CHAPTER EIGHT

The Association Between Religiosity and Life Satisfaction in Six Arab Countries.

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ABSTRACT

The aims of the present study were (a) to explore the sex-related differences in religiosity and satisfaction with life (SWL), (b) to estimate the associations between religiosity and SWL, and (c) to compare these associations between the Arab countries. A convenience sample of previously studied university students was selected from six countries: Egypt (two samples), Saudi Arabia, Kuwait, Qatar, Algeria, and Lebanon (total N = 3,543; Men = 1,548, Women = 1,995). The measures used were the self-report scales of religiosity and SWL in addition to the Arabic Scale of Intrinsic Religiosity and Satisfaction with Life Scale. No statistically significant gender differences were found except in the Lebanon sample and one of the Egypt samples, where religiosity was higher among women. All of the religiosity-SWL correlations were significant and positive, ranging from .18 to .42. It was concluded that religious people probably tend to be more satisfied with their lives in Arab contexts.

Keywords: Religiosity, Life Satisfaction, Arabs, Mental Health, Post-Secondary Education.
INTRODUCTION

The goal of the investigation reported herein was to estimate the associations between religiosity and satisfaction with life (SWL) in an Arab context. Seven previously studied samples of college students from six Arab countries were selected. These samples are under-studied population in the international literature, with the majority of international studies in this domain limited to English studies speaking populations, mainly in the USA, and with Christians. Most studies sampled within one country.

The introduction of this report consists of the following subjects: the difference between religion and religiosity, the SWL concept, review of the research on the associations between religiosity and SWL, and the aims of the present study.

Religion vs. Religiosity

It is important, from the outset, to differentiate between the terms religion and religiosity. Religion is a system of beliefs, rites, organizational arrangements, ethical norms and sentiments towards divinity (Marzal, 2007). Religiosity, on the other hand, is a cognitive, affective and behavioural phenomenon that Delener (1990) defined as “the degree to which beliefs in specific religious values and ideals are held and practiced by an individual” (p. 27). In a similar vein, Hackney and Sanders (2003) defined religiosity as “an organized system of beliefs, practices, rituals, and symbols designed to facilitate closeness to the sacred or transcendent God or higher power” (p. 44).

Satisfaction with Life

Satisfaction with life (SWL) is defined as the evaluation of an individual’s life in accordance with their personal standards (Pavot & Diener, 1993). It is determined by comparing one’s ideal life circumstances with the way one perceives one’s current quality of
life (Pavot & Diner, 2009).

Religiosity and SWL

The existing literature on the association between religiosity and SWL has indicated a positive relationship (e.g., Abu-Rayya et al., 2016; Aghababaei, 2014; Arthaud-Day et al., 2005; Fife et al., 2011; Helliwell & Putnam, 2004; Khan & Subbani, 2013; Koenig et al., 2012; Munawar & Tariq, 2018; Myers & Diener, 1995; Sawatzky et al., 2009; Zullig et al., 2006). Some empirical studies are discussed in more detail below.

Elliot and Hayward (2009) used the cross-sectional fourth wave of the World Values Survey, with data from 65 countries, and found that personal religious identity was positively associated with life satisfaction throughout the world, and that the association is stronger under conditions of greater governmental regulation. In a longitudinal study of Germans, Headey et al. (2010) found that individuals who became more religious over time had long term gains in life satisfaction, while those who become less religious have long-term losses. In a study using Russian longitudinal monitoring survey data and different econometric models, Bryukhanov and Fedotenkov (2017) documented positive associations between religiosity and life satisfaction. Finally, using a sample of 420 Portuguese students, Silva et al. (2017) found that adolescents who reported having religion had life satisfaction, subjective well-being, and family and friendship satisfaction.

In an Islamic context, Ghufran (2011) compared 100 elder Muslims who performed religious prayers in the mosque collectively five time a day with 100 Muslims who did not regularly attend collective prayers. The results indicated significantly greater SWL and well-being for those who attended the collective religious prayers regularly than those who did not. Using two samples from Turkey and Jordan, Ayten and Ferhan (2016) also found a positive association between religiosity and SWL.
In a study of Pakistani students, Perveen et al. (2017) found that those who showed more SWL had higher levels of religiosity, and also lower levels of materialism. Ayten (2017) found that religiosity has a positive effect on helping behaviours and life satisfaction among 230 Turkish participants.

