section specifies the meaning of psychological well-being and provides a rationale for the specific indices that were used to assess this construct.

### Psychological Well-being

Psychological well-being is perhaps the most widely used construct among psychologists and mental health professionals. However, there is still no consensus regarding the operational definition of this construct (Khan & Juster, 2002). Yet, many theories of well-being have been proposed and an extensive body of empirical research using different indices of this construct has been conducted.

Ryff's (1989) work on psychological well-being is particularly well-developed. She specifies three psychological literatures that theoretically guide an understanding of the meaning of this construct. The first is the developmental psychology literature, which approaches wellness from the prism of progression and views it as the continuous growth of the individual across the life span. One well-known example of this approach is Erikson's model of stages of development. The second is the clinical psychology literature, which offers different formulations of well-being. For example, Maslow considers self-actualization as the ultimate criterion of well-being. Rogers asserts that the ideal human condition is embodied in the "fully functioning person." This person is characterized by openness to experience, ability to live existentially, trust in the self, ability to express feelings freely, independence, and creativity (Rogers, 1961). Jung regards individuation (a process in which the conscious and the unconscious domains of personality work in harmony rather than in opposition) as its core. Finally, the mental health literature has two major approaches to well-being. The first is predominated by the absence-of-illness definition of psychological well-being, while the other stresses positive functioning, including constructs such as creativity, curiosity, open-mindedness, courage, and love of learning. Based on these three sources, Ryff (1989; 1995) proposed six

components of well-being and developed scales to measure each component. Factor analysis yielded support for these six highly differentiated dimensions of well-being (Ryff et al., 1995). The following paragraph provides definitions of these components and presents a sample item from the scale that measures each of them.

1. self- acceptance (i.e., positive attitude toward the self; acknowledgment and acceptance of different aspects of the self). Sample item: “In general, I feel confident and positive about myself.”

(2) purpose in life (i.e., having goals and a sense of directedness in life; feeling that there is meaning in life). Sample item: “I have a sense of direction and purpose in life.”

3. environmental mastery (i.e., feeling competent, and possessing the ability to manage the environment; making effective use of surrounding opportunities). Sample item: “In general, I feel I am in charge of the situation in which I live.”

4. autonomy (i.e., self-determination and independence; ability to resist social pressure). Sample item: “My decisions are not usually influenced by what other people think of me.”

5. personal growth (i.e., feeling of continued growth; seeing the self as growing and expanding). Sample item: “I am the kind of person who likes to give new things a try.”

6. positive relationship with others (i.e., having warm, satisfying, and trusting relations with others; concern about the welfare of others). Sample item: “Most people see me as loving and affectionate.”

Ryff’s theoretical model and quantitative measures are extensively utilized by researchers who are concerned with mental health and well-being (Keyes et al., 1998). However, Ryff was criticized that, though she based her model partly on the mental

health literature that utilizes the absence-of-illness as one of the definitions of well-being, she did not include in her model any component that represents this definition (Kahn & Juster, 2002). Empirical research and other conceptual frameworks do utilize this definition.

Kahenman et al. (1999) proposed five different conceptual levels of well-being to guide empirical investigation: external conditions (e.g., income, housing), subjective well-being (e.g., self-report of satisfaction and dissatisfaction), persistent mood level (e.g., optimism/pessimism), transient emotional states (e.g., joy, anger), and biochemical bases of behavior. However, research on well-being has not focused equally on these five levels. Reviewing the empirical literature in the field, Kahn and Juster (2004) found that the vast majority of surveys of well-being have utilized one or more of three types of criteria: (1) satisfaction with life, (2) health and ability/disability, and (3) composite indexes of positive/negative functioning.

To assess the validity of the subscales of the Psychological Measure of Islamic Religiousness, this study utilized measures that represent elements of the above theoretical and conceptual frameworks. The General Islamic Well-being, the Satisfaction with Life, the Positive Relations with Others, and the Purpose in Life measures represented Ryff's model and positive functioning criteria; the Physical Health and the Alcohol Use represented the health and ability/disability criterion; and the Depressed Mood and the Angry Trait measures represented negative feelings and functioning.

#### Expected Results

Because of the dearth of empirical research conducted among Muslims regarding their patterns of religiousness, this study was exploratory in nature. It is one of the first

attempts to empirically explore the ways in which Islamic religiousness affects the physical and psychological well-being of Muslims. Therefore, the hypotheses proposed were tentative in nature.

Among the many possible scenarios of findings, one seemed more probable. This scenario rested on the assumption that the factor analysis would not yield support for the highly differentiated dimensions of Islamic beliefs and practices that were delineated through the earlier steps of this program of research. Rather, based on the results of the pilot testing of the measure (see Abu Raiya, 2005b for more detail), I hypothesized that the factor analysis would yield two factors of Islamic religiousness: positive Islamic religiousness and negative Islamic religiousness.

Based on the findings of research among non-Muslim samples, mostly Christians, globally speaking, I expected to find a positive relationship between positive religiousness factors (i.e., beliefs, practices, ethical conduct, positive religious coping, intrinsic religiousness or identification, religious pluralism) and well-being, and a negative relationship between negative religiousness factors (i.e., negative religious coping, extrinsic religiousness or introjection, religious struggle, and religious fundamentalism or exclusivism) and well-being. For example, in support of this prediction, cross-sectional and longitudinal studies have consistently found significant negative associations between religious attendance and beliefs and indicators of health status, including specific conditions such as hypertension, general measures of functional disability, and overall mortality (Koenig et al., 2001). Pargament et al. (1998) found that positive and negative religious coping methods were linked to better mental health and greater distress respectively. Ryan et al. (1993) reported positive relations between

introjection and anxiety and depression, as well as a positive relation between identification and identity integration. Altemeyer and Hunsberger (1992) found a positive relationship between religious fundamentalism and prejudice, and a negative relationship between religious fundamentalism and tolerance. Of course, it must be stressed that these findings emerged from studies of largely Christian samples. Although it was possible that religiousness might have different associations with well-being among Muslims, this initial exploratory study tested a set of predictions that grew out of the established literature in the psychology of religion.

Therefore, I hypothesized that:

1. Higher scores on positive Islamic religiousness would be associated with higher scores on satisfaction in life, general Islamic well-being, positive relations with others, purpose in life, and good physical health, while higher scores on positive Islamic religiousness will be associated with lower scores on depressed mood, angry feelings, alcohol abuse, and good physical health.
2. Higher scores on negative Islamic religiousness would be tied to lower scores on satisfaction in life, general Islamic well-being, positive relations with others, purpose in life, and poor physical health; and higher scores in negative Islamic religiousness would be associated with higher scores on depressed mood, angry feelings, alcohol abuse, and poor physical health.

## CHAPTER II: METHOD

### Measures

#### Measures of Islamic Religiousness

Building on the two previous steps of this program of research, the current study utilized a survey including items that represent the following subscales: Islamic Dimensions, Islamic Religious Conversion, Islamic Positive Religious Coping, Islamic Negative Religious Coping, Islamic Religious Struggle, Islamic Religious Internalization-Identification, Islamic Religious Internalization-Introjection, and Islamic Religious Exclusivism. These subscales made up the Psychological Measure of Islamic Religiousness (PMIR). Due to concerns about the length of the PMIR voiced by participants in the pilot test study (see Abu Raiya, 2005b for further details), I decided to use a short form of each subscale, when possible. This decision was justified as well by the fact that all of the above subscales demonstrated good to very high internal consistency. The short form of the PMIR consisted of a total number of 70 items, comparing to a total number of 122 items that made up the original PMIR.

Because analysis based on subscales that include less than five items may be problematic, it was decided to set a minimum of five items per subscale. Generally, the items chosen were those that contributed to the highest internal consistency of the subscale. However, in a few cases, items with slightly lower item-total correlations were selected to increase the content validity and maintain the structure of the subscale. For example, although the items “Islam is the major reason why I do not drink alcohol,” and “Islam is the major reason why I do not have sex before or outside marriage,” from the Ethical Conduct Don’t subscale did not have the highest item-total correlations, they

were included in the short form because of their centrality to adherents of the Islamic faith. In addition, because half of the items included in the long form of the Islamic Religious Exclusivism subscale are reverse-scored, this structure had to be kept in the short form. Consequently, a few items with lower item-total correlations were included in the short form. The next few paragraphs describe the subscales in more detail.

Subscales of Islamic Dimensions. The Islamic dimensions were measured through five subscales: the Beliefs Dimension, the Practices Dimension, the Ethical Conduct- Do Dimension, the Ethical Conduct-Don't Dimension, and the Islamic Universality Dimension.

The *Beliefs Dimension* subscale consisted of five items. The participants were asked to respond to each item on a 3-point scale ranging from 0 (“no”) to 2 (“yes”); the higher the score, the stronger the belief. In the pilot test, this subscale demonstrated very high internal consistency (Cronbach’s alpha = .97).

Six items were included in the *Practices Dimension* subscale. One of these items (wearing hijab) was gender-specific (for women only). The participants were asked to respond to each item in this subscale on a 6-point scale ranging from 0 to 5; the higher the score, the more of the practice is applied. Because of the different nature of each practice, the response categories for each item were different. For example, the item “How often do you pray?” had the following response categories: “Never,” “a few times a year,” “several times a month,” “several times a week,” “most of the time the 5 daily prayers,” and “five times a day or more,” whereas the item “Except in prayers, how often do you engage in d’iker and tasbih?” had the following response categories: “Never,” “a few times in my life,” “a few times a year,” “a few times a month,” “about once or twice

a week,” and “once a day or more.” The results of the pilot study showed that this subscale demonstrated high internal consistency when the gender-specific item was not included (Cronbach’s alpha = .92) and very good internal consistency when it was (Cronbach’s alpha = .87).

Five items were included in the *Islamic Universality Dimension* subscale. The participants were asked to respond to each item on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”); higher scores represent greater adherence to Islamic universality. The results of the pilot study revealed that this subscale had high internal consistency (Cronbach’s alpha = .91).

It should be mentioned that due to the low number of items (5) in each of the above 3 subscales, the original version of these subscales were used.

The *Ethical Conduct-Do Dimension* subscale-short form consisted of 5 items. The participants were asked to respond to each item on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”); the higher the score, the higher the level of the “do.” The results of the pilot study showed that both this form and the long 9-item form of this subscale demonstrated very high internal consistency (Cronbach’s alpha = .95 and .97 respectively).

Five items made up the *Ethical Conduct-Do not Dimension* subscale-short form. The participants were asked to respond to each item on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”); the higher the score, the higher the level of the “don’t”. The internal consistency of this form of the subscale as inferred from the pilot study was .96, whereas the internal consistency of the long 10-item form was .98.

Islamic Religious Conversion Subscale-Short Form. Pargament (1997) proposed the following definition for religious conversion: “In an effort to re-create life, the individual experiences a dramatic change of the self, a change in which the self becomes identified with the sacred” (p. 248). The key features of this process are the admission that the self is limited and the incorporation of the sacred into the self (Mahoney & Pargament, 2004).

To assess this phenomenon among Muslim participants, the *Islamic Religious Conversion* subscale-short form was used. The participants were asked to respond to each of the 6 items in this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”); the higher the score, the higher the possibility that a religious conversion occurred. The results of the pilot test revealed that the internal consistency of the shortened subscale does not differ from the internal consistency of the 12-item form (Cronbach’s alpha = .92).

This subscale included a screening item (“In my life, I have changed from a non-religious person to a religious person”) with the response options of “yes” and “no.” Only participants who replied “yes” to this item completed this subscale.

Islamic Positive Religious Coping Subscale- Short Form. Following Pargament et al. (2000), the positive religious coping methods reflect a secure relationship with God, a belief that there is a greater meaning to be found, and a sense of spiritual connectedness with others. To measure the degree to which Muslim participants utilize these methods, the *Islamic Positive Religious Coping* subscale-short form was used. The items included in this subscale refer to general life stressors. The participants were asked to respond to each of the 7 items in this subscale on a 4-point scale ranging from 1 (“I do not do this at all”) to 4 (“I do this a lot”). Higher scores on this subscale reflect more positive religious

coping. Based on the results of the pilot test, the internal consistency of the shortened subscale was .92, while the internal consistency of the long 13-item form was .95.

Islamic Negative Religious Coping Subscale- Short Form. According to Pargament et al. (2000), the negative religious coping pattern involves expressions of a less secure relationship with God, a tenuous and ominous view of the world, and a religious struggle to find and conserve significance in life. This pattern of coping was measured using the *Islamic Negative Religious Coping* subscale-short form. The participants were asked to respond to each of the 5 items of this subscale on a 4-point scale ranging from 1 (“I do not do this at all”) to 4 (“I do this a lot”). Higher scores on this subscale reflect more negative religious coping. The internal consistency of the shortened form of this subscale was .74, while the internal consistency of the full 7-item form was .81.

Islamic Religious Struggle Subscale-Short Form. Religious struggle refers to difficulties, doubts, and conflicts that the individual experiences when adhering to a religious faith or doctrine. To assess the occurrence of religious struggle among Muslim participants, the *Islamic Religious Struggle* subscale-short form was used. The participants were asked to respond to each of the 6 items in this subscale on a 5-point scale ranging from 0 (“never”) to 4 (“very often”); the higher the score, the more religious struggle the person experiences. The internal consistency of this short form of the subscale was .90, while the internal consistency of the long 11-item form was .93.

Islamic Religious Internalization-Identification Subscale. According to Ryan et al. (1993), religious identification represents adoption of religious beliefs as personal values. The *Islamic Religious Internalization-Identification* subscale was used to measure identification among participants. The participants were asked to respond to each of the 5

items of this subscale on a 4-point scale ranging from 1 (“not true at all”) to 4 (“very true”); the higher the score, the more identification is manifested. For all items in this subscale, the option of “not applicable” was included in the response categories. In the pilot test, this subscale demonstrated good internal consistency (Cronbach’s alpha = .84).

Islamic Religious Internalization-Introjection Subscale. In introjection, behaviors are driven by other-approval, anxiety, guilt, and loss of esteem (Ryan et al., 1993). To assess religious introjection among participants, the *Islamic Religious Internalization-Introjection* subscale was used. The participants were asked to respond to each of the 5 items in this subscale on a 4-point scale ranging from 1 (“not true at all”) to 4 (“very true”); the higher the score, the more introjection is manifested. For all items in this subscale, the option of “not applicable” was included in the response categories. In the pilot test, this subscale demonstrated good internal consistency (Cronbach’s alpha = .80).

Because of the low number of items (5) in the Islamic Religious Internalization-Identification and the Islamic Religious Internalization-Introjection subscales, the original forms of these subscales were used in this study.

Islamic Religious Exclusivism Subscale-Short Form. According to Pargament (1997), religious Exclusivism reflects the assumption that there is an absolute reality and a single way to approach it. To measure religious exclusivism among participants, the *Islamic Religious Exclusivism* subscale-short form was used. The participants were asked to respond to each of the 10 items in this subscale on an 8-point scale ranging from -4 (“very strongly disagree”) to +4 (“very strongly agree”). Higher scores reflect more exclusivism. The internal consistency of this shortened form of the subscale was .93, while the internal consistency of the long 20-item form was .95.

### Psychological Well-being Measures

General Islamic Well-being. The General Islamic Well-being Scale is an outcome measure that assesses the degree to which the individual perceives Islam as affecting several aspects of the individual's life (sense of meaning in life, personal identity, sense of community, sense of personal comfort, sense of peace of mind, physical health, sense of self-esteem, feeling of closeness to Allah, and ability to cope with difficult situations in life). This is a 9-item scale developed based on the previous two steps of this program of research. The participants were asked to respond to each item on a 5-point scale ranging from -2 ("very negatively") to 2 ("very positively"); the higher the score, the more positively Islam affects the general well-being; the lower score, the more negatively Islam affects the well-being. In the pilot test, this subscale demonstrated very high internal consistency (Cronbach's alpha = .96).

Depressed Mood. Depression was assessed via the Center for Epidemiological Research-Depressed Mood Scale (CES-D; Radloff, 1977). The CES-D is a 20-item scale that assesses depressive symptomology. Reliability estimates (Cronbach's alphas) for this scale have been reported to range from .84 to .90. The author reported the scale to have content validity, construct validity and criterion validity. Reviewing the literature, Beverly et al. (2004) showed that the items of the CES-D were theoretically relevant, the scale correctly reflects the incidence of depressive symptomology in the groups tested, and it correlates with other measures that assess depression. The participants were asked to respond to each item on a 4-point scale ranging from 1 ("rarely or none of the time") to 4 ("most or all of the time"). A high score on this measure indicates greater depressive affect.

Life Satisfaction. To measure life satisfaction among participants, the 5-item “Satisfaction With Life Scale” (SWLS), developed by Diener et al. (1985), was used. The authors reported that the scale has very good internal consistency (Cronbach’s alpha = .87) and high test-retest reliability ( $r = .82$  over a two month period). The original validation studies found that the SWLS was significantly correlated with ten other measures of subjective well-being. The SWLS has also been found to change in the expected directions in response to major life events, such as elderly caregivers who had a spouse diagnosed with primary degenerative dementia, and patients receiving psychotherapy (Pavo & Diener, 1993). The participants were asked to respond to each item on a 7-point scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). A global score was obtained by adding the responses of the individual items. A higher score on this measure means a greater sense of life satisfaction.

Positive Relations with Others. Ryff and Keyes’s (1995) 9-item Positive Relations with Others scale was used to assess the quality of relations that participants tend to form with others. The authors reported that the scale has good internal consistency (Cronbach’s alpha = .83). Several studies testify to the construct and criterion validity of this scale (Ryff, 1989; Ryff et al., 1994). For example, Ryff (1989) found direct relationships between positive relations with others and positive affect and life satisfaction, and negative relationships between positive relations with others and negative affect and depression. Furthermore, Ryff et al. (1994) found a direct link between positive relations with others and happiness, and negative relationships between positive relations with others and dysfunctional energy and affect. Participants in the study were asked to respond to each item on a 6-point scale ranging from 1 (“strongly

disagree”) to 6 (“strongly agree”). Higher scores indicate warm, satisfying, trusting relationships with others, concern for others' welfare, a strong capacity for empathy, affection and intimacy, and an understanding of the nature of give and take of human relationships. Lower scores denote few close and trusting relationships with others, and difficulties being warm, open, and concerned about others.

Purpose in Life. Ryff’s and Keyes’s (1995) 9-item Purpose in Life scale was used to assess this domain in participants’ lives. The authors reported that the scale has very good internal consistency (Cronbach’s alpha = .88). Abundant studies have shown this scale to possess criterion validity. For example, Ryff (1989) found significant positive relationships between this scale and positive affect and satisfaction in life, and negative relationships between it and negative affect and depression. Ryff (1995) found a positive relationship between this scale and happiness and a negative relationship with dysfunctional energy and affect. Participants in the study were asked to respond to each item on a 6-point scale ranging from 1 (“strongly disagree”) to 6 (“strongly agree”). Higher scores denote having goals and sense of directness in life, feeling of meaning to present and past life, and holding beliefs that give life purpose. Lower scores indicate the lack of sense of meaning and direction in life, and not holding beliefs and outlooks that give life meaning.

Physical Health. The “General Health Perception” subscale of the Short-Form-36 Health Survey (SF-36), developed by Ware and Sherburne (1992) was used to measure participants’ perception of their physical health. The internal consistency of this subscale was reported to range from .73 to .95. The authors provided evidence of content and predictive validity of the subscale. Other research has shown that this subscale

demonstrates discriminant validity. For example, the SF-36 General Health Perception subscale was able to differentiate healthy participants from participants receiving dyslipidemia and/or hypertension treatment (Lalonde et al., 1999). This subscale consists of 5 items. The participants were asked to respond to four of these items on a 5-point scale ranging from 1 (“definitely true”) to 5 (“definitely false”). The remaining item was scored on a scale from 1 (“excellent”) to 5 (“poor”). An overall score was obtained by adding participants’ responses to the five items such that a high score represents a perception of poorer health.

Angry Feelings. The “Anger Trait” Scale of the 44-item State-Trait Anger expression Inventory (STAXI) developed by Spielberger (1988) was used to measure how often angry feelings are experienced over time by participants. The internal consistency of this scale was reported to range from .82 to .84. As an evidence for construct validity, the author reported that the scale correlates highly with other measures of hostility (.69 and .50 with the Bruss-Durkee Hostility Inventory and the MMPI Hostility Scale, respectively). This scale consists of 10 items. The participants were asked to respond to each of these items on a 4-point scale ranging from 1 (“almost never”) to 4 (“almost always”). The higher the score, the more often angry feelings are experienced over time.

Alcohol Use. The Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993) was used to identify serious drinking problems among participants. This measure was developed under the sponsorship of the World Health Organization specifically for use in community settings. It is a 10-item measure intended to assess three dimensions believed to be closely tied to current detrimental and hazardous

drinking patterns: alcohol consumption, alcohol dependence, and adverse consequences of alcohol use. Saunders et al. (1993) reported that the AUDIT has been shown to have an overall sensitivity of 80% and specificity of 98% of detecting drinking problems, with good to excellent subscale reliabilities in health care patients, and good sensitivity (84%) and internal consistency (.80) with undergraduate students. It also has been found to have high validity and reliability in detecting hazardous drinking in large-scale surveys of adults of working age in a variety of settings (Allen et al., 1997). The participants were asked to respond to 7 of the items on a 5-point scale ranging from 0 (“never”) to 4 (“daily or almost daily”). The remaining three items have 3 response options and were scored 0 (“no”), 2 (“yes, but not in the last year”), or 4 (“yes, during the last year”). The maximum score possible is 40. A total score of 8 or more indicates a strong likelihood of hazardous or harmful alcohol consumption.

#### Other Measures

Global Religiousness. Two items (How do you describe your religiousness? How do you describe your spirituality?) were used to assess general perceptions of religiousness. The participants were asked to respond to each item on a 5-point scale ranging from 1 (“very low”) to 5 (“very high”). A higher score on this measure means greater perception of global religiousness.

Social Desirability. The need to assess social desirability grew out of the observation that Muslims might have been motivated to present Islam in a favorable light (see Abu Raiya, 2005a-b for further detail). The short version (thirteen items) of the Marlowe-Crowne scale was used to measure social desirability. This scale is the most widely used social desirability scale. It captures both the impression management and the

self-deception dimensions of social desirability, and has demonstrated good reliability (Cronbach's alpha = 0.88) (Reynolds, 1982). The participants were asked to indicate whether each of the items is true or false for them personally.

Demographic Variables. The participants were asked to provide information regarding their age, gender, marital status, years of education, yearly household income, and continent of current residency.

### Sample

The sample consisted of 340 Muslim participants who completed the online survey. Originally, 362 individuals submitted online surveys, however, 22 of these surveys were not useable; they were either partially completed or submitted more than once. Therefore, the final analyses were based on 340 people. Table 1 provides background demographic information on the sample.

Two hundred and five (60.8%) participants were women and 131 (38.9%) were men. Two hundred and twenty six (66.9%) participants were between the ages 18 and 30, 73 (21.6%) between 30 and 45, 33 (9.7%) between 45 and 60, and 6 (1.8%) were above 60. Two hundred and five (60.8%) participants reported being single, 109 (32.2%) indicated being married, and 22 (6.5%) were reportedly divorced. Twenty four (7.1%) participants indicated having less than 12 years of education, 154 (45.8%) stated having between 12 and 15 years of education, 92 reported having between 15 and 18 years of education, and 66 (19.6%) reportedly have more that 18 years of education. One hundred and eighty one (53.9%) participants specified North America as their continent of current residence, 60 (17.9%) reported living in Europe currently, 50 (14.9%) indicated residing in Asia, 24 (7.1%) reportedly live in Africa, and the remaining 20 (5.9%) in Australia.

One hundred and thirty one (40.2%) participants reported their yearly household income as being less than \$25,000, 78 (23.9%) reported their yearly household income to be between \$25,000 and \$50,000, 62 (19%) reported their yearly household income to be between \$50,000 and \$75,000, and the remaining 55 (16.9%) reported their yearly household income to be above \$75,000. Finally, participants indicated moderate levels of self-rated religiousness ( $M = 3.23$ ,  $S.D = 1.01$ ; obtained range: 1-5) and self-rated spirituality ( $M = 3.65$ ,  $S.D = 1.02$ ; obtained range: 1-5).

### Procedure

A survey consisting of all of the measures was constructed. Then, a web space for the purpose of the study was created, and the survey was posted online. To generate sites for posting the survey, an extensive search for Muslim groups/associations/forums operating in the English language in the web was conducted. Browsers and search tools like “Goggle”, “Yahoo”, and “Belief-net” were used and the keywords “Muslim forums,” “Muslim associations,” and “Muslim groups” were inserted. When groups/associations/forums with high constituency and/or active websites were identified, the contact information of the owners/managers/presidents/administrators (henceforth administrators) of these forums, groups, and associations were obtained via their web pages. For example, the administrators of the web sites of the Muslim student associations at the Universities Yale, Chicago, and Michigan Dearborn, the Federation of the Islamic Associations of New Zealand, the Australian New Muslim Association, and the Muslim Association of Britain were contacted. Appendix A lists all of the websites that were contacted. These administrators were contacted by e-mail, and the purpose of the study was explained in detail to them. Then, they were asked to send a message that

included the survey-link via e-mail to all of the members in their groups, forums, and associations. Appendix B displays the recruitment letter sent to administrators and the message they were asked to forward to their members' lists. All in all, about one hundred recruiting messages were sent to administrators, and about thirty of them confirmed receiving the message and forwarding it to their listserv. Additionally, a "snowball" sampling was applied; a message including the survey-link was sent to about 30 of the researcher's Muslim friends and acquaintances who were asked to complete the survey and forward the message to any Muslim they know.

It should be mentioned that online surveys are being increasingly used as a research tool in the social sciences (Granello & Wheaton, 2004; Glover & Bush, 2005) . More will be said about their usefulness for studying Muslims in general and Islamic religiousness in particular in the discussion section.

## CHAPTER III: RESULTS

In what follows, item-level descriptive statistics for each of the original subscales are presented. Next, the results of the factor analyses and the reliability estimates of the factors are reported. Finally, validity analyses conducted on the resulted subscales are provided.

### Descriptive Statistics

Item-level descriptive statistics for each of the subscales are presented in Tables 2-7. The next few paragraphs describe the results presented in each of the tables in more detail.

### Islamic Dimensions

Tables 2.1 through 2.5 provide descriptive details on each of the “Islamic Dimensions” subscales. As can be seen, participants indicated high endorsement of each item of the subscales “Beliefs Dimension,” “Ethical Conduct Do Dimension,” “Ethical Conduct Do not Dimension,” and “Islamic Universality Dimension” and demonstrated low variability. The participants responded to the “Belief Dimension” subscale on a 3-point scale ranging from 0 (“no”) to 2 (“yes”), and to the “Ethical Conduct Do Dimension,” the “Ethical Conduct Do not Dimension,” and the “Islamic Universality Dimension” subscales on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The mean score of the items of the “Beliefs Dimension” subscale ranged from 1.84 to 1.91 and standard deviations of the items ranged from .39 to .49. The mean score of the “Ethical Conduct Do Dimension” subscale ranged from 3.90 to 4.08 and standard deviations of the items ranged from 1.20 to 1.25. The mean score of the “Ethical Conduct Do not Dimension” subscale ranged from 3.88 to 4.46 and standard

deviations of the items ranged from 1.15 to 1.36. The mean scores of the “Islamic Universality Dimension” subscale ranged from 3.81 to 4.25 and standard deviations of the items ranged from 1.11 to 1.20.

On the other hand, participants demonstrated high variability in their scores on the “Practices Dimension” subscale. The participants in this subscale responded to each item on a 6-point scale ranging from 0 to 5. Because of the different nature of each practice, the response categories for each item were different. For example, the item “How often do you pray?” has the following response categories: “Never,” “a few times a year,” “several times a month,” “several times a week,” “most of the time the 5 daily prayers,” and “five days a day or more,” whereas the item “Except in prayers, how often do you engage in d’iker and tasbih?” has the following categories: “Never,” “a few times in my life,” “a few times a year,” “a few times a month,” “about once or twice a week,” and “once a day or more.” The mean score of the items in this subscale ranged from 1.92 to 4.01 and standards deviations of the items ranged from 1.13 to 1.77. More specifically, participants reported relatively high observance of fasting ( $\underline{M} = 4.01$ ,  $\underline{S.D} = 1.13$ ) and prayer ( $\underline{M} = 3.75$ ,  $\underline{S.D} = 1.48$ ) and relatively moderate observance was reported by participants with regard to reading the Holy Qura’n ( $\underline{M} = 3.49$ ,  $\underline{S.D} = 1.41$ ), engaging in d’iker and tasbih ( $\underline{M} = 3.37$ ,  $\underline{S.D} = 1.77$ ), and going to the masjid ( $\underline{M} = 2.88$ ,  $\underline{S.D} = 1.40$ ). With respect to the type of hijab they wore, women in this study reported wearing a relatively less strict type of hijab ( $\underline{M} = 1.92$ ,  $\underline{S.D} = 1.75$ ).

### Islamic Religious Conversion

Table 3 provides descriptive details about each item of the “Islamic Religious Conversion” subscale. Participants responded to a screening item before completing this

subscale (“In my life, I have changed from a non-religious person to a religious person”) with the response options of “yes” and “no.” One hundred and seventy nine (53%) participants replied “yes” to this item and only they filled out the items in this subscale, indicating that religious conversion was not uncommon among participants. Participants indicated high endorsement of each of the items of this subscale and demonstrated low variability across items. Participants responded to each item of this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The mean scores of the items in this subscale ranged from 4.16 to 4.52 and standards deviations of the items ranged from .88 to 1.17.

#### Islamic Positive Religious Coping

Table 4.1 provides descriptive details about each item of the “Islamic Positive Religious Coping” subscale. Participants indicated moderate to high scores in this subscale and demonstrated variability across the items. Participants responded to the items of this subscale on a 4-point scale ranging from 1 (“I do not do this at all”) to 4 (“I do this a lot”). The mean scores ranged from 2.68 to 3.52 and standard deviations ranged from .82 to 1.05. For example, participants endorsed relatively greater use of seeking Allah’s love and care when faced with a problem ( $\underline{M} = 3.52$ ,  $\underline{S.D} = .83$ ), and relatively less use of reading the Holy Qura’n in coping ( $\underline{M} = 2.68$ ,  $\underline{S.D} = 1.05$ ).

#### Islamic Negative Religious Coping

Table 4.2 provides descriptive details about each item of the “Islamic Negative Religious Coping” subscale. Low to moderate scores were obtained for the items in this subscale, and variability was demonstrated across the items. Participants responded to each item of this subscale on a 4-point scale ranging from 1 (“I do not do this at all”) to 4

(“I do this a lot”). The mean scores ranged from 1.43 to 2.62 and standard deviations ranged from .81 to 1.04. For example, participants scored relatively lower on the item “when I face a problem in my life, I realize that Allah will not answer my supplications” ( $M = 1.43$ ,  $S.D = .81$ ) but expressed more frequent expressions of being punished by Allah when facing a problem ( $M = 2.62$ ,  $S.D = 1.04$ ).

### Islamic Religious Struggle

Table 5 provides descriptive details about each item of the “Islamic Religious Struggle” subscale. Participants indicated relatively low endorsement of the items of this subscale and demonstrated low variability across the items. Participants responded to the items in this subscale on a 5-point scale ranging from 0 (“never”) to 4 (“very often”). The mean scores ranged from .39 to 1.02 and standards deviations of the items ranged from .90 to 1.21. Especially low scores were obtained on items that referred to divine struggle and doubts regarding core Islamic beliefs. For example, reports of doubts about the existence of Allah ( $M = .39$ ,  $S.D = .90$ ), and doubts about the existence of the afterlife ( $M = .42$ ,  $S.D = .98$ ) were uncommon.

### Islamic Religious Internalization-Identification

Table 6.1 provides descriptive details about each item of the “Islamic Religious Internalization-Identification” subscale. Participants scored relatively high on the items of this subscale and demonstrated low variability across the items. Participants responded on a 4-point scale ranging from 1 (“not at all true”) to 4 (“very true”); the option “not applicable” was also possible. The mean scores ranged from 2.91 to 3.47 and standard deviations ranged from .72 to .97.

### Islamic Religious Internalization-Introjection

Table 6.2 provides descriptive details about each item of the “Islamic Religious Internalization-Introjection” subscale. Low to high scores were obtained for the items of this subscale and participants demonstrated variability across the items. Participants responded to items in this subscale on a 4-point scale ranging from 1 (“not at all true”) to 4 (“very true”); the option “not applicable” was also possible. The mean scores ranged from 1.43 to 3.18 and standard deviations ranged from .84 to 1.02. For example, participants reported relatively low scores on the item “I go to the masjid because others would disapprove of me if I did not” ( $M = 1.43$ ,  $S.D = .84$ ). On the other hand, participants scored high on the item “I pray because Allah would disapprove of me if I did not” ( $M = 3.18$ ,  $S.D = 1.02$ ).

### Islamic Religious Exclusivism

Table 7 provides descriptive details about each item of the “Islamic Religious Exclusivism” subscale. The scores in this subscale were skewed toward the exclusivism end of the continuum, and participants demonstrated variability across the items. Participants responded on an 8-point scale ranging from -4 (“very strongly disagree”) to 4 (“very strongly agree”) and half of the items were reverse scored. The mean scores of the items in this subscale ranged from 0.92 to 2.80, and standards deviations ranged from 2.33 to 3.10. For example, participants scored relatively higher on the item “Islam is Allah’s unfailing guide to happiness and salvation and must be totally followed” ( $M = 2.8$ ,  $S.D = 2.2$ ), and relatively lower on the item “the basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against Allah” ( $M = .92$ ,  $S.D = 2.96$ ).

### Factor Analyses

Except for the 6 items of the “Islamic Religious Conversion” subscale that had a screening item, and the gender-specific item in the “Islamic Practices Dimension” subscale, the remaining 63 items of the PMIR were entered into an exploratory factor analysis using principal components extraction and direct oblimin rotation. The direct oblimin rotation was selected because the various subscales of the measure were expected to be correlated. The factor analysis yielded 14 factors with eigenvalues greater than 1 and accounted for 70.25% of the variance. However, because these 14 factors were not conceptually meaningful, included single-item factors, and the scree plot bended around the fifth or the sixth factor, it was decided to look for better factor-solutions. Four, five, six, and seven factor-solutions were examined. Among these, the six-factor solution proved to be the most conceptually meaningful. The eigenvalues of the six factors ranged from 2.35 to 15.37 and together accounted for 50.87% of the variance. Table 8 displays the factor loadings of each item with the 6 factors; all items that had factor loadings of .40 or greater, and did not have significant cross-loadings were included in further analyses.

An examination of Factor 1 suggested that this factor included all the 5 items that were conceptually linked to the construct originally labeled “Islamic Beliefs” and therefore it was decided to retain this label. Factor 2 included all but one of the items (14) that originally composed the Islamic dimensions “Ethical conduct Do,” “Ethical Conduct Do not,” and “Islamic Universality.” Therefore, it was decided to call this factor, “Islamic Ethical Principles & Universality.” Factor 3 consisted of the 6 items that were conceptually linked to the construct “Islamic Religious Struggle,” and two items that

were part of the “Islamic Negative Religious Coping” subscale.” Because all of these items represent elements of struggle and doubt, it was decided to name this factor “Islamic Religious Struggle.” Factor 4 included 3 items of the originally labeled “Islamic Practices Dimension” subscale, four of the items that were part of the “Islamic Religious Internalization- Introjection” subscale and five items of the “Islamic Religious Exclusivism” subscale. The items of the “Islamic Practices Dimension” subscale that loaded on this factor (prayer, fasting, and going to the masjid) reflect the sense of dutifulness; the items of the “Islamic Religious Internalization- Introjection” subscale loaded on this factor pertain to a sense of obligation; and the items of the “Islamic Religious Exclusivism” reflect the sense of exclusivism. Consequently, this factor was called “Islamic Religious Duty, Obligation & Exclusivism.” Factor 5 included 2 items of the subscale originally labeled “Islamic Practices Dimension,” all 7 items of the “Islamic Positive Religious Coping” subscale, and all 5 items of the “Islamic Religious Internalization- Identification” subscale. Therefore, this factor was labeled “Islamic Positive Religious Coping & Identification.” The three items that composed factor 6 were originally part of the “Islamic Negative Religious Coping” subscale. Their underlying common theme is the feeling of being punished by Allah in times of crisis. Thus, this factor was named “Punishing Allah reappraisal.”

The 6 items of the “Islamic Religious Conversion” subscale were entered into separate exploratory factor analysis using principal components extraction and direct oblimin rotation. This yielded one factor with eigenvalue greater than 1. Table 9 presents the items of this subscale with their factor loadings. The eigenvalue of this factor was 3.93 and it accounted for 65.51% of the variance.

Thus, in subsequent analyses, the PMIR was split into seven subscales: “Islamic Beliefs,” “Islamic Ethical Principles & Universality,” Islamic Religious Duty, Obligation & Exclusivism,” “Islamic Religious Struggle,” “Islamic Positive Religious Coping & Identification,” “Punishing Allah Reappraisal,” and “Islamic Religious Conversion.” Scores for each of the seven subscales were calculated by adding all the items comprising the subscale; higher scores reflect greater use of the content of the subscale.

### Reliability Analyses

Estimates of internal consistency (Cronbach’s alphas) were calculated for the factor analytically derived subscales and the Islamic Religious Conversion subscale. Items with low correlations with the total score of the subscale were deleted. The final PMIR included 60 items. The reliability coefficients of the subscales are provided in Table 10. Except for two subscales (the “Islamic Religious Duty, Obligation & Exclusivism” and the “Punishing Allah Reappraisal” that both had Cronbach’s alpha of .77), the reliability estimates for each of the subscales were greater than .80. “Islamic Beliefs” (Cronbach’s alpha = .97) and “Islamic Ethical Principles & Universality” (Cronbach’s alpha = .96) had especially high internal consistency.