Momeni and Rafiee (2018) found a significant correlation between external religious orientation and life satisfaction among the elderly, with a coefficient of .249. Nagamaba and Soni (2018) found that the level of religiosity of a country and its level of development both play a significant role in shaping the subjective well-being (i.e., happiness and life satisfaction) of its population. Furthermore, in a study of medical students from Trinidad, Habib et al. (2018) found that “how religious one considers oneself” was the religiosity construct most significantly associated with life satisfaction, while “frequency of prayer” was the least associated.

Other studies have evaluated these variables among pathological samples. Baetz et al. (2002) found that among psychiatric inpatients, higher frequency in worship attendance was correlated with less severe depressive symptoms, shorter length of stay at the hospital, higher SWL, and lower rates of alcohol abuse (both currently and lifetime), as compared to those with less frequent or no worship attendance.

A systematic review carried out by Bonelli and Koenig (2013) indicated that levels of religiosity was inversely correlated with depression, substance abuse and suicide. In a study of 1,790 community-dwelling older adults living with at least one chronic medical condition, Foong et al. (2020) found that while intrinsic religiosity was positively associated with life satisfaction, extrinsic religiosity had a negative relationship with life satisfaction.

Notwithstanding the numerous studies that have found positive associations between religiosity and SWL, there are some exceptions that indicated negative results. Lewis et al. (1996) did not find significant correlations between religiosity and SWL among Northern Irish...
undergraduates. More recently, Kate et al. (2017) found that Muslims in the highly secularized and pluralistic Dutch context display significantly lower life satisfaction than the non-religious, perhaps due to their underprivileged social position as a religious minority.

As noted by Nagamaba and Soni (2018), most studies on the relationship between SWL and religiosity have been conducted in the context of Christianity and/or only look at one country, and scant research has recruited Arab samples.

The aims of the study

The current investigation therefore aimed to address the gap that exists between Western and Arabic literature on this association and to gain a more holistic view of it, using seven previously published samples from six Arab countries. Specifically, the objectives were (a) to estimate the association between religiosity and SWL, (b) to explore the sex-related differences in religiosity and SWL, and (c) to compare these associations between the six Arab countries studied.

This study tested three hypotheses: (1) there will be a positive association between religiosity and SWL, (2) there will be sex-related differences in religiosity and in SWL, and (3) there will be differences in these associations between the six countries.

METHODS

Participants

This study was based on seven previously studied convenience samples ($n = 3,543$; 1,548 men and 1,995 women). All participants were local college students between age 20 and 22 from one of six Arab countries (one sample from each country, except two from Egypt). The vast majority were Muslims and the minority were Christians. Table 1 presents some demographic information about these samples (see Table 1).
**Measures**

The self-report scales of religiosity and SWL were administered in most of the included studies. Others used multi-item questionnaires to assess religiosity and SWL.

1. **The self-report scales of religiosity and satisfaction**

These scales consist of two single-item questions: (1) “What is your level of religiosity in general?” and (2) “To what degree do you feel satisfied with your life in general?” The participants were asked to respond with a rating between 0 and 10, according to his or her global estimation and general feeling (and not their present states). High scores indicate a high level of religiosity and SWL. The researcher prefers to use these single-item self-report scales of religiosity and SWL because the original research projects contained loaded test batteries.

2. **The Arabic Scale of Intrinsic Religiosity**

The Arabic Scale of Intrinsic Religiosity (ASIR; Abdel-Khalek, 2017b), assesses internal religiosity regardless of religion or denomination. It consists of 15 statements (e.g., “Religion is the most important thing in my life”, “I consider myself committed to religion”, and “I believe that God is close to me”). Each item rated their agreement with these statements on a five-point intensity scale, anchored by 1 as “Strongly Disagree” and 5 as “Strongly Agree.” The total score can therefore range from 15 to 75, with higher scores representing higher religiosity. An exploratory factor analysis identified one high loaded factor. The ASIR has Arabic and English equivalent forms.

3. **The Satisfaction with Life Scale**

The Satisfaction with Life Scale (SWLS; Diener et al., 1985) assesses global life satisfaction and subjective well-being, but does not tap into related constructs such as positive affect or loneliness. It has exhibited favourable psychometric properties including high internal consistency and temporal reliability, and also has a wealth of evidence supporting its construct validity (Diener et al., 1985; Pavot & Diener, 1993).
The scale contains five items to be answered according to a 7-point Likert scale. The scores can range from 5 to 35, with higher scores representing greater life satisfaction. The psychometric parameters of the Arabic version were good (Abdel-Khalek & El Nyal, 2012; Abdel-Khalek & Snyder, 2007). Table 2 presents the psychometric properties of the study scales (see Table 2).