### Validity Analyses

In order to assess the validity of the PMIR subscales, the following analyses were performed:

1. Correlational analyses between the demographic variables and the different subscales.

2. Correlational analyses among the subscales to determine the relations between them. Modest intercorrelations could provide support for possible discriminant and convergent validity of these subscales.
3. Correlations between the different subscales and the outcome measures. These analyses could demonstrate criterion validity of the subscales.
4. Hierarchical regression analyses to determine whether the PMIR subscales have incremental validity.

#### Correlations between the Demographic Variables and the Subscales

Correlational analyses revealed that there were no significant links between age or yearly household income and any of the religious factors. Significant correlations were found between years of formal education and Islamic Religious Struggle ( $r = -.12, p < .05$ ), and Islamic Positive Religious Coping & Identification ( $r = .17, p < .01$ ); more years of formal education were tied to lower scores on Islamic Religious Struggle and higher scores on Islamic Religious Positive Coping & Identification.

A one-way ANOVA revealed that there were significant differences between males and females in their scores on Islamic Religious Struggle  $\{F(1, 323) = 4.08, p < .05\}$ , and Islamic Religious Duty, Obligation & Exclusivism  $\{F(1, 243) = 15.46, p < .01\}$ . More specifically, males scored significantly higher than females on Islamic Religious Struggle  $\{t(323) = 2.02, p < .05\}$  and Islamic Religious Duty, Obligation, & Exclusivism  $\{t(242) = 3.93, p < .01\}$ . With regard to marital status, there were significant differences between the groups in their scores on Islamic Beliefs  $\{F(3, 330) = 13.50, p < .01\}$ , Islamic Ethical Principles & Universality  $\{F(3, 320) = 5.72, p < .01\}$  and Islamic Religious Struggle  $\{F(3, 322) = 16.09, p < .01\}$ . More specifically, married individuals

scored higher than divorced individuals on Islamic Beliefs  $\{t(129) = 4.05, p < .01\}$  and Islamic Ethical Principles & Universality  $\{t(120) = 2.82, p < .01\}$ , and lower on Islamic Religious Struggle  $\{t(124) = -4.59, p < .01\}$ . With respect to the current continent of residence, a one-way ANOVA analysis demonstrated that there were significant differences between the groups in their scores on Islamic Ethical Principles & Universality  $\{F(5, 316) = 3.88, p < .01\}$ , Islamic Religious Struggle  $\{F(5, 318) = 4.10, p < .01\}$ , and Islamic Positive Religious Coping & Identification  $\{F(5, 260) = 4.15, p < .01\}$ . More specifically, African participants scored significantly lower than North American participants  $\{t(198) = -4.96, p < .01\}$ , and European participants  $\{t(79) = -2.86, p < .01\}$  on Islamic Ethical Principles & Universality. North American participants scored significantly higher than African participants  $\{t(188) = 4.25, p < .01\}$  and Asian participants  $\{t(214) = 2.88, p < .01\}$  on Islamic Positive Religious Coping & Identification. Finally, North American participants scored lower than African participants on Islamic Religious Struggle  $\{t(188) = 3.78, p < .01\}$ .

#### Correlations among the Subscales

The correlations among the seven subscales of the PMIR (the six analytically derived subscales and the Islamic Religious Conversion subscale) are displayed in Table 11. For the most part, these factors were significantly correlated with one another. Except for the Islamic Religious Struggle subscale, which was significantly negatively associated with all the other subscales ( $r$ 's ranged from  $-.18$  to  $-.61$ ), significant positive correlations characterized the relationships between the remaining 6 subscales ( $r$ 's ranged from  $.15$  to  $.70$ ). An especially high negative correlation was found between the Islamic Ethical Principles & Universality and the Islamic Religious Struggle subscales ( $r = -.66, p < .01$ );

greater observance of the Islamic Ethical Principles & Universality was tied to lower report of Islamic Religious Struggle. A high positive correlation emerged between the Islamic Ethical Principles & Universality and the Islamic Religious Conversion subscales ( $r = .70, p < .01$ ); reports of the occurrence of Islamic Religious Conversion were associated with higher scores on the Islamic Ethical Principles & Universality. It should be mentioned that the Islamic Religious Conversion had a screening item and only those who answered “yes” to this item completed the subscale. Surprisingly, the Punishing Allah Reappraisal subscale was significantly positively correlated with the Islamic Beliefs subscale ( $r = .25, p < .01$ ) and the Islamic Ethical Principles & Universality subscale ( $r = .29, p < .01$ ). Thus, higher scores on the Punishing Allah Reappraisal subscale were linked with greater endorsement of the Islamic Beliefs subscale and with greater observance of the Islamic Ethical Principles & Universality. More will be said about this interesting finding in the discussion section. Generally, the results suggested that individuals who scored higher on the Islamic Religious Struggle subscale tended to obtain lower scores on each of the other six subscales, while, globally speaking, individuals who obtained higher scores on one of the other six subscales tended to obtain higher scores on the other subscales as well.

#### Correlations between the Subscales and the Well-being Measures

Correlations between the religious subscales and the outcome measures are provided in Table 12. The next few paragraphs describe the findings displayed in the table in more details.

Greater levels of General Islamic Well-being were related significantly to higher scores on all of the religious subscales ( $r$ 's ranged from .17 to .68,  $p < .01$ ) except the

Islamic Religious Struggle subscale; greater levels of General Islamic Well-being were related significantly to lower scores on this subscale ( $r = -.75, p < .01$ ).

Higher levels of Depressed Mood were associated with lower adherence to the Islamic Beliefs ( $r = -.23, p < .01$ ), lower observance of the Islamic Ethical Principles & Universality ( $r = -.24, p < .01$ ), lower levels of Islamic Religious Duty, Obligation & Exclusivism ( $r = -.20, p < .01$ ), and greater reports of Islamic Religious Struggle ( $r = .35, p < .01$ ).

Greater levels of Positive Relations with Others were significantly correlated with higher adherence to the Islamic Beliefs ( $r = .29, p < .01$ ), higher adherence to Islamic Ethical Principles & Universality ( $r = .28, p < .01$ ), greater levels of Islamic Positive Religious Coping & Identification ( $r = .24, p < .01$ ), and lower reports of Islamic Religious Struggle ( $r = -.44, p < .01$ ).

Greater levels of Purpose in Life were significantly associated with greater adherence to the Islamic Beliefs ( $r = .21, p < .01$ ), greater observance of the Islamic Ethical Principles & Universality ( $r = .27, p < .01$ ), greater levels of Islamic Positive Religious Coping & Identification ( $r = .24, p < .01$ ), and lower reports of Islamic Religious Struggle ( $r = -.44, p < .01$ ).

Poorer Physical Health was significantly related to lower adherence to the Islamic Beliefs ( $r = -.23, p < .01$ ), lower adherence to the Islamic Ethical Principles & Universality ( $r = -.22, p < .01$ ), less use of Islamic Positive Religious Coping & Identification ( $r = -.22, p < .01$ ), and higher reports of Islamic Religious Struggle ( $r = .35, p < .01$ ).

Higher scores on Satisfaction with Life were significantly tied to higher scores on Islamic Beliefs ( $r = .23, p < .01$ ), Islamic Ethical Principles & Universality ( $r = .33, p < .01$ ), Islamic Positive Religious Coping & Identification ( $r = .30, p < .01$ ), Islamic Religious Conversion ( $r = .23, p < .01$ ), and lower scores on Islamic Religious Struggle ( $r = -.31, p < .01$ ).

Higher scores on Angry Feelings were negatively associated with higher scores on Islamic Beliefs ( $r = -.16, p < .01$ ), Islamic Ethical Principles & Universality ( $r = -.23, p < .01$ ), Islamic Religious Conversion ( $r = -.18, p < .01$ ), Islamic Religious Duty, Obligation & Exclusivism ( $r = -.14, p < .05$ ), and Islamic Positive Religious Coping & Identification ( $r = -.21, p < .01$ ). Conversely, more Angry Feelings were positively associated with higher reports of Islamic Religious Struggle ( $r = .32, p < .01$ ), and greater use of Punishing Allah Reappraisal ( $r = .15, p < .01$ ).

Greater Alcohol Use was tied to less adherence to the Islamic Beliefs ( $r = -.48, p < .01$ ), less observance of the Islamic Ethical Principles & Universality ( $r = -.45, p < .01$ ), lower levels of Islamic Religious Duty, Obligation & Exclusivism ( $r = -.14, p < .05$ ), lower levels of Islamic Positive Religious Coping & Identification ( $r = -.13, p < .05$ ), and less use of Punishing Allah Reappraisal ( $r = -.12, p < .05$ ). On the other hand, more Alcohol Use was tied to higher scores on Islamic Religious Struggle ( $r = .62, p < .01$ ).

None of the 7 PMIR subscales was significantly correlated with Social desirability. As for the outcome measures, greater levels of Social Desirability were significantly tied to higher levels of Positive Relations with Others ( $r = .17, p < .01$ ), Purpose in Life ( $r = .13, p < .05$ ), and Satisfaction with Life ( $r = .12, p < .01$ ) and lower levels of Depressed Mood ( $r = -.20, p < .01$ ).

### Hierarchical Regression Analyses

In order to determine the demographic variables that needed to be controlled for in the regression analyses, the correlations between the demographic variables and the well-being measures were calculated. These analyses showed that there were many significant correlations between the demographic variables and the well-being measures. More specifically, greater age was significantly correlated with lower levels of General Islamic Well-being ( $r = -.30, p < .01$ ), Positive Relations with Other ( $r = -.21, p < .01$ ), and Purpose in Life ( $r = -.13, p < .05$ ), higher levels of Depressed Mood ( $r = .13, p < .05$ ), and greater Alcohol Use ( $r = .14, p < .05$ ). Higher yearly household income was significantly tied to higher scores on Positive Relations with Others ( $r = .13, p < .05$ ), Purpose in Life ( $r = .11, p < .05$ ), and Satisfaction with Life ( $r = .12, p < .05$ ). Higher number of formal years of education was significantly associated with higher levels of General Islamic Well-being ( $r = .13, p < .05$ ), Positive Relations with Others ( $r = .16, p < .01$ ), and Satisfaction with Life ( $r = .16, p < .01$ ), and lower scores on Depressed Mood ( $r = -.15, p < .01$ ) and Physical Health ( $r = .18, p < .01$ ).

A one-way ANOVA analysis revealed that there were significant differences between males and females in their scores on General Islamic Well-being { $F(1, 322) = 4.11, p < .05$ }, Positive Relations with Others { $F(1, 313) = 13.09, p < .01$ }, and Physical Health { $F(1, 326) = 5.9, p < .05$ }. More specifically, females scored significantly higher than males on General Islamic Well-being { $t(322) = -2.03, p < .05$ } and Positive Relations with Others { $t(313) = -3.61, p < .01$ } and significantly lower than males on Physical Health { $t(326) = 2.44, p < .05$ }. Lower scores on the Physical Health measure represent better health. With regard to marital status, there were significant differences

between the groups in their scores on General Islamic Well-being  $\{F(3, 321) = 12.13, p < .01\}$ , Positive Relations with Others  $\{F(3, 312) = 11.03, p < .01\}$ , Purpose in Life  $\{F(3, 317) = 4.27, p < .01\}$ , Physical Health  $\{F(3, 325) = 6.98, p < .01\}$ , Satisfaction with Life  $\{F(3, 319) = 5.35, p < .01\}$ , and Alcohol Use  $\{F(3, 310) = 11.56, p < .01\}$ . More specifically, married individuals scored higher than divorced individuals on General Islamic Well-being  $\{t(123) = 3.76, p < .01\}$ , Positive Relations with Others  $\{t(120) = 5.19, p < .01\}$ , Purpose in Life  $\{t(124) = 3.11, p < .01\}$ , Satisfaction with Life  $\{t(123) = 3.50, p < .01\}$ , and lower on Physical Health  $\{t(125) = -3.44, p < .01\}$  and Alcohol Use  $\{t(120) = -4.71, p < .01\}$ . With respect to the current continent of residence, a one-way ANOVA analysis demonstrated that there were significant differences between the groups in their scores on General Islamic Well-being  $\{F(5, 317) = 5.03, p < .01\}$ , Positive Relations with Others  $\{F(5, 308) = 5.63, p < .01\}$ , Purpose in Life  $\{F(5, 313) = 2.96, p < .05\}$ , and the Physical Health  $\{F(5, 321) = 3.19, p < .01\}$ . More specifically, African participants scored significantly lower than Asian participants  $\{t(67) = -3.01, p < .01\}$ , North American participants  $\{t(198) = -4.96, p < .01\}$ , and European participants  $\{t(79) = -2.86, p < .01\}$  on General Islamic Well-being. North American participants scored significantly higher than African participants  $\{t(188) = 4.25, p < .01\}$  and Asian participants  $\{t(214) = 2.88, p < .01\}$  on Positive Relations with Others. Finally, North American participants scored higher than African participants  $\{t(193) = 2.94, p < .01\}$  on Purpose in Life and lower on Physical Health  $\{t(197) = -2.75, p < .01\}$ . Because all of the demographic variables were correlated with at least one outcome measure, all of them were controlled for in the hierarchical regression analyses. Additionally, because social

desirability was correlated with some of the outcome measures, it was decided to control for it too in the hierarchical regression analyses.

In the first step of the hierarchical regression analysis, all the demographic variables and social desirability were entered. In the second step, the factor analytically derived subscales of the PMIR were entered as one block, and the significance of change in R square was tested. When the results of the second step revealed that the change in R square was significant, then the beta weights associated with each subscale were examined for statistical significance. This process was repeated for each criterion or outcome measure. Because the Islamic Religious Conversion subscale was not included in the factor analysis of the whole PMIR, it was subjected to a separate hierarchical regression analysis.

After controlling for the demographic variables and social desirability, the six factor analytically derived subscales combined accounted for unique variance in all of the outcome measures ( $R^2$  change ranged from .07 to .43) (see Table 13). Focusing on the specific PMIR subscales, greater levels of Islamic Positive Religious Coping & Identification were tied to higher scores on General Islamic Well-being ( $\beta = .51, p < .01$ ), Purpose in Life ( $\beta = .19, p < .05$ ), and Satisfaction with Life ( $\beta = .26, p < .01$ ), and lower scores on Physical Health ( $\beta = -.25, p < .05$ ), and Alcohol Use ( $\beta = -.28, p < .01$ ). Higher reports of Islamic Religious Struggle were associated with higher scores on Depressed Mood ( $\beta = .33, p < .01$ ), Angry Feelings ( $\beta = .32, p < .01$ ), and Alcohol Use ( $\beta = .77, p < .01$ ), and lower scores on General Islamic Well-being ( $\beta = -.13, p < .05$ ), Positive Relations with Others ( $\beta = -.20, p < .05$ ), and Purpose in Life ( $\beta = -.18, p < .05$ ). Greater levels of Punishing Allah Reappraisal were tied to higher scores on Angry

Feelings ( $\beta = .16, p < .05$ ) and Alcohol Use ( $\beta = .12, p < .05$ ) and lower scores on Purpose in Life ( $\beta = -.15, p < .05$ ). Greater levels of Islamic Religious Duty, Obligation & Exclusivism were associated with higher scores on General Islamic Well-being ( $\beta = .13, p < .05$ ). Finally, Greater observance of Islamic Ethical Principles & Universality was associated with greater Satisfaction with Life ( $\beta = .18, p < .05$ ).

After controlling for all of the demographic variables and social desirability, the Islamic Religious Conversion subscale accounted for unique variance on General Islamic Well-being ( $R^2$  change = .21,  $p < .01$ ), Satisfaction with Life ( $R^2$  change = .04,  $p < .05$ ), and Angry Feelings ( $R^2$  change = .025,  $p < .05$ ). More specifically, higher scores on Islamic Religious Conversion were tied to higher scores on General Islamic Well-being ( $\beta = .49, p < .01$ ) and Satisfaction with Life ( $\beta = .20, p < .05$ ) and lower scores on Angry Feeling ( $\beta = -.15, p < .05$ ).

## CHAPTER IV: DISCUSSION

The purpose of the current investigation was to further develop the Psychological Measure of Islamic Religiousness (PMIR) that was constructed based on previous research (see Abu Raiya, 2005a-b for further details), and to assess its reliability and validity as a scientific tool for the study of the psychology of Islam. In this section, the notable findings of the study are presented. More specifically, evidence for the relevance, reliability, and validity of the measure's subscales, and other notable findings are reported, and interpretations of the key findings are offered. Next, the results of the study are compared with those derived from other religious samples, mainly Christian samples. A discussion regarding the implications of the findings for psychological research, theory and practice follows. Finally, I point to potential limitations of the study and recommend directions for future research.

### Notable Findings

#### Relevance, Reliability, and Validity of the PMIR

Overall, the results of this study demonstrated that the PMIR is relevant to Muslims. The study's participants reportedly adhered to different Islamic beliefs, adopted various Islamic religious attitudes, and observed a diverse array of Islamic religious practices. Participants also varied in their responses to the different items of the measure. More specifically, participants reported relatively high adherence to the Islamic belief system and high observance of the ethical conduct of Islam. They also indicated high frequency of prayer, reading the Holy Qura'n, and fasting, and relatively low frequency of attending the masjid. Additionally, participants indicated using a wide range of religious coping methods, including positive religious coping and Punishing Allah Reappraisal, high

levels of Islamic religious identification, and low frequency of religious struggle. Finally, religious conversion was reportedly prevalent among participants, and moderate to high levels of religious exclusivism were reported by them.

Factor analyses of the PMIR yielded factors that were somewhat different from what was hypothesized. However, given the exploratory nature of the study, the hypothesized factors were tentative. As mentioned earlier, there is a dearth of empirical research conducted among Muslims regarding their patterns of religiousness and this study was one of the first empirical attempts to explore the ways in which Islamic religiousness is tied to the physical and psychological well-being of Muslims.

The dimensions that emerged from the factor analyses made intuitive sense for the most part. Some of these dimensions (the Islamic Beliefs, the Islamic Religious Struggle, and the Islamic Religious Conversion) were identical to what was originally hypothesized. Others (Islamic Ethical Conduct & Universality and Islamic Positive Religious Coping & Identification) were combinations of two dimensions that were highly correlated in previous research (see Abu Raiya, 2005b for further details). Another (Punishing Allah Reappraisal) was found to be a distinctive coping method used by adherents to other religious traditions. Furthermore, except for two subscales (Islamic Religious Duty, Obligation & Exclusivism and Punishing Allah Reappraisal), the remaining subscales had internal consistencies that were higher than .80, the recommended guideline by Nunnally (1978). It should also be mentioned that Punishing Allah Reappraisal subscale ( $\alpha = .77$ ) had only three items and this might explain the relatively low internal consistency of this subscale. Future research could increase the

reliability of the Punishing Allah Reappraisal subscale by adding more items reflecting the construct (Clark & Watson, 1995).