**Procedure**

The single-item self-report scales and questionnaires were administered in Arabic to students anonymously in small group sessions in their classrooms during scheduled university hours. All participants volunteered for the study after the researcher briefly explained its purpose and assured them that anonymity would be maintained. If any student did not want to participate, he or she could leave at any time. The administration of the scales was done between the years 2011 and 2017. Each sample was recruited in their respective country. The data collection respected privacy, confidentiality, and the anonymity of participants. SPSS version 18 (2009) was used for the statistical data analysis.

**RESULTS**

Independent samples t-tests were done to evaluate gender differences in religiosity. Of the seven samples, two showed a significant gender divide: Women had significantly higher ASIR scores than men, with a small effect size in Lebanon, $t = 5.87, p < .001, d = .54$, and a medium effect size in Egypt (1), $t = 2.29, p < .02, d = .19$ (Table 3). No significant differences were found in the other five samples (see Table 3).

The results for satisfaction with life showed that there were no significant differences in SWL according to gender (see Table 4).

Table 5 presents the Pearson $r$ coefficients for the associations between religiosity and life satisfaction in each sample. Statistically significant positive correlations were found in
every case. The correlations ranged from .25 to .42 in men with a median of .30, and between .18 and .35 among women with a median of .21 (see Table 5).

**DISCUSSION**

The association between religiosity and SWL has been the focus of extensive empirical studies, most of which have confirmed the positive association between these two variables (see the introduction). However, most of these have focused primarily on Christianity (Koenig et al., 2012), particularly in the USA, and usually in one country. Muslim participants have been under-studied and un-represented in the international literature on this subject.

However, while this association is well established, its strength appears to depend on the cultural context (Kate et al., 2017). For example, Okulicz-Kozaryn (2010) indicated that the relationship is weaker in countries that are less religious. In a similar vein, Farokhi (2017) found that religious people in religious communities tend to be more satisfied with their life. The current investigation was carried out using seven predominantly Muslim samples from six Arab countries.

**First Hypothesis: Positive Association between Religiosity and SWL**

Regarding the first hypothesis, the associations between religiosity and SWL were statistically significant and positive in all seven samples. These correlations ranged between .18 and .42, which agrees with most previous studies in different countries (see the introduction). Therefore, the first hypothesis has been fully verified in the Arabic, mainly Muslim population.

This result suggests religious people, in general, may be more satisfied with their lives. Causality cannot be inferred based on correlations with cross-sectional samples, but several researchers have suggested potential explanations of this association. Diener and Seligman
argued that religiosity provides individuals with cognitive resources consisting of a coherent system of beliefs. Religiosity thereby provides a sense of meaning or purpose in life (Diener et al., 2011). Studies have also found that religiosity can provide an adaptive means of understanding and experiencing life, as well as facilitating the ability to make meaningful connections with life experiences (Fallot, 2001), and that it promotes health and well-being enhancing behaviours (McCullough & Willoughby, 2009).

Religious beliefs and practices serve as a powerful coping mechanism for aversive life events, thus promoting positive health and mental well-being (Koenig, 2008). They give social support, encourage human virtues, and increase positive emotions such as sense of meaning, purpose in life, and peace (Koenig et al., 2012). Clark and Lelkes (2006) consider religion as analogous to insurance because it has a stress-buffering effect against negative life events such as unemployment.

In the arena of motives or needs, explanations for religiosity include desire for control, uncertainty reduction, death anxiety avoidance, meaning, belongingness, and self-enhancement motive (Sedikides & Gebauer, 2010). An important advantage religious communities have in terms of life satisfaction is their ability to foster a sense of solidarity and commitment through a shared framework of meaning (Kate et al., 2017).