The analyses also provided support for the validity of the PMIR subscales. First, the findings generated evidence for the discriminant validity of the subscales. Discriminant validity refers to the principle that measures of different constructs should not be so highly correlated as to lead one to conclude that they measure the same thing (Fiske, 1982). Despite the fact that most of the subscales were significantly related to each other, these correlations were modest for the most part.

Second, the modest correlations among the subscales pointed to their convergent validity. Convergent validity refers to the principle that different measures of a given construct should be at least moderately correlated among themselves (Fiske, 1982). Based on the assumption that the different subscales measure different aspects of the same construct (Islamic religiousness), we expected them to be moderately correlated. This assumption grew out of interviews with Muslims and Islamic theology (see Abu Raiya, 2005a for extended discussion) which postulates that the different aspects of Islam are not exclusive of each other; rather Islam is “one package.”

Third, the subscales of the PMIR demonstrated concurrent validity. Each of the subscales was associated with various well-being indices. It should be emphasized that this study utilized a wide range of outcome measures (General Islamic Well-being, Satisfaction with Life, Positive Relations with Others, Purpose in Life, Physical Health, Alcohol Use, Depressed Mood, Angry Feelings) that represented different aspects of well-being (i.e., positive functioning, ability/disability, negative feelings and

functioning). Thus, the connection between Islam and different domains in life was established.

Finally, the PMIR demonstrated evidence of incremental validity. Significant relationships between the PMIR subscales and the well-being measures were maintained after controlling for the effects of the demographic variables and social desirability. Thus, the links between Islamic religiousness and psychological well-being could not be explained by these potentially confounding explanatory variables.

In sum, this study yielded substantial evidence for the relevance, reliability, and validity of the different subscales of the PMIR. Overall, the PMIR demonstrated promise as a measure of Islamic beliefs and practices with potentially significant implications for physical and mental health.

#### Other Key Findings

Several other findings of the study deserve special attention. First, the results yielded support for the multidimensionality of Islam. In this respect, Islam is not unique; previous research has shown that other religions, such as Christianity (Glock & Stark, 1962), Judaism (Lazar et al., 2002), and Hinduism (Tarakeshwar, Pargament & Mahoney, 2003) are multidimensional as well. While the dimensions and domains that emerged from this study (beliefs, ethical conduct, struggle, identification, positive religious coping, exclusivism, punishing God) characterize other religious traditions as well, some combinations seem unique to Islam. Consider the Islamic Religious Duty, Obligation & Exclusivism dimension, for example. Though each of the components of this dimension can be found in different religious traditions, the particular configuration of these elements appears to be distinctively Islamic. Another example is the Islamic Ethical

Principles & Universality dimension. The universality element of this dimension (considering every Muslim as a brother or sister; identifying with the suffering of every Muslim) appears to be distinctive to Islam. Finally, though both positive religious coping and religious identification reflect positive religiousness in many traditions, they have not been linked within one single dimension in other religious traditions. These support the notion that Islam, while similar in many ways to other religious traditions, has unique dimensions and characteristics.

Second, Islam seems to play a central role in the well-being of Muslims. Its role appears mostly positive. Similar to other faiths (Pargament, 1997), Islam can be linked to a variety of functions, such as comfort, meaning, identity, spirituality, and community. Though several factors identified in the current investigation (Islamic Beliefs, Islamic Ethical Conduct & Universality, Islamic Religious Duty, Obligation & Exclusivism) were positively correlated with measures of greater well-being, one seemed more prominent in this domain: the Islamic Positive Religious Coping & Identification. This factor seems to be the “positive predictor” of Islamic religiousness; greater levels of Islamic Positive Religious Coping & Identification were consistently and strongly tied to greater levels of positive well-being indices (General Islamic Well-being, Purpose in Life, Satisfaction with Life) and lower levels of negative well-being indices (Physical Health, Alcohol Use). This finding is similar to findings obtained from Christian samples; among these samples, positive religious coping (Pargament et al. 2000; Ano & Vasconcelles, 2005; Cole, 2005) and religious identification (Ryan et al., 1993) were found to be indicators of positive religiousness.

On the other hand, Islam can be a source of strain. Like other religions (Pargament, 1997), Islam can be tied to struggle and negative religious coping. Some forms of religiousness have been associated with poorer outcomes among Christian samples. For example, negative religious coping methods (e.g., punishing God reappraisal, questioning God's power) and religious struggle were related to negative outcomes such as poorer physical health and emotional distress (Pargament, 2000; Cole, 2005; Sherman et al., 2005). In this sample, the Islamic Religious Struggle appeared to be the "negative predictor" of Islamic religiousness; greater levels of Islamic Religious Struggle were linked consistently and strongly with greater levels of negative outcomes (Angry Feeling, Alcohol Use, Depressed Mood) and lower levels of positive outcomes (Positive Relations with Others, Purpose in Life).

Why was religious struggle among Muslims tied so robustly to negative outcomes? One possible answer may have to do with the degree to which religious struggle is socially acceptable among Muslims. It could be that expressing religious struggles, especially doubts about the existence of Allah or the afterlife, is not socially acceptable in the Islamic culture. Because of the possible lack of acceptance and social support, and because religious struggles address such fundamentally important matters, individuals who have religious doubts may experience loneliness, which may lead to depression or angry feelings. To cope with these negative feelings, some individuals may use destructive methods of coping such as alcohol use. It is important to recognize that this explanation is speculative in nature. Future studies that specifically explore the phenomenon of religious struggle among Muslims might shed more light on the mechanisms that mediate between Islamic Religious Struggle and negative outcomes.

Two other points regarding the links between Islam and mental and physical health deserve close examination. First, punishing God reappraisal was classified in the Christian context as a negative religious coping method because it was tied to negative outcomes (Pargament et al., 2000). However, in the Muslim sample, Punishing Allah Reappraisal could not be clearly classified as negative. The correlational analyses demonstrated that Punishing Allah Reappraisal was linked both to more negative outcomes (Angry Feelings and Alcohol Use) and to more positive outcomes (General Islamic Well-being). In addition, Punishing Allah Reappraisal was directly tied to other Islamic dimensions. Further, Islamic theology emphasizes the notion that Allah is a punisher. These findings and interpretations are mitigated to some extent by the regression analyses which showed that Punishing Allah Reappraisal was tied only to negative outcomes after controlling for the demographic variables and social desirability. Nevertheless, the general pattern of findings suggests that Punishing Allah Reappraisal may have mixed implications for well-being among Muslims. Future research examining the relationship between Punishing Allah Reappraisal and religious outcomes as well as other psychological outcomes might help in identifying the positive and negative links between Punishing Allah Reappraisal and the well-being of Muslims.

Second, while religious exclusivism or fundamentalism is considered a negative type of religiousness in the Christian context (Altemeyer & Hunsberger, 1992; Pargament, 1997), it seems that in the Islamic context this is not the case. Religious exclusivism was found to be an ingredient of the “Islamic Religious Duty, Obligation, and Exclusivism” factor which correlated positively with different desirable outcomes (i.e., General Islamic Well-being, Purpose in Life) and negatively with different

undesirable outcomes (Depressed Mood, Angry Feelings, Alcohol Use). This finding is also consistent with interviews conducted with Muslims and Islamic theology (see Abu Raiya, 2005a for extended discussion) which states that Islam is the true and perfect religion of Allah and is supposed to be related to every good thing in life. However, the above should be viewed with caution. In the Christian context, the implications of religious fundamentalism were tested primarily in relation to prejudice and intolerance. In this context, fundamentalism was found to be related positively to these constructs (Altemeyer & Hunsberger, 1992; Rowatt et al. 2004). Future research that tests the validity of the link between exclusivism and prejudice/intolerance among Muslim samples might extend our understanding regarding the role religious exclusivism plays in the life of Muslims. Perhaps religious exclusivism leads both to better psychological outcomes and poorer social outcomes.

#### Implications for Psychological Theory, Practice, and Research

The findings of this study have several implications for psychological theory, practice, and research. First, they underscore the relevance of Islam to Muslims' lives and well-being, and therefore highlight the need for greater attention to the Islamic religion when dealing with Muslim populations. Failure to do so could lead to an incomplete and perhaps distorted picture of the lives of Muslims. Further, the findings of this study strongly challenge commonplace misconceptions and stereotypes of Islam (e.g., Islam is dangerous to the health and well-being of Muslims). For example, one current widespread stereotype is that Islam promotes anger and violence. A very different picture emerged from this study. Except for Islamic Religious Struggle and Punishing Allah Reappraisal, higher scores on all the other dimensions of Islamic religiousness identified

in this study were tied to lower scores on angry feelings. With respect to Islamic Religious Struggle and Punishing Allah Reappraisal, it should be noted that these constructs have been tied to negative outcomes in other traditions too (Pargament et al., 2000). Additional empirical data are needed to ultimately clarify misconceptions of the role of Islam in individuals' lives and replace them with concrete knowledge.

Second, the multidimensional nature of Islam established in this study highlights the need to view Islam from a broad perspective; Islam might mean different things to different people, and some people might adhere to some of its elements but not to others. Therefore, using a few items (i.e., prayer, masjid attendance) to measure Islamic religiousness fails to capture the multifaceted nature of Islam and may render the results simplistic and uninformative (Mahoney, 1999).

Third, though the findings of the study pointed to the fact that Islam is similar to other religious traditions in many ways, it is distinctive in other ways. Therefore, applying existing psychological theories and conceptual frameworks that have been developed mainly within western cultural contexts to Islam might not fully capture the uniqueness of this religion and might be ethnocentric (Sue, 1992).

Fourth, psychotherapists are increasingly incorporating a variety of spiritual and religious elements into their work with clients. Given the promising results of these efforts (Harding et al., 2006; Hartog & Gow, 2006; Richards & Bergin, 2000; al-Issa, 2000; Pargament, Murray-Swank & Tarakeshwar, 2005; Freedman & Enright, 1996; McCullough & Worthington, 1994), and given that Islamic religiousness is linked to the physical, psychological, and spiritual well-being of Muslims, mental health professionals should consider how to incorporate Islamic practices and beliefs in their therapeutic work

with Muslim clients. This might aid in developing specific, effective, and more culturally sensitive interventions. Steps in this direction have already been taken. Several studies have found that different forms of religious psychotherapy were effective with Muslim clients who suffered from anxiety, depression, and bereavement (Razali, Hasanah, Aminah, & Subramaniam, 1998; Azhar, Varma, & Dharap, 1994; Azhar & Varma, 1995). In these studies, clients in the groups receiving psychotherapy that included Islamic components (i.e., prayer, expressing repentance and forgiveness, relying on Allah and supplicating to Him in times of needs) responded significantly faster to therapy and manifested better adjustment than those receiving standard treatment.

Finally, this study utilized an online survey for gathering data. Online surveys are being increasingly used as a research methodology in the social sciences (Granello & Wheaton, 2004; Glover & Bush, 2005). Despite the limitations of this methodology (i.e., difficulties in obtaining a representative sample, low response rates, problems with technology), it has several benefits (e.g., reduced time, reduced cost, ease of data entry, flexibility in format) that make it quite appealing (Granello & Wheaton, 2004). As for the Islamic context, the online methodology seems to possess two other distinctive advantages. The first is anonymity. Given the suspicion that the researcher encountered from Islamic institutions in the United States in his effort to collect data for a previous study (see Abu Raiya, 2005b for further details), the fact that participants were not asked to disclose identifying personal information might have increased their willingness, especially among Americans, to take part in the study. The second is the ability to recruit Muslim participants from all over the world through online methods. Though most of the participants reportedly resided in North America, many reported living in Asia, Africa,

Europe, and Australia. Of course, this does not ensure that a representative sample was obtained, but it does increase the ability to generalize from the findings. Thus, online methodology seems promising in research with Muslims. Future research should further assess the advantages and the disadvantages of this methodology and its usefulness for studying Muslims in general and Islamic religiousness in particular.

#### Limitations and Future Directions

Given the dearth of empirical studies conducted among Muslims regarding the link between Islam and physical and mental health, this study should still be considered exploratory. Its main goal was to provide a foundation for future research with Muslims. As such, its results should be considered with caution. More specifically, the results of the study should be interpreted in light of the following limitations. First, larger samples of Muslims are needed to verify the results of this study. Future samples should include Muslims who are less religious and less educated than this sample. Moreover, studies with larger samples of Muslims of different marital status could further distinguish among the “bitter” and the “sweet” of Islam. Second, the results of the present investigation are cross-sectional and consequently do not allow causal inferences; different elements of Islamic religiousness could be the cause or result of well-being. Longitudinal studies are needed to assess the causal connections between Islamic religiousness and well-being. Finally, the study utilized a survey format and its findings were based on self-report data. Future studies that utilize different research methods (e.g., observer reports, direct observation) would provide further support for the results obtained in this study.

Despite these limitations, the findings of the study point to several directions for future research. First, studies that examine the links between Islam and other variables such as mortality, marital functioning, parenting practices, spiritual well-being, tolerance/prejudice may help in addressing more comprehensively the connections between Islamic religiousness and the mental, physical, and spiritual well-being of Muslims. Second, given that religious conversion is reportedly popular among Muslims and linked with indices of health and well-being, it might be valuable to further investigate this phenomenon among Muslims. Studies that aim to answer questions such as when Islamic religious conversion typically happens, what are some of the reasons for its occurrence, and whether it applies to specific groups of Muslims, might shed further light on this phenomenon. Finally, comparative studies are needed to discover similarities and differences between Islam and other religious faiths. These studies might help advance the field of psychology of religion, and widen our knowledge of the influence of religion on personal well-being.

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Table 1  
Demographic Information of the Sample

Variable	Frequency
<u>Age</u>	
> 18 < 30	226 (66.9%)
> 30 < 45	73 (21.6%)
> 45 < 60	33 (9.8%)
> 60	6 (1.8%)
<u>Gender</u>	
Female	205 (60.8%)
Male	131 (39%)
<u>Continent of Current Residence</u>	
North America	181 (53.9%)
Europe	60 (17.9%)
Asia	50 (14.9%)
Africa	24 (7.1%)
Australia	20 (6%)
South America	1 (.3%)
<u>Years of Education</u>	
< 12	24 (7.1%)
> 12 < 15	154 (45.8%)
> 15 < 18	92 (27.1%)
> 18	66 (19.6%)
<u>Marital Status</u>	
Single	205 (60.7%)
Married	109 (32.2%)
Divorced	22 (6.5%)
Widowed	2 (.6%)
<u>Yearly Household Income</u>	
< 25,000\$	131 (40.2%)
> 25,000\$ < 50,000\$	78 (23.9%)
> 50,000\$ < 75,000\$	62 (19%)
> 75,000\$	55 (16.9%)

Table 2.1  
Item-level Descriptive Statistics for the “Beliefs Dimension” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Beliefs Dimension</u> <sup>1</sup>			
I believe in the existence of Allah.	340	1.91 (.39)	0-2
I believe in the Day of Judgment.	340	1.86 (.46)	0-2
I believe in the existence of paradise and hell.	340	1.84 (.49)	0-2
I believe in the angels, the Jinn, and Satan.	339	1.84 (.47)	0-2
I believe in all the prophets that Allah sent and in the sacred texts that were revealed to them.	337	1.84 (.48)	0-2

Note. <sup>1</sup>Participants responded to all items in this subscale on a 3-point scale ranging from 0 (“no”) to 2 (“yes”).

Table 2.2  
Item-level Descriptive Statistics for the “Practices Dimension” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Practices Dimension</u>			
<sup>1</sup> How often do you pray?	340	3.75 (1.48)	0-5
<sup>2</sup> How often do you go to the masjid?	337	2.88 (1.40)	0-5
<sup>2</sup> Except in prayers, how often do you read or listen to the Holy Qura’n?	337	3.49 (1.41)	0-5
<sup>3</sup> How often do you fast?	339	4.01 (1.13)	0-5
<sup>2</sup> Except in prayers, how often do you engage in d’iker and tasbih?	339	3.37 (1.77)	0-5
<sup>4</sup> Which type of hijab do you wear? (for women only)	204	1.92 (1.75)	0-5

Note.

<sup>1</sup>Participants responded to this item on a 6-point scale ranging from 0 (“never”) to 5 (“five time or more a day”).

<sup>2</sup>Participants responded to these items on a 6-point scale ranging from 0 (“never”) to 5 (“once or more a day”).

<sup>3</sup>Participants responded to this item on a 6-point scale ranging from 0 (“never”) to 5 (“other religious days or sunnah fasts in addition to Ramadan”).

<sup>4</sup>Participants responded to this item on a 6-point scale ranging from 0 (“none”) to 5 (“one that covers the face (niqab or burqah”).

Table 2.3  
Item-level Descriptive Statistics for the “Ethical-conduct Do Dimension” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Ethical Conduct Do Dimension</u> <sup>1</sup>			
Islam is the major reason why I am a humble person.	339	4.08 (1.16)	1-5
Islam is the major reason why I honor my parents.	339	3.99 (1.22)	1-5
Islam is the major reason why I help my relatives and neighbors.	340	3.90 (1.25)	1-5
Islam is the major reason why I assist the needy and the orphans.	340	4.00 (1.22)	1-5
Islam is the major reason why I am tolerant person.	338	4.00 (1.20)	1-5

Note. <sup>1</sup>Participants responded to all items in this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Table 2.4  
Item-level Descriptive Statistics for the “Ethical-conduct Don’t Dimension” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Ethical Conduct Don’t Dimension<sup>1</sup></u>			
Islam is the major reason why I do not eat pork.	339	4.46 (1.15)	1-5
Islam is the major reason why I do not drink alcohol.	336	4.32 (1.27)	1-5
Islam is the major reason why I do not have sex before marriage or outside it.	340	4.36 (1.28)	1-5
Islam is the major reason why I do not consider committing suicide.	338	4.13 (1.36)	1-5
Islam is the major reason why I do not engage in gossip.	339	3.88 (1.21)	1-5

Note. <sup>1</sup>Participants responded to all items in this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Table 2.5  
Item-level Descriptive Statistics for the “Islamic Universality Dimension” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Universality Dimension<sup>1</sup></u>			
I consider every Muslim in the world as my brother or sister.	339	4.07 (1.20)	1-5
I identify with the suffering of every Muslim in the world.	340	4.10 (1.11)	1-5
One of my major sources of pride is being a Muslim.	339	4.25 (1.17)	1-5
I would like to live in a world ruled by the Islamic laws.	337	3.81 (1.37)	1-5
I believe that brotherhood and sisterhood is one the basic tenets of Islam.	339	4.23 (1.16)	1-5

Note. <sup>1</sup>Participants responded to all items in this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Table 3  
Item-level Descriptive Statistics for the “Islamic Religious Conversion” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Religious Conversion</u> <sup>1</sup>			
Becoming more involved in Islam was a turning point in my life.	177	4.52 (.88)	1-5
Islam has moved from the outside to the very center of my life.	178	4.35 (.99)	1-5
At one point in my life, I realized that Islam is the solution to all of my problems.	177	4.30 (1.09)	1-5
All at once, I felt that my life has no meaning without Islam.	178	4.23 (1.17)	1-5
All at once, I felt that I am on the wrong path and that I should follow the path of Allah.	178	4.16 (1.12)	1-5
In comparison to the way I used to be, Islam touches every aspect of my life.	177	4.39 (1.00)	1-5

Note. <sup>1</sup>Participants responded to all items in this subscale on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Note. This subscale had a screening item (“In my life, I have changed from a non-religious person to a religious person”) with the response options of “yes” and “no.” Only participants who replied “yes” to this item completed this subscale.

Table 4.1  
Item-level Descriptive Statistics for the “Islamic Positive Religious Coping” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Positive Religious Coping</u> <sup>1</sup>			
When I face a problem in life, I look for a stronger connection with Allah.	333	3.48 (.82)	1-4
When I face a problem in life, I consider that a test from Allah to deepen my belief.	333	3.40 (.88)	1-4
When I face a problem in life, I seek Allah’s love and care.	332	3.52 (.83)	1-4
When I face a problem in life, I read the Holy Qura’n to find consolation.	332	2.68 (1.05)	1-4
When I face a problem in life, I ask for Allah’s forgiveness.	330	3.38 (.88)	1-4
When I face a problem in life, I remind myself that Allah commanded me to be patient.	331	3.24 (.94)	1-4
When I face a problem in life, I do what I can and put the rest in Allah’s hands.	330	3.45 (.86)	1-4

Note. <sup>1</sup>Participants responded to all items in this subscale on a 4-point scale from ranging 1 (“I do not do this at all”) to 4 (“I do this a lot”).

Table 4.2  
Item-level Descriptive Statistics for the “Islamic Negative Religious Coping” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Negative Religious Coping<sup>1</sup></u>			
When I face a problem in life, I believe that I am being punished for bad actions I did.	332	2.62 (1.04)	1-4
When I face a problem in life, I voice anger that Allah did not answer my supplications.	332	1.45 (.76)	1-4
When I face a problem in life, I feel punished by Allah for my lack of devotion.	331	2.25 (1.03)	1-4
When I face a problem in life, I try to make sense of the situation with no reference to Allah.	331	1.77 (.98)	1-4
I face a problem in life, I wonder what I did for Allah to punish me.	330	1.43 (.81)	1-4

Note. <sup>1</sup>Participants responded to all items in this subscale on a 4-point scale from ranging 1 (“I do not do this at all”) to 4 (“I do this a lot”).

Table 5  
Item-level Descriptive Statistics for the “Islamic Religious Struggle” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Religious Struggle<sup>1</sup></u>			
I find myself doubting the existence of Allah.	338	.39 (.90)	0-4
I find some aspects of Islam to be unfair.	338	1.02 (1.21)	0-4
I find myself doubting the existence of afterlife.	337	.42 (.92)	0-4
I think that Islam does not fit the modern time.	339	.64 (1.13)	0-4
I doubt that the Holy Qura'n is the exact words of Allah.	339	.43 (1.05)	0-4
I feel that Islam makes people intolerant.	339	.69 (1.16)	0-4

Note. <sup>1</sup>Participants responded to all items in this subscale on a 5-point scale ranging from 0 (“never”) to 4 (“very often”).

Table 6.1  
Item-level Descriptive Statistics for the “Islamic Religious Internalization-Identification”  
Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range	N/A
<u>Islamic Religious Internalization- Identification<sup>1</sup></u>				
I pray because I enjoy it.	309	2.91 (.88)	0-4	26
I pray because I find it satisfying.	303	3.35 (.72)	0-4	26
I read the Holy Qura'n because I feel that Allah is talking to me when I do that.	303	3.00 (.97)	0-4	35
I read the Holy Qura'n because I find it satisfying.	304	3.47 (.79)	0-4	34
I fast in Ramadan because when I fast I feel close to Allah.	308	3.40 (.80)	0-4	26

Note. <sup>1</sup>Participants responded to all items in this subscale on 4-point a scale ranging from 1 (“not at all true”) to 4 (“very true”). For all items, participants were provided with the option of indicating if the item was not applicable (“N/A”) to them.

Table 6.2  
Item-level Descriptive Statistics for the “Islamic Religious Internalization –Introjection”  
Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range	N/A
<u>Islamic Religious Internalization- Introjection<sup>1</sup></u>				
I pray because if I do not, Allah will disapprove of me.	308	3.18 (1.02)	0-4	27
I read the Holy Qura'n because I would feel guilty if I did not.	302	2.28 (1.07)	0-4	35
I go to the masjid because one is supposed to go to the masjid.	266	2.60 (1.15)	0-4	72
I go to the masjid because others would disapprove of me if I did not.	264	1.43 (.84)	0-4	72
I fast in Ramadan because I would feel bad if I did not.	309	3.05 (1.15)	0-4	26

Note. <sup>1</sup>Participants responded to all items in this subscale on a 4-point scale ranging from 1 (“not at all true”) to 4 (“very true”). For all items, participants were provided with the option of indicating if the item was not applicable (“N/A”) to them.

Table 7  
Item-level Descriptive Statistics for the “Islamic Religious Exclusivism” Subscale

Variable	N	<u>M</u> ( <u>SD</u> )	Range
<u>Islamic Religious Exclusivism</u> <sup>1</sup>			
Islam is Allah’s complete unfailing guide to happiness and salvation, which must be totally followed.	331	2.80 (2.20)	(-4)-(+4)
Of all the people on this earth, Muslims has a special relationship with Allah because they believe the most in his revealed truths and try the hardest to follow his laws.	331	1.92 (2.61)	(-4)-(+4)
Islam is the best way to Worship Allah, and should never be compromised.	327	2.62 (2.34)	(-4)-(+4)
The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against Allah.	329	.92 (2.96)	(-4)-(+4)
*It is more important to be a good person than to believe in Allah and the right religion.	330	1.00 (2.96)	(-4)-(+4)
*No one religion is especially close to Allah, nor does Allah favors any particular believers.	328	.85 (3.10)	(-4)-(+4)
Allah will punish most severely those who abandon his true religion.	328	1.31 (2.95)	(-4)-(+4)
*No single book of religious writings contains all the important truths about life.	330	1.90 (2.92)	(-4)-(+4)
*“Satan” is just the name people give to their own bad impulses. There really is no such thing as Satan who tempts us.	327	2.68 (2.33)	(-4)-(+4)
*There is no body of teachings, or set of scriptures, which is completely without error.	327	2.11 (2.82)	(-4)-(+4)

Note. Participants responded to all items in this subscale on an 8-point scale ranging from -4 (“very strongly disagree”) to 4 (“very strongly agree”).

\* Reverse scored items

Table 8  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
I believe in the existence of Allah.	<b>.91</b>	.06	.04	.08	-.01	.07
I believe in the Day of Judgment.	<b>.90</b>	.10	.04	.03	-.06	.02
I believe in the existence of paradise and hell.	<b>.91</b>	.00	-.03	-.07	.07	.01
I believe in the existence of the angels, the Jinn, and Satan.	<b>.92</b>	.05	-.01	-.09	.00	.00
I believe in all the prophets that Allah sent and in the sacred texts that were revealed to them.	<b>.79</b>	.08	.00	.18	.03	.09
How often do you pray?	.37	.09	.10	<b>-.55</b>	.32	.33
How often do you fast?	.04	.00	-.12	<b>-.44</b>	.17	.08
How often do you go to the masjid?	-.09	.17	.14	<b>-.55</b>	.02	.04
Except in prayers, how often do you read or listen to the Holy Qura'n?	.08	.00	.04	-.31	<b>.51</b>	.10
Except in prayers, how often do you engage in d'iker or tasbih?	.00	.15	.08	-.26	<b>.43</b>	.27

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Islam is the major reason why I am a humble person.	-.07	<b>.72</b>	.00	-.06	.11	-.10
Islam is the major reason why I honor my Parents.	.00	<b>.72</b>	-.02	-.11	.05	-.07
Islam is the major reason why I help my relatives and neighbors.	.07	<b>.72</b>	.05	-.15	.07	-.02
Islam is the major reason why I assist the needy and the orphans.	.10	<b>.69</b>	.00	-.09	.11	-.09
Islam is the major reason why I am a tolerant person.	.00	<b>.66</b>	-.03	-.03	.14	-.11
Islam is the major reason why I do not eat pork.	.06	<b>.76</b>	-.07	.09	-.13	-.01
Islam is the major reason why I do not drink alcohol.	.08	<b>.66</b>	-.09	-.12	-.09	.07
Islam is the major reason why I do not have sex before marriage or outside it.	.16	<b>.66</b>	.00	-.05	.01	.17
Islam is the major reason why I do not consider committing suicide.	.05	<b>.55</b>	.14	.16	.07	-.11

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Islam is the major reason why I do not engage in gossip.	-.03	<b>.80</b>	.01	-.09	.00	.07
I consider every Muslim in the world as my brother or sister.	.00	<b>.60</b>	-.08	-.05	.07	.01
I identify with the suffering of every Muslim in the world.	.00	<b>.65</b>	.01	.04	.07	.03
One of my major sources of pride is being a Muslim.	.16	<b>.55</b>	.02	.01	.09	-.05
I would like to live in a world ruled by the Islamic laws.	.19	.38	-.14	-.27	.10	-.08
I believe that brotherhood and sisterhood is one the basic tenets of Islam.	-.05	<b>.73</b>	-.12	-.02	-.03	.03
When I face a problem in life, I look for a stronger connection with Allah.	-.19	.17	-.02	.19	<b>.68</b>	.00
When I face a problem in life, I consider that a test from Allah to deepen my belief.	-.04	.29	-.03	.13	<b>.60</b>	.01

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
When I face a problem in life, I seek Allah's love and care.	-.21	.26	-.12	.09	<b>.62</b>	.09
When I face a problem in life, I believe that I am being punished by Allah for bad actions I did.	-.10	.06	-.02	-.08	.09	<b>-.70</b>
When I face a problem in life, I wonder what I did for Allah to punish me.	.11	.11	.43	.12	-.03	<b>-.58</b>
When I face a problem in life, I feel punished by Allah for my lack of devotion.	-.07	.19	.00	.03	-.09	<b>-.70</b>
When I face a problem in life, I read the Holy Qura'n to find consolation.	.01	.14	.19	-.03	<b>.63</b>	.04
When I face a problem in life, I ask for Allah's forgiveness.	-.09	.16	-.10	.02	<b>.55</b>	-.17
When I face a problem in life, I try to make sense of the situation with no reference to Allah.	-.04	-.01	<b>.41</b>	-.05	-.02	-.16
When I face a problem in life, I remind myself that Allah commanded me to be patient.	-.11	.18	.02	-.04	<b>.56</b>	.00

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
When I face a problem in life, I realize that Allah will not answer my supplications.	.00	.09	<b>.45</b>	.13	-.12	-.33
When I face a problem in life, I do what I can and put the rest in Allah's hands.	-.11	.18	.00	-.03	<b>.57</b>	.15
I find myself doubting the existence of Allah.	.08	-.11	<b>.74</b>	-.15	-.03	.06
I find some aspects of Islam to be unfair.	-.17	-.21	<b>.46</b>	.19	-.10	.04
I find myself doubting the existence of afterlife.	.00	-.10	<b>.76</b>	-.07	-.12	.15
I think that Islam does not fit the modern time.	-.08	-.18	<b>.62</b>	.10	.15	.04
I doubt that the Holy Qura'n is the exact words of Allah.	-.02	-.08	<b>.70</b>	.00	.15	.10
I feel that Islam makes people intolerant	-.14	-.04	<b>.58</b>	.04	-.12	.22
I pray because I enjoy it.	.15	-.15	-.07	.00	<b>.67</b>	-.14
I pray because if I do not, Allah will disapprove of me.	-.06	.02	.00	<b>-.62</b>	.00	-.09
I pray because I find it satisfying.	.21	-.02	-.14	.03	<b>.59</b>	-.16

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
I read the Holy Qura'n because I feel that Allah is talking to me when I do that.	.07	-.04	-.06	-.07	<b>.66</b>	-.09
I read the Holy Qura'n because I would feel guilty if I did not.	.02	.00	.18	<b>-.53</b>	.17	-.31
I read the Holy Qura'n because I find it satisfying.	.10	-.13	-.17	-.12	<b>.65</b>	.00
I fast in Ramadan because when I fast I feel close to Allah.	.04	-.02	-.35	-.17	<b>.46</b>	-.01
I fast in Ramadan because I would feel bad if I did not.	-.07	.09	.00	-.32	.01	-.18
I go to the masjid because one is supposed to go to the masjid.	.01	.09	.13	<b>-.44</b>	.12	-.16
I go to the masjid because others would disapprove of me if I did not.	.08	.13	<b>.44</b>	-.25	-.20	-.24
Islam is Allah's complete, unfailing guide to happiness and salvation, which must be totally followed.	.09	.02	-.33	<b>-.45</b>	.16	-.05

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Of all the people on this earth, Muslims have a special relationship with Allah because they believe the most in his revealed truths and try the hardest to follow his laws.	.08	.11	.00	<b>-.56</b>	-.03	-.12
It is more important to be a good person than to believe in Allah and the right religion.	.01	.02	-.20	<b>-.54</b>	-.07	.10
Islam is the best way to worship Allah, and should never be compromised.	-.05	.05	-.18	<b>-.45</b>	.12	-.08
No one religion is especially close to Allah, nor does Allah favors any particular believers.	.00	.10	-.01	<b>-.53</b>	-.17	.37
“Satan” is just the name people give to their own bad impulses. There really is no such thing as Satan who tempts us.	.00	.14	-.38	-.27	-.01	-.09
Allah will punish most severely those who abandon his true religion.	.04	.00	-.12	-.31	.00	-.38

Table 8- Con.  
Exploratory Factor Analyses of the PMIR

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against Allah.	-.04	-.06	-.08	-.18	.10	-.34
No single book of religious writings contains all the important truths about life.	.12	.17	-.29	-.29	-.01	.04
There is no body of teachings, or set of scriptures, which is completely without error.	-.02	.17	-.31	-.23	-.06	.27

Table 9  
Exploratory Factor Analysis of the “Islamic Religious Conversion” Subscale

Item	Factor Loading
Becoming more involved in Islam was a turning point in my life.	.75
Islam has moved from the outside to the very center of my life.	.79
At one point in my life, I realized that Islam is the solution to all of my problems.	.83
All at once, I felt that my life has no meaning without Islam.	.83
All at once, I felt that I am on the wrong path and that I should follow the path of Allah.	.74
In comparison to the way I used to be, Islam touches every aspect of my life.	.87

Table 10  
Reliability Coefficients of the PMIR Subscales

Subscale	Reliability coefficients
Islamic Beliefs	.97
Islamic Ethical Principles & Universality	.96
Islamic Religious Conversion	.89
Islamic Religious Struggle	.90
Islamic Religious Duty, Obligation & Exclusivism	.77
Islamic Positive Religious Coping & Identification	.88
Punishing Allah Reappraisal	.77

Table 11  
Correlations among the PMIR Subscales

Subscale	1	2	3	4	5	6	7
1. Islamic Beliefs	1	.56**	.15*	-.61**	.16*	.11	.25**
2. Islamic Ethical Principles & Universality		1	.70**	-.66**	.42**	.54**	.29**
3. Islamic Religious Conversion			1	-.24**	.42**	.47**	.11
4. Islamic Religious Struggle				1	-.39**	-.42**	-.18**
5. Islamic Religious Duty, Obligation & Exclusivism					1	.41**	.12
6. Islamic Positive Religious Coping & Identification						1	.03
7. Punishing Allah Reappraisal							1

Note: \*\*  $p < .01$ . \*  $p < .05$

Table 12  
Correlations between the PMIR Subscales and the Well-being Measures

Variable	General Islamic Well-being	Depressed Mood	Positive Relations with Others	Purpose in Life	Physical Health	Satisfaction with Life	Angry Feelings	Alcohol Use
Islamic Beliefs	.47**	-.23**	.29**	.21**	-.23**	.23**	-.16**	-.48**
Islamic Ethical Principles & Universality	.68**	-.24**	.28**	.27**	-.22**	.33**	-.23**	-.45**
Islamic Religious Conversion	.44**	-.11	.12	.11	-.13	.23**	-.18**	-.14
Islamic Religious Struggle	-.75**	.35**	-.44**	-.41**	.35**	-.31**	.32**	.62**
Islamic Religious Duty, Obligation & Exclusivism	.43**	-.20**	.10	.20**	-.03	.07	-.15*	-.14*
Islamic Positive Religious Coping & Identification	.70**	-.11	.24**	.29**	-.22**	.30**	-.21**	-.13*
Punishing Allah Reappraisal	.17**	.04	.00	-.05	.00	-.03	.15**	-.12*

Note: \*\*  $p < .01$ . \*  $p < .05$

Table 13  
Regression Estimates of Well-being Measures on Demographic Variables and Social Desirability, and the Factor Analytically Derived Subscales

Variable	General Islamic Well-being	Depressed Mood	Positive Relations with Others	Purpose in Life	Physical Health	Satisfaction with Life	Angry Feelings	Alcohol Use
Demographics and social desirability								
<b>R<sup>2</sup></b>	<b>.15**</b>	<b>.11*</b>	<b>.18**</b>	<b>.06*</b>	.06	.04	.06	.07
Islamic Beliefs	.05	-.01	-.09	0.00	-.05	.05	.09	-.02
Islamic Ethical Principles & Universality	.10	-.01	-.05	-.01	.00	<b>.18*</b>	.05	-.10
Islamic Religious Struggle	<b>-.13*</b>	<b>.33**</b>	<b>-.20*</b>	<b>-.18*</b>	.16	.05	<b>.32**</b>	<b>.77**</b>
Islamic Religious Duty, Obligation & Exclusivism	<b>.13**</b>	-.09	.01	.09	.15	-.09	-.05	.04
Islamic Positive Religious Coping & Identification	<b>.51**</b>	-.07	.15	<b>.18*</b>	<b>-.24*</b>	<b>.26**</b>	-.02	<b>-.28**</b>
Punishing Allah Reappraisal	.11	.11	-.09	<b>-.15*</b>	.05	-.10	<b>.16*</b>	<b>.12*</b>
<b>R<sup>2</sup></b>	<b>.59**</b>	<b>.22*</b>	<b>.26*</b>	<b>.15**</b>	<b>.14**</b>	<b>.12**</b>	<b>.20**</b>	<b>.49**</b>
<b>R<sup>2</sup> Change</b>	<b>.43**</b>	<b>.11**</b>	<b>.08*</b>	<b>.21**</b>	<b>.08**</b>	<b>.08**</b>	<b>.14**</b>	<b>.42**</b>

Note: The coefficients listed are standardized regression weights obtained at the end of the analyses.