**Second Hypothesis: Gender Differences in Religiosity and SWL**

As to the second hypothesis, results indicated that there were no statistically significant gender differences in SWL, and none in religiosity except for one of the Egypt samples and the Lebanon sample, both showing women with higher scores. Previous findings have indicated conflicting results concerning the sex-related differences in religiosity (e.g., Abdel-Khalek, 2018; Miller, 2003, p. 49; Spilka et al., 2003, p. 154; Sullins, 2006), as well as in SWL (e.g., Abdel-Khalek & El Nayal, 2015; Borg, 2005; Dorahy et al., 1998; Giusta et al., 2011; Lucas
& Gorm, 2000). Based on the present results, the second hypothesis was not supported.

**Third Hypothesis: Religiosity-SWL Association Differences by Country**

The third hypothesis on the differences between the studied countries in the correlations between religiosity and SWL was partially verified. These associations were higher in males from Algeria and Qatar than the other male groups. On the other hand, these correlations were lower in females from Qatar and Algeria in comparison to the other female groups. A thorough investigation of the reasons for these differences merit a further study.

**Additional Findings**

There was another noteworthy finding of this study regarding the single-versus multi-item scales. The two kinds of assessments did not seem to result in different correlation results between religiosity and SWL (Table 5), nor did they show very different reliability or validity (Table 2).

Notwithstanding the fact that the psychometric properties of the short scales are usually inferior to long scales, the short scales have some specific advantages. The single-item scale of life satisfaction has been adopted extensively in national and international surveys as a reliable and valid indicator of individual’s well-being (Bonikowska et al., 2015; Diener et al., 2013), and has demonstrated a substantial degree of criterion validity with multiple-item measures of life satisfaction (Cheung & Lucas, 2014). The same conclusions are relevant to the assessment of religiosity with single-item self-report scales (Abdel-Khalek, 2018). Generally speaking, the single-item scales have proven to be suitable in large scale surveys, longitudinal studies, and experience-sampling studies.

Several studies have supported the usefulness of single-item self-report scales (Wills, 2009; Zullig et al., 2006). The single-item self-report scale is based on the assumption that
respondents will interpret the question with the most relevant meaning that comes to their mind and answer accordingly (Wills, 2009). This type of measure is useful from a parsimonious point of view when the battery of tests contains a large number of scales. However, these scales do have limitations (Gillings & Joseph, 1996). For example, single-item scales cannot provide data on the internal consistency of the scales (e.g., Cronbach alpha).

**LIMITATIONS**

The interpretation of this investigation’s findings should be take some limitations into account. First is the limited generalizability of results—because of using college students, this sample is not representing the general population. Second, the present study was based only on six Arab countries of the total 23 that exist, and so these results cannot necessarily generalize to Arab countries as a whole. Third, the cross-sectional and correlational nature of the data does not permit causal inferences. Fourth, the effect of social desirability bias was not accounted for or investigated. Fifth, the results were obtained via self-report, so there is a need to corroborate findings with other tools such as peer reports. Finally, because religiosity is a multidimensional construct, there is a need delve to deeper into the different subtypes of religiosity to properly capture its complexity.

**CONCLUSION**

This study sought to analyse the associations between religiosity and SWL in the Arab context. A large sample of college students (N = 3,543) from six countries (seven samples) was selected from previous studies. Single-item self-report scales and questionnaires were administered. The findings corroborate and extend upon existing literature regarding the association between religiosity and SWL. Notwithstanding the sharp differences between the six Arab countries in geography, socio-economic and political systems as well as social
structure, the results indicated statistically significant associations between religiosity and SWL in men and women in all the seven samples. Further study is needed on the benefits of religion to the Arab participants, incorporating other countries and types of measures. This is a probable point for future study.
REFERENCES


### Table 1. The samples of the study

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample</th>
<th>Age</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt (2)</td>
<td>162</td>
<td>20.6</td>
<td>Abdel-Khalek, 2017.</td>
</tr>
<tr>
<td>Kuwait</td>
<td>251</td>
<td>20.2</td>
<td>Abdel-Khalek, 2012b.</td>
</tr>
<tr>
<td>Qatar</td>
<td>113</td>
<td>20.8</td>
<td>Abdel-Khalek, 2013.</td>
</tr>
<tr>
<td>Algeria</td>
<td>286</td>
<td>22.2</td>
<td>Abdel-Khalek et al., 2017.</td>
</tr>
</tbody>
</table>