\*\*  $p < .01$ . \*  $p < .05$

Table 14  
Regression Estimates of Well-being Measures on Demographic Variables and Social Desirability, and the Islamic Religious Conversion Subscale

Variable	General Islamic Well-being	Depressed Mood	Positive Relations with Others	Purpose in Life	Physical Health	Satisfaction with Life	Angry Feelings	Alcohol Use
Demographics <b>R<sup>2</sup></b>	.07	.13	.16	.12	.11	.04	.11	.04
Islamic Religious Conversion <b>R<sup>2</sup></b>	<b>.49**</b>	-.11	.07	.09	-.11	<b>.20**</b>	<b>-.16*</b>	-.09
<b>R<sup>2</sup> Change</b>	<b>.29**</b>	-.15	.16	.12	.11	<b>.08*</b>	<b>.14*</b>	.04
<b>R<sup>2</sup> Change</b>	<b>.21**</b>	.02	.00	.00	.00	<b>.04*</b>	<b>.03*</b>	.00

Note: The coefficients listed are standardized regression weights obtained at the end of the analyses.

\*\*  $p < .01$ . \*  $p < .05$

## APPENDIX A

## LETTER TO ADMINISTRATORS

Brother/Sister, alaslamu alaikum,

My name is Hisham Abu Raiya, a doctoral student in the psychology department at Bowling Green State University, Ohio, the United States. As part of my degree requirements, I am currently conducting a study that aims to develop a psychological measure of Islamic religiousness that can be utilized in mental health research. The lack of such a measure is perhaps the primary reason why only few studies have been conducted among Muslims regarding their beliefs and practices, and how these practices and beliefs affect their physical and psychological well-being. The importance of such efforts cannot be underestimated; developing a measure of Islamic beliefs and practices, and consequently conducting scientific research based on it, can considerably deepen our understating of the ways in which Islam affects the well-being of its adherents.

For the sake of this study, I am looking for Muslim individuals who are willing to complete a survey that includes questions about their practices, beliefs, and life more generally, and which will take about half an hour of their time. I am aware that you are the president/administrator/manager of the Islamic website \_\_\_\_\_, so I am writing to ask your help in recruiting participants to this study. If you agree to do so, please forward the recruitment message and the link attached to the members of your association and any other Muslim you know. If you have any questions or concerns about this research study, please feel free to contact me at 419-353-7051 or [hishama@bgnet.bgsu.edu](mailto:hishama@bgnet.bgsu.edu), or Professor Kenneth Pargament at 419-372-8037, [kpargam@bgnet.bgsu.edu](mailto:kpargam@bgnet.bgsu.edu). If I have any questions or concerns about the conduct of the

study, please contact the Chair of Bowling State University, Human Subjects Review Board at 419-372-7716, [hsrb@bgnet.bgsu.edu](mailto:hsrb@bgnet.bgsu.edu).

Your help, brother/sister, will contribute significantly to the scientific investigation of Islam, and will be extremely appreciated.

Sincerely, Hisham Abu Raiya

Alasalamu alaikum,

My name is Hisham Abu Raiya, a doctoral student in the psychology department at Bowling Green State University, Ohio, the United States. As part of my degree requirements, I am currently conducting a study that aims to develop a psychological measure of Islamic religiousness that can be utilized in mental health research. The lack of such a measure is perhaps the primary reason why only few studies have been conducted among Muslims regarding their beliefs and practices, and how these practices and beliefs affect their physical and psychological well-being. The importance of such efforts cannot be underestimated; developing a measure of Islamic beliefs and practices, and consequently conducting scientific research based on it, can considerably deepen our understanding of the ways in which Islam affects the well-being of its adherents.

I am writing to ask your help in completing a survey that include questions about your practices, beliefs, and life more generally. This will take about half an hour of your time. If you agree to do so, please open the link attached to this e-mail and follow the instructions. Your help, brother/sister, will contribute significantly to the scientific investigation of Islam, and will be extremely appreciated.

Sincerely, Hisham Abu Raiya

## APENDIX B

### LIST OF THE WEBSITES CONTACTED FOR THE PURPOSE OF THE STUDY

1. The Islamic Student Association of Yale University
2. The Islamic Student Association of the University of Austin
3. The Islamic Student Association of the University of Chicago
4. The Islamic Student Association of the University of Kansas
5. The Islamic Student Association of Georgetown University
6. The Islamic Student Association of the University of Virginia
7. The Islamic Student Association of Penn State University
8. The Islamic Student Association of the Syracuse University
9. The Islamic Student Association of the University of Ottawa
10. The Islamic Student Association of the University of Wisconsin
11. The Islamic Student Association of the University of Nevada
12. The Islamic Student Association of the of Vanderbilt University
13. The Islamic Student Association of the University of Missouri-Rolla
14. The Islamic Student Association of the of Western Ontario University
15. The Islamic Student Association of Ohio State University
16. The Islamic Student Association of the University of Illinois, Chicago
17. The Islamic Student Association of the University of Washington
18. The Islamic Student Association of James Madison University
19. The Islamic Student Association of Toftus University
20. The Islamic Student Association of Virginia Commonwealth University
21. The Islamic Student Association of the University of Michigan Dearborn
22. The Islamic Student Association of UCSD
23. The Islamic Student Association of the University of Delaware
24. The Islamic Student Association of Golden Gate University
25. The Islamic Student Association of the Rutgers University
26. The Islamic Student Association of British Columbia University
27. The Islamic Student Association of Columbia University
28. The Islamic Student Association of Calgary University

29. The Islamic Student Association of the University of Mississippi
30. The Islamic Student Association of John Hopkins University
31. The Islamic Student Association of the University of Arizona
32. The Islamic Student Association of the University of Akron
33. The Islamic Student Association of George Mason University
34. The Islamic Student Association of Louisiana University
35. The Islamic Student Association of the University of Kentucky
36. The Islamic Student Association of the University of Georgia
37. The Islamic Student Association of the University of Alberta
38. National Association of Muslim Lawyers
39. The Islamic Student Association of the University of Missouri St. Louis
40. The Islamic Student Association of the University of New Mexico
41. The Islamic Student Association of Wayne State University
42. The Islamic Student Association of Illinois Institute of Technology
43. The Islamic Student Association of Binghamton University
44. The Islamic Student Association of the University of New England
45. The Federation of Student Islamic Societies in the UK
46. Iranian Student Muslim Association in the UK
47. The Federation of the Islamic Associations of New Zealand
48. The Islamic society of Britain
49. The Association of Muslim Lawyers at the UK
50. The Islamic society of Newcastle University at the UK
51. The Islamic society of Warwick university at the UK
52. The Syrian Arab Association of Canada
53. The Syrian Arab Association in the UK
54. The United Muslim Women at Australia
55. The Islamic association of Australia
56. The Australian New Muslim Association
57. The Islamic movement of South Africa
58. The Muslim Association of Britain
59. The Islamic Society of the University of Leicester at the UK

60. The Islamic Society of the University of Lancaster
61. The Islamic Society of the Imperial College at the UK
62. The Islamic Society of the University of Peterborough at the UK
63. The Indian Muslim Welfare Society
64. The Islamic Assembly of North America
65. The Islamic circle of North America
66. The Islamic Medical Association of North America
67. The Islamic Society of North America
68. The Muslim Society/Ministry of Imam W. D Mohammad
69. The North American Association of Muslim Professional and Scholars
70. The American Islamic Chamber of Commerce
71. The American Islamic Services Foundation
72. The Baitul Salaam Network
73. The Institute of Islamic Education and Research
74. The Islamic Dawah Missionary Program in the USA
75. The Islamic Information Office
76. The Canadian Society of Muslims
77. The Islamic Resource and Media Council
78. The Muslim Youth of North America- Toronto Division
79. The Islamic online website
80. The Islamic association of greater Detroit
81. The Islamic Society of the University of Dundee at Scotland
82. The Islamic Society of the University of Glasgow at the UK
83. London School of Economics at the UK
84. The Islamic Society of the University of Nottingham
85. The Islamic Society of the University of Reading at the UK
86. The Arabic student association at Concordia-Canada
87. The Ahmad Makani Forum
88. The Amun Network Forum
89. The Inside Islam Forum
90. The Mohammad Patel Forum

91. The MPCA Forum
92. The Ummiko Sayag Forum
93. The Shabab Almahdi Forum
94. The Allah Slaves Forum
95. The Fear\_Allah Forum
96. The Muslim Chronicle Forum
97. The Secular Muslim Forum
98. The Iben Warraq Forum
99. The Scottish Muslims Forum
100. The Reformist Muslim Forum
101. The Forum of Progressive Muslim

**APPENDIX C**  
**CORRELATIONS BETWEEN THE ORIGINAL SUBSCALES OF THE PMIR**  
**AND THE WELL-BEING MEASURES**

## Correlations between the PMIR Original Subscales and the Well-being Measures

Variable	General Islamic Well-being	Depressed Mood	Positive Relations with Others	Purpose in Life	Physical Health	Satisfaction with Life	Angry Feelings	Alcohol Use
Islamic Beliefs	.47**	-.23**	.29**	.21**	-.23**	.23**	-.16**	-.48**
Islamic Practices	.68**	-.30**	.33**	.40**	-.30**	.35**	-.26**	-.48**
Islamic Ethical Conduct Do	.66**	-.22**	.26**	.26**	-.20**	.32**	-.22**	-.39**
Islamic Ethical Conduct Do not	.66**	-.23**	.29**	.24**	-.20**	.32**	-.22**	-.42**
Islamic Universality	.66**	-.23**	.27**	.28**	-.23**	.31**	-.22**	-.44**
Islamic Religious Conversion	.44**	-.11	.12	.11	-.13	.23**	-.18*	-.14
Islamic Positive Religious Coping	.76**	-.26**	.45**	.42**	-.36**	.46**	-.22**	-.43**
Islamic Negative Religious Coping	.00	.15*	-.07	-.16*	.01	-.10	.19**	.03
Islamic Religious Struggle	-.75**	.32**	-.42**	-.38**	.35**	-.29**	.30**	.62**
Islamic Religious Identification	.60**	-.09	.23**	.23**	-.19**	.23**	-.19**	-.08
Islamic Religious Introjection	.23**	-.01	-.12	-.06	.03	.01	-.02	-.01
Islamic Religious Excluvism	.72**	-.31**	.34**	.35**	-.24**	.25**	-.25**	-.50**

Note: \*\*  $p < .01$ . \*  $p < .05$

APPENDIX D  
QUESTIONNAIRE

*Below are some questions and statements concerning your religious and general life.*

*Please indicate your reaction to each question or statement by choosing the answer that best fits you. Remember! There are no wrong or right answers and all your answers will remain completely confidential. Please be honest and open in your responses.*

<Islamic Religiousness Items>

*Please indicate your reaction to each of the following statements using the following scale:*

**No = 1              Uncertain = 2              Yes = 3**

1. I believe in the existence of Allah.
2. I believe in the Day of Judgment.
3. I believe in the existence of paradise and hell.
4. I believe in the existence of the angels, the Jinn, and Satan.
5. I believe in all the prophets that Allah sent and in the sacred texts that were revealed to them.

*For the following questions, please check the answer that fits you.*

6. How often do you pray?

\_\_\_ Never (0)

\_\_\_ A few times a year (1)

\_\_\_ Several times a month (2)

\_\_\_ Several times a week (3)

\_\_\_ Most of the times the 5 daily prayers (4)

\_\_\_ Five times a day or more (5)

7. How often do you fast?

\_\_\_ Never (0)

\_\_\_ A Few times in life (1)

\_\_\_ A few days of the month of Ramadan each year (2)

\_\_\_ Half to all the month of Ramadan each year (3)

\_\_\_ The whole month of Ramadan each year (4)

\_\_\_ Other religious days or sunna fasts in addition to the month of Ramadan (5)

8. How often do you go to the masjid?

\_\_\_ Never (0)

\_\_\_ A few times in my life (1)

\_\_\_ A few times a year (2)

\_\_\_ A few times a month (3)

\_\_\_ About once or twice a week (4)

\_\_\_ Once a day or more (5)

9. Except in prayers, how often do you read or listen to the Holy Qura'n?

\_\_\_ Never (0)

\_\_\_ A few times in my life (1)

\_\_\_ A few times a year (2)

\_\_\_ A few times a month (3)

\_\_\_ About once or twice a week (4)

\_\_\_ Once a day or more (5)

10. Except in prayers, how often do you engage in d'iker or tasbih?

\_\_\_ Never (0)

\_\_\_ A few times in my life (1)

\_\_\_ A few times a year (2)

\_\_\_ A few times a month (3)

\_\_\_ About once or twice a week (4)

\_\_\_ Once a day or more (5)

11. Which type of hijab you wear? (for women only)

\_\_\_ None (0)

\_\_\_ One that does not cover all the hair and ears but covers part of the hair (1)

\_\_\_ One that covers all the hair but rest of clothes regular fashions (2)

\_\_\_ One that covers all the hair and the neck but rest of clothes regular fashions (3)

\_\_\_ One that covers all the hair and loose-fitting, opaque clothing (i.e., jilbab, shalwar, khimar, abaya, etc.) (4)

\_\_\_ One that covers the face (niqab or burqah) (5)

*Please indicate your reaction to each the following statements using the following scale:*

**Strongly disagree = 1    Disagree = 2    Neutral = 3    Agree = 4    Strongly agree = 5**

12. Islam is the major reason why I am a humble person.

13. Islam is the major reason why I honor my parents.

14. Islam is the major reason why I help my relatives and neighbors.

15. Islam is the major reason why I assist the needy and the orphans.

16. Islam is the major reason why I am a tolerant person.
17. Islam is the major reason why I do not eat pork.
18. Islam is the major reason why I do not drink alcohol.
19. Islam is the major reason why I do not have sex before marriage or outside it.
20. Islam is the major reason why I do not consider committing suicide.
21. Islam is the major reason why I do not engage in gossip.
22. I consider every Muslim in the world as my brother or sister.
23. I identify with the suffering of every Muslim in the world.
24. One of my major sources of pride is being a Muslim.
25. I would like to live in a world ruled by the Islamic laws.
26. I believe that brotherhood and sisterhood is one of the basic tenets of Islam.

*Please indicate your reaction to the following statement:*

27. In my life, I have changed from a non-religious person to a religious person.

**No**

**Yes**

*If your answer is no, please move to the following section.*

*If your answer to the above statement is yes, please indicate your reaction to each of the statements 28-33 by using the following scale:*

**Strongly disagree = 1    Disagree = 2    Neutral = 3    Agree = 4    Strongly agree = 5**

28. Becoming more involved in Islam was a turning point in my life.
29. Islam has moved from the outside to the very center of my life.
30. At one point in my life, I realized that Islam is the solution to all of my problems.
31. All at once, I felt that my life has no meaning without Islam.

32. All at once, I felt that I am on the wrong path and that I should follow the path of Allah.

33. In comparison to the way I used to be, Islam touches every aspect of my life.

*Please indicate your reaction to each the following statements using the following scale:*

**I do not do this at all = 1**

**I do this a little = 2**

**I do this a medium amount = 3**

**I do this a lot = 4**

34. When I face a problem in life, I look for a stronger connection with Allah.

35. When I face a problem in life, I consider that a test from Allah to deepen my belief.

36. When I face a problem in life, I seek Allah's love and care.

37. When I face a problem in life, I believe that I am being punished for bad actions I did.

38. When I face a problem in life, I voice anger that Allah did not answer my supplications.

39. When I face a problem in life, I feel punished by Allah for my lack of devotion.

40. When I face a problem in life, I read the Holy Qura'n to find consolation.

41. When I face a problem in life, I ask for Allah's forgiveness.

42. When I face a problem in life, I try to make sense of the situation with no reference to Allah.

43. When I face a problem in life, I remind myself that Allah commanded me to be patient.

44. When I face a problem in life, I realize that Allah will not answer my supplications.

45. When I face a problem in life, I do what I can and put the rest in Allah's hands.

*Please indicate your reaction to each the following questions using the following scale:*

**Never = 0      Rarely = 1      Sometimes = 2      Often = 3      Very often = 4**

46. I find myself doubting the existence of Allah.
47. I find some aspects of Islam to be unfair.
48. I find myself doubting the existence of afterlife.
49. I think that Islam does not fit the modern time.
50. I doubt that the Holy Qura'n is the exact words of Allah.
51. I feel that Islam makes people intolerant.

*Please indicate your reaction to each the following statements using the following scale:*

**Not applicable**

**Not at all true = 1**

**Usually not true = 2**

**Usually true = 3**

**Very true = 4**

52. I pray because I enjoy it.
53. I pray because if I do not, Allah will disapprove of me.
54. I pray because I find it satisfying.
55. I read the Holy Qura'n because I feel that Allah is talking to me when I do that.
56. I read the Holy Qura'n because I would feel guilty if I did not.
57. I read the Holy Qura'n because I find it satisfying.
58. I fast in Ramadan because when I fast I feel close to Allah.
59. I fast in Ramadan because I would feel bad if I did not.

60. I go to the masjid because one is supposed to go to the masjid.

61. I go to the masjid because others would disapprove of me if I did not.

*Below are number of statements about general religious opinions. You will probably find that you agree with some of the statements and disagree with others, to varying extent.*

*Please indicate your reaction to each of the following statements using the following scale:*

**Very strongly disagree = -4**

**Strongly disagree = -3**

**Moderately disagree = -2**

**Slightly disagree = -1**

**Slightly agree = 1**

**Moderately agree = 2**

**Strongly agree = 3**

**Very strongly agree = 4**

62. Islam is Allah's complete, unfailing guide to happiness and salvation, which must be totally followed.

63. Of all the people on this earth, Muslims have a special relationship with Allah. because they believe the most in his revealed truths and try the hardest to follow his laws.

64. It is more important to be a good person than to believe in Allah and the right religion.

65. Islam is the best way to worship Allah, and should never be compromised.

66. No one religion is especially close to Allah, nor does Allah favors any particular believers.
67. “Satan” is just the name people give to their own bad impulses. There really is no such thing as Satan who tempts us.
68. Allah will punish most severely those who abandon his true religion.
69. The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against Allah.
70. No single book of religious writings contains all the important truths about life.
71. There is no body of teachings, or set of scriptures, which is completely without error.

<General Islamic Well-being Scale>

*Please indicate your reaction to each the following statements using the following scale:*

**Very negatively = -2**

**Negatively = -1**

**Not at all = 0**

**Positively = 1**

**Very positively = 2**

72. Islam affects my sense of meaning in life.
73. Islam affects my sense of personal identity.
74. Islam affects my sense of community.
75. Islam affects my sense of personal comfort.
76. Islam affects my sense of peace of mind.
77. Islam affects my physical health.

78. Islam affects my sense of self-esteem.
79. Islam affects my feeling of closeness to Allah.
80. Islam affects my ability to cope with difficult situations in life.

<Center for Epidemiological Research-Depressed Mood Scale (CES-D)>

*Please choose the answer that best describes how often you felt or behaved this way*

*DURING THE PAST WEEK, using the following scale:*

**Less than 1 day = 1    One to two days = 2    Three to four days = 3**

**Five to seven days = 4**

81. I was bothered by things that usually do not bother me.
82. I did not feel like eating; my appetite was poor.
83. I felt that I could not shake off the blues even with help from my family or friends.
84. I felt that I was just as good as other people.
85. I had trouble keeping my mind on what I was doing.
86. I felt depressed.
87. I felt that everything I did was an effort.
88. I felt hopeful about the future.
89. I thought my life had been a failure.
90. I felt tearful.
91. My sleep was restless.
92. I was happy.
93. I talked less than usual.
94. I felt lonely.

95. People were unfriendly.
96. I enjoyed life.
97. I had crying spells.
98. I felt sad.
99. I felt that people disliked me.
100. I could not get “going.”

<Positive Relations with Others Scale>

*Please choose the answer that best describes your present agreement or disagreement with each of the following statements using the following scale:*

**Strongly disagree = 1**

**Moderately disagree = 2**

**Slightly disagree = 3**

**Slightly agree = 4**

**Moderately agree = 5**

**Strongly agree = 6**

101. Most people see me as loving and affectionate.
102. Maintaining close relationships has been difficult and frustrating for me.
103. I often feel lonely because I have few close friends with whom to share my fears.
104. I enjoy personal and mutual conversations with family members or friends.
105. I do not have many people who want to listen when I need to talk.
106. It seems to me that most other people have more friends than I do.
107. People would describe me as a giving person, willing to share my time with others.

108. I have not experienced many warm and trusting relationships with others.

109. I know that I can trust my friends, and they know they can trust me.

<Purpose in Life Scale>

*Please choose the answer that best describes your present agreement or disagreement with each statement using the following scale:*

**Strongly disagree = 1**

**Moderately disagree = 2**

**Slightly disagree = 3**

**Slightly agree = 4**

**Moderately agree = 5**

**Strongly agree = 6**

110. I live life one day at a time and do not really think about the future.

111. I tend to focus on the present, because the future nearly always brings me problems.

112. My daily activities often seem trivial and unimportant to me.

113. I do not have a good sense of what it is I am trying to accomplish in life.

114. I used to set goals for myself, but that now seems like a waste of time.

115. I enjoy making plans for the future and working to make them a reality.

116. I am an active person in carrying out the plans I set for myself.

117. Some people wander aimlessly through life, but I am not one of them.

118. I sometimes feel as if I have done all there is to do in life.

<The “General Health Perception” subscale of the Short-Form-36 Health Survey (SF-36)>

*The following questions pertain to your general health. Please choose the response most applicable to you, using the following scale:*

**Definitely True = 1      Mostly True = 2      Don't Know = 3      Mostly False = 4**  
**Definitely False = 5**

119. I seem to get sick a little easier than other people.

120. I am as healthy as anybody I know.

121. I expect my health to get worse.

122. My health is excellent.

123. In general, would you say your health is:

**Excellent = 1              Very good = 2              Good = 3              Fair = 4**  
**Poor = 5**

<Satisfaction with Life Scale>

*Please indicate your agreement with each of the following items using the following scale:*

**Strongly disagree = 1      Disagree = 2      Slightly disagree = 3**  
**Neither agree nor disagree = 4      Slightly agree = 5      Agree = 6**  
**Strongly agree = 7**

124. In most ways, my life is close to my ideal.

125. The conditions of my life are excellent.

126. I am satisfied with my life.

127. So far, I have gotten the important things I want in life.

128. If I could live my life over, I would change almost nothing.

<The “Anger Trait” Scale of the 44-item State-Trait Anger expression Inventory (STAXI)>

*Please choose the answer that best indicates your reaction to each of the following statements using the following scale:*

**Almost never = 1      Sometimes = 2      Often = 3      Almost always = 4**

129. I lose my temper.

130. I fly off the handle.

131. I get angry very quickly.

132. I make sarcastic remarks.

133. When I feel bad, I say nasty things.

134. I feel annoyed when I am not given recognition for a job well-done.

135. I feel infuriated when I do a good job and get a poor evaluation.

136. I get angry when I have to wait because of other’s mistakes.

137. I get angry when I am told I am wrong in front of others.

138. I argue with others.

<The Alcohol Use Disorders Identification Test (AUDIT)>

*Please choose the answer that is correct for you, using the following scale:*

**Never = 0      Monthly or less = 1      Two to four times a month = 2**

**Two to three times a week = 3      Four or more times a week = 4**

139. How often do you have a drink containing alcohol?
140. How many drinks containing alcohol do you have on a typical day when you are drinking?
141. How often do you have six or more drinks on one occasion?
142. How often during the last year have you found that you were not able to stop drinking once you had started?
143. How often during the last year have you failed to do what was normally expected from you because of drinking?
144. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
145. How often during the last year have you had a feeling of guilt or remorse after drinking?

*Please choose the answer that is correct for you, using the following scale:*

**No = 0      Yes, but not in the last year = 2      Yes, during the last year = 4**

146. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
147. Have you or someone else been injured as a result of your drinking?
148. Has a relative or friend, or a doctor or other health worker, been concerned about your drinking or suggested you cut down?

## &lt;Global Religiousness&gt;

*Please indicate your reaction to each of the following questions using the following scale:*

**Very low = 1      Low = 2      Average = 3      High = 4      Very high = 5**

149. How do you describe your religiousness?

150. How do you describe your spirituality?

## &lt;The Short Version (thirteen items) of the Marlowe-Crowne Social Desirability Scale&gt;

*Please indicate whether each one of the statements below is **False or True**.*

151. It is sometimes hard for me to go on with my work if I am not encouraged.

152. I sometimes feel resentful when I do not get my way.

153. On a few occasions, I have given up on something because I thought too little of my ability.

154. There have been times when I felt like rebelling against people in authority even though I knew there were right.

155. No matter whom I am talking to, I am always a good listener.

156. There have been occasions when I took advantage of someone.

157. I am always willing to admit it when I make a mistake.

158. I sometimes try to get even rather than forgive or forget.

159. I am always courteous, even to people who are disagreeable.

160. I have never been irked when people express ideas very different from my own.

161. There have been times when I was quite jealous of the good fortune of others.

162. I am sometimes irritated by people who ask favors of me.

163. I have never deliberately said something that hurt someone's feeling.

<Demographics>

*Please answer the following questions by checking the answer that fits you.*

164. What is your age?

> 18 <30 (1)

> 30 <45 (2)

> 45 < 60 (3)

> 60 (4)

165. What is your gender?

Male

Female

166. What is your yearly household income?

< \$25,000 (1)

> \$25,000 < \$50,000 (2)

> \$50,000 < \$75,000 (3)

> 75,000\$ (4)

167. What is your marital status?

Married

Divorced

Single

Widowed

168. How many years of formal education do you have?

\_\_\_ < 12 (1)

\_\_\_ > 12 < 15 (2)

\_\_\_ > 15 < 18 (3)

\_\_\_ > 18 (4)

169. What is the continent of your current residence?

\_\_\_ Asia

\_\_\_ Africa

\_\_\_ South America

\_\_\_ North America

\_\_\_ Australia

\_\_\_ Europe

## APPENDIX F

### A BRIEF REVIEW OF ISLAM

#### Overview

The purpose of the following brief review is to present the important tenets and characteristics of Islam: the definition, the founder, the sacred texts, the basic practices and beliefs, the moral conducts, and Islam today. This review cannot provide comprehensive coverage of such a rich, complex, and multifaceted religion. Therefore, different sources that can offer a richer and deeper understanding of Islam are presented throughout the text.

#### What is Islam?

Islam is the last major monotheistic traditions to emerge in history. However, instead of being the youngest of the major monotheistic world religions, from the Islamic viewpoint it is the oldest. Islam, according to this view, represents the “original” as the final revelation of God to Abraham, Moses, Jesus, and Muhammad (Esposito, 1998). According to Gordon (2002), the word *Islam*, often translated as “submission” or “surrender,” reflects the decision by the *Muslim* (“one who submits or surrenders”) to abide in mind and body by the will of the one and the true God (*Allah*). The word Islam has also a linguistic connection to the word *salam* (peace). To surrender to Allah’s will then is to bring about a harmonious and peaceful order to the universe.

Islamic tradition started in the early seventh century C.E in the town of Mecca in the Arabian Peninsula. According to this tradition, a forty-year old reflective and trusted merchant, Muhammad - commonly referred to as the prophet, or messenger of Allah- received a series of revelations, collectively known as the *Qura’n*, from Allah beginning

in the 610 C.E and ending soon before his death in 632 C.E. In the eyes of Muslims, the Qura'n is considered Allah's direct and unchangeable word (Gordon, 2002). Allah, in the Qura'n, describes His unique and intimate relationship with humankind as follows: "This book, without doubt, is a guide to those of awe and fear (of Allah)" (The Qura'n, 2:2).

### The Prophet Muhammad and the Beginning of Islam

Muhammad was born in Mecca in 570 C.E. His father A'bid Allah, a trader, died before he was born, and his mother Amina, died when he was about six. His respected but relatively poor uncle, Abu Talib, an elder statesman of the clan of Banu Hashim of the tribe of Quraysh, raised him, protected him, and defended him against the enemies of his mission (Esposito, 1998; Rahman, 1984).

A good deal is known about Muhammad's life after the call to be Allah's messenger. However, historical records have little to tell about Muhammad's early years prior to becoming a prophet at about the age of forty in 610 C.E (Esposito, 1998). In his youth and as indication of his honesty, integrity and moral sensitivity he was called *al-Amin* (the trusted one). In his early twenties, he managed the business of a rich and widowed woman, Khadija, and undertook trade missions to *al-Sham* (Syria today) on her behalf. According to the historical records, she was so deeply impressed by his honesty and financial abilities that she asked him to marry her. Muhammad accepted her offer. At that time, he was 25 and she was 40 years old. She bore him three sons, all of whom died in infancy, and four daughters. Khadija's death was one of the painful moments of Muhammad's life and he did not marry again until long time after her death, when he was 50 years old. No male offspring resulted from his later marriages, although the Coptic Christian, Mary, bore him a son who died. Muhammad's most famous surviving child

was Fatima (called *alzahra'* in the Islamic tradition), who would marry Ali, the fourth caliph of Islam (Esposito, 1998; Rahman, 1984).

Muhammad was of a reflective and contemplative nature that led him to withdraw frequently to a cave, a few miles northern to Mecca, called *Mt. Hira*. In this place, in long periods of solitude, he pondered his life and the troubles and problems of his society, yearning for a higher meaning and a greater insight. Here, at the age of forty during the month of *Ramadan*, Muhammad received the call of Allah to be His messenger (Esposito, 1998). In the night called in Islamic tradition *Lailat Alqader* ("The Night of Bower and Excellence"), he started to receive revelations from Allah. According to the Islamic tradition, the angel Gabriel, commanded him to "recite." "I have nothing to recite" was Muhammad response. Gabriel repeated the command twice, and each time Muhammad, frightened and confused, declared firmly that he did not know what to say. Finally, the words came to him: "Recite on the name of your Lord who has created, created man from a germ-cell. Recite for your Lord is the Most Generous who has taught by the pen, taught human being what he did not know" (The Qura'n, 96:1-5).

Initially most of Muhammad's followers were from low socio-economic classes. The Meccan merchant nobility and its upper classes rejected Muhammad's new religion because they considered it a threat to their two primary interests: idol worship and socioeconomic privilege. Two of the most important demands of the Qura'n clashed strongly with the interests of the Meccan oligarchy. The first was the abolition of idol worship (or what the Qura'n calls associating others with Allah in worship- *shirk*), in which the Meccan oligarchy had an obvious religious and economic interest. The second

was economic and social justice for the deprived and the poor, which Meccan oligarchy perceived as an unfair charge on the wealth they had earned (Rahman, 1984).

Muhammad struggled in Mecca over the following ten years, preaching Allah's messages and trying to gather a small group of faithful and loyal followers. Among the first people who converted to Islam were Ali, his cousin and son-in-law and the fourth caliph (successor), and Abu Bakir, his future father-in-law and the first caliph (Rahman, 1984). When in 619, both Khadija and Abu Talib died, Muhammad lost the earthly help crucial for his survival. Meccan resistance escalated from scorn, disrespect, and verbal attacks to active persecution and harassment (Esposito, 1998). As the conditions worsened, Muhammad sent some of his followers to other areas, Ethiopia especially, out of safety concerns. This situation changed drastically in 620 C.E, when Muhammad was invited by a delegation from *Yathrib* (later called *Madina*), a city two hundred miles north of Mecca, to serve as chief arbitrator in a bitter dispute between its Arab tribes. Muhammad and two hundred of his followers emigrated to Madina. This migration (*hijra*) marked the beginning of the Islamic calendar, and is considered a turning point in Muhammad's life and a new phase in the history of the Islamic religion (Esposito, 1998; Rahman, 1984).

To build a *masjid* (mosque) was the first task of Muhammad in Medina. This was of special importance because the masjid, according to the new religion, was supposed to be the area of prayer that is the center of Islamic life (Rahman, 1984). The second was to strengthen the relationship between the people who came with him and their hosts. Within a short time after his arrival in Medina, the prophet managed to establish a brotherhood between the new comers and the native population. The groups were known

as *muhajirun* (immigrants) and *ansar* (helpers). He also formulated a document called the charter (constitution) of Medina. This constitution specified the rights and duties of all the different groups living in the city. The Medina became a Muslim town, the town of the prophet (Esposito, 1998).

As the affairs in Medina began to stabilize, Muhammad turned his attention to Mecca- the ultimate purpose. Mecca was the religious, political, economic, and intellectual center of Arabia (Esposito, 1998). Within one year of the hijra, the *Ka'aba* at Mecca (which according to the Islamic tradition contains the sacred black stone, and was built by Abraham and his son Ishmael as a place of worship) was declared by the Qura'n to be the object of Islamic *hajj* (pilgrimage). Six months later, it was also fixed as the *qibla* (direction) for prayer-replacing Jerusalem (Rahman, 1984).

Conflicts soon followed. "Muslim religious fervor was matched by the power of Meccan tribal mores that branded the Muslims as secessionists and traitors; all the ingredients were there for a formidable battle" (Esposito, 1998, p. 8). The first well-known battle took place in 624 C.E at the plain of *Badir* near Medina. The Muslim forces, though considerably outnumbered, achieved a clear-cut triumph. This unusual victory was interpreted as a patent sign of Allah's favor and of the truth of Islam. In the Qura'n, it is stated that Allah sent a significant amount of angels to fight besides the Islamic forces. The euphoria after Badir was dissipated when the Muslims forces were defeated by the Meccan armies in the battle of *Uhud* in 625 C.E in which Muhammad was wounded (Esposito, 1998; Rahman, 1984).

Finally, in 630 C.E Mecca fell to Islam. When the Muslim army neared Mecca, the city surrendered without a fight or bloodshed. Muhammad entered the city as a hero. A

general amnesty was announced, Meccans embraced Islam, and the idols in the Ka'aba were destroyed. Tribal delegations from all over the Arabian Peninsula arrived to Mecca, expressed loyalty to Muhammad, and converted to Islam (Rahman, 1984). In 632 C.E, Muhammad led his last pilgrimage to Mecca, where he preached his farewell sermon (known in the Islamic tradition as *Kutbat Alwada'*), urging his followers:

“Know ye that every Muslim is a brother unto every Muslim, and that ye are now one brotherhood. It is not legitimate for any one of you, therefore, to appropriate unto him self anything that belongs to his brother unless it is willingly given him by that brother” (cited in Esposito, 1998, p. 11).

Brotherhood sums up the essence of Islam, the nature of the Islamic community, and the achievement of Muhammad as a man and prophet. Muhammad died three months later in June 632 C.E. At that time, all Arabia was united under the Islamic faith (Esposito, 1998).

### The Sacred Texts

The Islamic tradition regards the Qura'n as Allah's exact words. Muslims acknowledge the Qura'n as the “extension of the divine into the earthly realm, the embodiment on earth of Allah's mercy, power and mystery” (Gordon, 2002, p. 37).

To interpret and fully understand the teachings of the Qura'n, the *ulama* (the religious scholars) relied on the voluminous collection of the prophet's teachings, words, and deeds (*sunna* or *hadith*). This collection acts as supplementary guidance alongside the Qura'n. Consequently, the Qura'n and the hadith are the two main sources used to elucidate matters of Islamic faith, law and doctrine (Gordon, 2002).

## The Qura'n

At the core of Islam lies the Qura'n. Farah (1987) describes the importance of the Qura'n in the life of Muslims well: "More than representing the supreme embodiment of the sacred beliefs of Islam, its bible and its guiding light, the Qura'n constitutes the Muslim's main reference not only for spiritual matters but also for the mundane requirements of day to day living" (p. 79).

The Qura'n is more widely read than any other sacred text. The Muslim's reliance on the Qura'n and its teachings makes it the primary resource both in the execution of religious duties and in the attainment of basic knowledge (Gordon, 2002).

The term "Qura'n" literally means "recitation," or "readings." Other commonly used names of the Qura'n are the "concealed book" or a "well-guarded tablet" which according to the Qura'n is supposed to rest in the seventh heaven (Farah, 1987). The Qura'n was originally revealed to Muhammad in the Arabic language over a period of twenty-two years. Its current, written form was achieved during the ruling period of the third caliph, Uthman (644-656 C.E). Uthman, who was worried about the destiny of the Qura'n, ordered a group of trustful and respected Muslims to create a definitive version (Gordon, 2002). The Qura'n consists of 114 chapters known as *suras* (singular *sura*). Each sura is composed of a varying number of individual verses (*ayat*, singular *aya*). Each aya in the Qura'n is considered a "sign" from Allah of His presence, omniscience, omnipotence, greatness, and mercy. The Qura'n is about four-fifths the size of the New Testament and its chapters are arranged according to length, not chronology (Esposito, 1998; Gordon, 2002).

The Qura'n stylistic expression is an interesting mixture of rhymed poetry and a lyrical flow. These modes of expression were highly familiar to the pre-Islamic Arabs. The Qura'n was exceptionally adjustable for oral recitation, a carry over from the *Jahiliyah* (pre-Islamic era) when this manner of expression was very popular in the Arabian Peninsula. Stylistically, the Qura'n shows the strong preponderance of *saja'* (rhymed prose) a form that was popularly used by the soothsayers of pagan Arabia (Farah, 1987).

The revelations of the Qura'n were received during the two periods of Muhammad's life, in Mecca and Madina (Esposito, 1998). There are significant differences between these two revelations. The Meccan revelations were the shorter ones. In these revelations of the Qura'n, the primary focus of Muhammad was to persuade the disbelievers to turn away from their idolatry, and to convince them to worship the one God. Muhammad, by the guidance of Allah, resorted to reason, logical proof, and fair exhortation in his attempts at persuasion just as often as he resorted to threats of impending doom. The central theme that surrounded his arguments was the immensity, goodness, and righteousness of Allah as manifested in nature, history, and His revelations to Muhammad. Allah is displayed in the most exalted and glorious terms. His omnipotence and omniscience were constantly emphasized (Gordon, 2002). In addition, the happiness of heaven and the pains and torture of hell are portrayed very sensuously, as is also the fear, awe and terror which will grab mankind on the awesome day (*Yawm al-Qiama*) (Farah, 1987). In the Qura'n, this day is described as: "When the sky shall be severed, and the stars shivered, and when the seas to mingle reckoning will bring man

before the creator, a Day when one soul shall not obtain anything for another soul, but the command on that Day shall be with Allah alone” (The Qura’n, 82:20).

The later Medinan revelations are the longer chapters. In this period, the message of Islam as manifested in the Qura’n became easier to understand. In these revelations, it became possible to follow the series of events that occasioned the revelation. These chapters, generally, are much easier to assimilate because they are dealing with accomplished facts, concrete events, and everyday concerns. Since most of these suras were revealed after the establishment of the religion and of the Muslim community, they are more assured in tone. These revelations, by and large, emphasize practices and duties rather than beliefs (Gordon, 2002; Farah, 1987).

The Qura’n manifests itself in the everyday life of Muslims in a variety of ways. Historically, Muslim parents used to send their children to Islamic education schools, which taught the young Muslims to read and write Qura’nic verses and to memorize and recite the full text (Gordon, 2002). Although this custom is almost nonexistent currently because of the spread of secular schooling, parents today still try to make sure that their children obtain Qura’nic education. The great value attached to memorization and recitation is most likely derived from the prophet’s own example of oral transmission of the Qura’n. Qura’nic recitation is still a respected form of art, and recordings by reciters are readily available throughout the Islamic world. Muslims attach a physical sacredness to the Qura’n and prefer to handle it only in a state of purity; they also believe it to possess a divine blessing (*baraka*) which is used sometimes in healing rituals and ceremonies (Gordon, 2002).

To sum, according to Islam, the Qura'n is the last revealed word of Allah and the chief source of Muslim belief and practice. It deals with all of the topics which relate to human existence: wisdom, doctrine, worship, law, etc. However, its essential topic is the relationship between Allah and His creatures. At the same time, it provides guidelines and detailed teachings for a just society, proper ethical standards, and an equitable economic system, and it is present in the everyday life of Muslim (Ibrahim, 1997).

### The Sunna

The second chief source of Islam is the sunna of the prophet. Traditionally, there was extensive agreement as to the importance of the sunna, but equally widespread disagreement as to its content (Gordon, 2002). The word sunna literally means exemplary practice; and in the context of Islam, it means the practice by the example of Muhammad. Muhammad represents the perfect Muslim, and his example serves as a guide to living the Muslim's life in all aspects and domains (e.g., how to treat friends as well as enemies, what to eat and to drink, how to make love and war) (Esposito, 1998), and to making the implicit concepts of the Qura'n explicit (Gordon, 2002). The sunna, therefore, is seen as a "safeguard" to the Islamic community. It provides this community a means for extending the teaching of Islam, and it assumes an underlying unity in these teachings.

Later Islamic generations were familiarized with the prophet's example through the hadith. The word hadith literally means a report, saying or action (of Muhammad in this case) and is frequently translated to English as tradition. But hadith is more than that; it is the body of accounts of what Muhammad said and did, what was done in his presence and not forbidden by him, and even includes some of the sayings and actions of his close companions (Gordon, 2002). Family members and close companions of the prophet

played an essential role in this collection. In its final form, each hadith was headed by a list of those through whom the report was transmitted, which ideally extended back to Muhammad or to a close companion to whom he had spoken directly (Farah, 1987; Gordon, 2002).

Most of the hadiths were collected in the late eighth to early ninth century. In that period, Muslim scholars also began to strictly analyze the numerous reports that were flowing within the growing Islamic community. It became clear to the scholars that many of the hadiths were not true or accurate, but rather reflected opinions or ideological positions that have nothing to do with what Muhammad said. This issue created a huge debate in the Islamic world then and still does. In the Sunni World, the most cherished hadith collector is al-Bukhari (810-870 C.E) and Muslim ibn al-Hajjaj (died 875 C.E) (Gordon, 2002).

### Major Islamic Beliefs

Belief in God (Allah). According to Islamic beliefs there is “one, unique, unmatched God, Who has neither son nor partner, and none has the right to be worshipped but him alone. He is the true God, and every other deity is false. He has the most significant names and sublime perfect attributes. No one shares His divinity or His attributes” (Ibrahim, 1997, p .45). In the Qura’n, Allah describes Himself: “He is God, the one. God, to whom the creatures turn for their needs. He begets not, nor was He begotten, and there is none like Him” (The Qura’n, 112: 1-4).

Ibrahim (1997) describes Allah as reflected by the Qura’n and the Islamic belief very well,

Allah alone is the Almighty, the Creator, the Sovereign,

and the Sustainer of everything in the whole universe. He manages all affairs. He stands in need of none of His creatures, and all His creatures depend on Him for all that they need. He is the All-Hearing, the All-Seeing, and the All-Knowing. In a perfect manner, His knowledge encompasses all things, the open and the secret, and the public and the private. He knows what has happened, and what will happen. His will is above the will of all his creatures. He has power over all things, and He is able to do everything. He is the Most Gracious, the Most Merciful, and the Most Beneficent (p. 46).

#### Belief in the Angels (*al-Mala'ka*) and the *Jinn*

Muslim doctrine affirms the existence of the angels that are honored creatures. The angels worship Allah only, obey him, and act only by his command. Several of the angels are named in the Qura'n and, of this group, Gabriel who is said to have brought the Qura'n to Muhammad, stands as the most prominent. The angels are described as the creatures of light. Muslims believe also in al-jinn, the creatures of fire, whose role is not fully understood (Ibrahim, 1997; Gordon, 2002).

#### Belief in the Prophets (*al-Anbiyaa'*) and Messengers (*al-Rosol*) of Allah

According to the Qura'n and the Hadith, an important ingredient of the Islamic faith is the belief in the prophets and messengers of Allah, starting with Adam, including Noah, Abraham, Ishmael, Isaac, Jacob, Moses, and Jesus. To be a true Muslim believer, according to Islam, one must believe that Muhammad is the last prophet sent by Allah.

One should also believe that all the prophets and messengers were created human beings and none of them had the divine qualities of Allah (Ibrahim, 1997).

#### Belief in Allah's Revealed Books (*Kotob Allah Almonzala*)

According to Islamic beliefs, Allah revealed books to His messengers as proof for and guidance to mankind. These books are *al-Zubur* (revealed to David), *al-Taurah* (revealed to Moses), *al-Injil* (revealed to Jesus), and the Qura'n (revealed to Muhammad) (Ibrahim, 1997).

#### Belief in the Day of Judgment (*Yawm al-Hisab*)

One of the basic Islamic beliefs is the belief in the Day of Judgment (the Day of Resurrection). According to Islamic belief, in that time all people will be resurrected for Allah's judgment based on their beliefs and deeds. Based on Allah's judgment, people will be either rewarded (heaven- *al-Jana*), or punished (hell- *al-Nar*) (Farah, 1987; Ibrahim, 1997).

#### Belief in the Divine Predestination (*al-Qadar*)

Another tenet of Islam is the belief in al-Qadar, which is divine predestination. However, this belief in divine predestination does not mean that human beings do not have free will. Rather, Allah is believed to give human beings free will. This means they can choose right or wrong and that they are responsible for their choices (Ibrahim, 1997).

#### The Five Pillars of Islam

In the domain of human relationship with Allah, five acts of devotion (*ibadat*, singular *ibada*) are required practices for Muslims: shahada, salah, zakah, sawm and hajj. These actions are considered to be the "building blocks" of the Islamic religion. They are

very often referred to as the “five pillars” of Islam, and constitute the Islamic ritual system and the ceremonial duties (Gordon, 2002; Farah, 1987).

#### The Testimony of Faith (*Shahada*)

The pivotal and often repeated act among the Muslim’s ritual duties is the testimony of faith (shahada). The testimony of faith is to say with conviction, “There is no true god but Allah, and Muhammad is the messenger (prophet) of Allah” (Ibrahim, 1997).

Shahada is the only prerequisite for becoming a Muslim. The shahada’s words are the first words that should be spoken in the ears of a newborn babe and the last on the lips of the dying (Farah, 1987).

#### Prayer (*Salah*)

Of the five pillars of Islam, salah, or the ritual prayer, is the essential obligation of Muslim worship and is considered the supreme act of righteousness. Therefore, greater importance is placed on prayer than on any other duty in Islam (Farah, 1987). It is believed that Muhammad said, “When each of you performs his prayer, he is in intimate communication with his Lord” (cited in Gordon, 2002, p. 63).

How to perform the prayer is not the decision of the Muslim; it is a well-defined ritual, and follows a prescribed pattern. According to Islamic doctrine, Muslims should pray five times a day, at dawn, midday, mid-afternoon, sunset and nightfall. The Muslim can pray wherever. The Muslim is obligated to pray in the masjid and with his fellow Muslims only on Friday (Friday is the sacred day of Muslims, but it is not a day of rest). Each prayer includes reciting from the Qura’n, especially *al-fatiha* (the opening chapter of the Qura’n), *al-shahada*, *al-takbir* (saying Allah is Great) (Farah, 1987; Gordon, 2002).

The prayer must be approached in a state of purity or cleanness called *taharah*. There are two types of tahara: *ghusl*, a general form, and *wudu*, the limited form. Ghusl is necessary after acts of great defilement (*janabah*) such as sexual intercourse; wudu after small defilements (*hadath*) such as simple contact with the opposite sex. Wudu is the more commonly performed, either in the Muslim's private home or in the masjid (Farah, 1987).

Prayer is considered the foundation of the Islamic religion. According to the Qura'n and the hadith, any Muslim who fails to pray without justifiable reason is committing a grave sin (Abdalati, 1970). Allah, in the Qura'n, strongly emphasizes the pivotal role prayer should play in the life of the Muslim; so does the prophet Muhammad in the hadith. Many virtues are attributed to prayer in the Islamic tradition, such as discipline, willpower, and moral soundness.

#### Almsgiving (*Zakah*)

Invariably referred to as the "poor tax" or "poor-due" and "almsgiving," the *zakah* literally means purification. In practical terms, *zakah* designates the annual amount in kind, coin, or any material possessions which a Muslim with means must distribute among the rightful beneficiaries (Abdalati, 1970). According to the Islamic faith, the *zakah* is a means of avoiding the sufferings of the next life, and is an "expiation" or "purification" of the Muslim's soul (Farah, 1987).

While the *zakah* may be regarded as an act of beneficence, a percept of right-doing and a charitable act in a moral sense, *zakah* is a required religious observance; indeed, it is a fundamental of the faith (Abdalati, 1970). The distribution of the *zakah* is prescribed in the Qura'n according to predetermined categories of utilization. Among the people that

deserve the zakah are the poor and needy, the officials who gather it, and poor travelers (Farah, 1987). The exact amount was never spelled out; but the average was usually between 2 and 3 percent of earnings and possessions (Gordon, 2002). The zakah is supplemented by the *sadqah*, voluntary or non-obligatory alms. These were not defined or limited (Farah, 1987).

#### Fasting (*Sawm*) the Month of *Ramadan*

Sawm, or fasting in the month of Ramadan, is another requirement of the Islamic faith. Because the Muslims follow the lunar calendar, the month of fast varies constantly; it may move through the whole course of the solar year. During Ramadan, the Muslim cannot eat or drink; nor can he/she smoke, or have sexual intercourse, from sunrise until sunset. To be accepted by Allah, the fast must be accompanied by *niyah* (intention) of the Muslim. The fast is broken immediately after sunset with *fatur* (light meal). During this month, Muslims increase their prayer and the masjids are well attended. The month of Ramadan ends with a great feast known as *I'id al-fitr*. This feast is an occasion for festivities lasting three days, and is one of the most strictly observed holidays of Islam. Those who seek to avoid it incur severe disapproval from their relatives (Farah, 1987; Gordon, 2002; Ibrahim, 1997).

#### Pilgrimage (*al-Hajj*)

The fifth ritual duty of the Muslim is pilgrimage to Mecca. It is an obligation once in a lifetime for those who are physically and financially able to perform it. As an institution, the pilgrimage is a carry-over from the pre-Islamic period. The rites of the hajj include circling the ka'aba seven times and going seven times between the hillocks of *Safa* and *Marwa*, as Hagar (Abraham's wife) did during her search for water for her son

Ishmael. Then the pilgrims stand together in the mount of *Arafat* (15 miles from Mecca) and ask Allah for what they wish and for His forgiveness. The end of the hajj is marked by the sacrifice festival (*I'd Al-Adha*), which is celebrated with prayers (Ibrahim, 1997).

### The Commandments and Ethical Conduct

Since “commandments” of Islam are not specifically spelled out in any one document, we must learn the dos and don’ts of Islam by perusing the contents of the Qura’n. From this, the following injunctions can be adduced:

1. *Acknowledge there is no god whatsoever but Allah-* “Thy lord hath decreed, that ye worship none save Him...”
2. *Honor and respect parents-* “And lower unto them the wing of submission through mercy, and say: My Lord! Have mercy on them both as they did care for me when I was little.”
3. *Respect the rights of others-* “Give the kinsman his due, and the needy, and the wayfarer...But if thou turn away from them, seeking mercy from the Lord, for which thou hopest, then seek unto them reasonable word.”
4. *Be generous but not squandered-* “...squander not (thy wealth) in wantonness. Lo! The squanderers were ever brothers of the devil, and the devil was ever an ingrate to his Lord. “And let not thy hand be chained to thy neck nor open it with a complete opening, lest thou sit down rebuked, denuded. Lo! thy Lord enlargeth the provision for whom He will, and straiteneth (it from whom He will).”
5. *Avoid killing except for justifiable reason-* “Slay not the life which Allah hath forbidden save with right...”

6. *Commit no adultery*- “And come not near unto adultery. Lo! it is an abomination and an evil way.”
7. *Safeguard the possessions of the orphans*- “Come not near the wealth of the orphans save with that which is better till s/he come to his strength; and keep the covenant. Lo! of the covenant it will be asked.”
8. *Deal justly and equitably*- “Fill the measure when ye measure, and weigh with a right balance; that is meet, and better in the end.”
9. *Be pure in heart and mind*- “Your Lord is best aware of what in your minds. If ye are righteous, then lo! He was ever forgiving unto those who turn (unto Him).”
10. *Be humble and unpretentious*- “And walk not in the earth exultant! Thou canst not rend the earth, nor canst thou stretch the height of the hills...and follow not that whereof thou has not knowledge. Lo! the hearing and the sight and the heart-of each of these you will be asked (Farah, 1987, pp. 113-114).

And generally, the Qura'n enjoins Muslims to avoid “the evil of all that is hateful in the sight of thy Lord.”

Relevant to this discussion is the concept of sin. According to Abdalati (1970), in Islam, a sin is any act, thought or will that

- (1) is deliberate; (2) defies the unequivocal law of God;
- (3) violates the right of God or the right of human beings;
- (4) is harmful to the soul or the body; (5) is committed repeatedly; and (6) is normally avoidable. These components are not innate or inherited. Although the individual has the potential capacity to sin, this is not

greater than his/her capacity for piety and goodness.

Committing a sin is therefore a choice (p. 33).

In Islam, there are two categories of sin: 1. major and minor sins; 2. sins against Allah and sins against human beings. All sins against Allah, except one, are forgivable if the sinner genuinely seeks forgiveness. The Qura'n has stated clearly that Allah does not forgive the sin of shirk (polytheism, pantheism, trinity, etc.), but He forgives sins other than this and pardons whom He wills. Yet if the polytheist or atheist expresses a real regret and comes back to Allah, his sin will be forgiven. Sins against human beings are forgivable only if the offended pardons the offender or if the proper compensations and/or punishments are applied (Abdalati, 1970).

Besides the “commandments” and sin, there are other five categories of human conduct according to Islam: the required (*fard'*- e.g., the five pillars); the recommended (*muhbab*- e.g., giving charity and visiting relatives and friends); the permissible (*halal*- everything that is not reprehensible or forbidden), reprehensible (*makroh*- e.g., divorce); and forbidden (*haram*- e.g., committing suicide in any circumstances, eating pork, using drugs and alcohol) (Gordon, 2002).

### The Family and the Institution of Marriage

Familial life receives considerable attention in Islamic law. Seventy verses of the Qura'n refer to such topics as marriage, inheritance, and the rearing of children. Family is regarded in the Islamic tradition as the society's fundamental unit, and it plays a pivotal role in the integrity of the Islamic *Umma* (nation) (Gordon, 2002).

Within Islam, marriage represents a shared life based on the obedience to Allah, in which the spouses enjoy a full range of emotional and spiritual satisfaction (Marsot,

1984). In the Qura'n, Allah says, "One of the signs of Allah is that He created for you spouses like yourselves, that you might find rest in them, and He puts mutual love and mercy in your heart. This is surely a lesson for thoughtful people" (30:21).

Islam asserts the religious virtue, the social necessity, and the moral advantages of marriage. Muslim individual is expected to be family-oriented, to seek a family of his/her own and to raise children. Both the Qura'n and the hadith describe Allah's expectations that humans should marry and bear offspring (Abdalati, 1970). It is believed that Muhammad said, "When a Muslim marries, he perfects half of his religion" (cited in Abdalati, 1970, p.114).

In Islamic law, marriage (*nikah*) is considered to be a legal contract between two physically and mentally mature parties. It involves oaths of loyalty, respect, and support on the part of both partners and before Allah. Marriage contracts specify that the husband provides a dowry, which becomes the wife's property. The contract also refers to sexual conduct, and any attempt to void the contract through divorce (*talaq*) is taken gravely. Every effort of reconciliation or compromise is to be sought and considered. Both partners can initiate divorce. The Qura'n states that divorce, although permitted, is hateful in the eyes of Allah and binding on the conscience of human being. If circumstances necessitate divorce, the man is commanded to treat his wife with kindness and give her back the rest of her property and personal possessions (Gordon, 2002; Abdalati, 1970).

The occasion of marriage is one of great celebration and entertainment throughout the Muslim world. It provides a stage for great social interaction and enjoyment. It serves

also to highlight the importance Muslims attached to family life as a force for unity and social cohesion (Farah, 1987).

### Islam Today

Today, the Islamic community spans the globe. A steadily growing proportion of the world's population today adheres to the Islamic faith. The number of adherents is estimated to be one billion, although accurate figures are hard to verify because censuses in many regions where Muslims predominate are rarely reported (Gordon, 2002; Esposito, 1998). A widely misconception is that most Muslims are Arabs, an impression derived from the fact that most Arabs are Muslims, the Near Eastern origins of the faith, and the close association of Arabic and the Qura'n. In fact, only 18-21 percent of Muslims are Arabs, while 80 percent or more of the Muslims are non-Arabs (Gordon, 2002). The largest Muslim-populated state is Indonesia, followed by Pakistan, Bangladesh, and India. Most Iranian and Turks are Muslims, and significant Muslim populations may be found in China, the former Soviet Union states, and Africa. Islamic communities in Europe and North America are growing rapidly. In the United States, Islam is the second largest religion. Large numbers of Muslims of south Asian origins live in the United Kingdom, many North African Muslims reside in France and Belgium, and many Turks and Iranian have settled in Germany recently. Islam in Europe and North America is also represented by increasing numbers of converts from non-immigrant communities (Esposito, 1998; Gordon, 2002).

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