### Table 2. Reliability ($r_{11}$) and criterion validity of the study scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>$r_{11}$</th>
<th>validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic Scale of Internal Religiosity</td>
<td>.91</td>
<td>.73</td>
</tr>
<tr>
<td>Self-report of religiosity</td>
<td>.89</td>
<td>.84</td>
</tr>
<tr>
<td>Self-report of life satisfaction</td>
<td>.81</td>
<td>.65</td>
</tr>
<tr>
<td>Satisfaction with Life Scale</td>
<td>.79</td>
<td>.67</td>
</tr>
</tbody>
</table>

### Table 3. Mean ($M$), standard deviation (SD), $t$ value for sex differences and $d$ for effect size for religiosity scale

<table>
<thead>
<tr>
<th>Country</th>
<th>Scale</th>
<th>Men</th>
<th>Women</th>
<th>$t$</th>
<th>$P$</th>
<th>$d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt (1)</td>
<td>SRR</td>
<td>5.76</td>
<td>6.13</td>
<td>2.29</td>
<td>.02</td>
<td>.19†</td>
</tr>
<tr>
<td>Egypt (2)</td>
<td>ASIR</td>
<td>60.15</td>
<td>61.17</td>
<td>1.05</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Saudi</td>
<td>SRR</td>
<td>6.17</td>
<td>6.33</td>
<td>1.07</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Kuwait</td>
<td>SRR</td>
<td>6.50</td>
<td>6.52</td>
<td>1.10</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Qatar</td>
<td>SRR</td>
<td>7.30</td>
<td>7.70</td>
<td>1.55</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Algeria</td>
<td>SRR</td>
<td>6.29</td>
<td>6.38</td>
<td>0.52</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Lebanon</td>
<td>SRR</td>
<td>5.41</td>
<td>6.26</td>
<td>5.87</td>
<td>.001</td>
<td>.54††</td>
</tr>
</tbody>
</table>

**Notes.** SRR= Self-report of religiosity; ASIR = The Arabic Scale of Internal Religiosity.

† Small effect size.

†† Medium effect size.
Table 4. *Mean* (*M*), *standard deviation* (*SD*), *t* value for *life satisfaction*

<table>
<thead>
<tr>
<th>Country</th>
<th>scale</th>
<th>Men</th>
<th>Women</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt (1)</td>
<td>SRS</td>
<td>6.55 2.52</td>
<td>6.16 2.53</td>
<td>1.78</td>
<td>–</td>
</tr>
<tr>
<td>Egypt (2)</td>
<td>SWLS</td>
<td>24.50 5.68</td>
<td>23.89 5.67</td>
<td>0.91</td>
<td>–</td>
</tr>
<tr>
<td>Saudi</td>
<td>SRS</td>
<td>7.38 2.41</td>
<td>7.67 2.15</td>
<td>1.68</td>
<td>–</td>
</tr>
<tr>
<td>Kuwait</td>
<td>SWLS</td>
<td>23.90 5.71</td>
<td>23.60 5.81</td>
<td>0.59</td>
<td>–</td>
</tr>
<tr>
<td>Qatar</td>
<td>SWLS</td>
<td>24.31 4.69</td>
<td>24.66 5.33</td>
<td>0.53</td>
<td>–</td>
</tr>
<tr>
<td>Algeria</td>
<td>SRS</td>
<td>6.96 2.61</td>
<td>6.67 2.53</td>
<td>1.46</td>
<td>–</td>
</tr>
<tr>
<td>Lebanon</td>
<td>SWLS</td>
<td>19.79 6.51</td>
<td>20.41 6.53</td>
<td>1.04</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note.* SRS = Self-report of satisfaction; SWLS = Satisfaction with Life Scale.

Table 5. *Pearson r coefficients* between religiosity and *life satisfaction* in the seven samples.

<table>
<thead>
<tr>
<th>Country</th>
<th>Correlation</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt (1)</td>
<td>.291**</td>
<td>.352**</td>
<td></td>
</tr>
<tr>
<td>Egypt (2)</td>
<td>.301**</td>
<td>.290**</td>
<td></td>
</tr>
<tr>
<td>Saudi</td>
<td>.310**</td>
<td>.207**</td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>.267**</td>
<td>.316**</td>
<td></td>
</tr>
<tr>
<td>Qatar</td>
<td>.384**</td>
<td>.181*</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>.418**</td>
<td>.186*</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>.254**</td>
<td>.203**</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>.301**</td>
<td>.207**</td>
<td></td>
</tr>
</tbody>
</table>

*Notes.* *p* < .05, **p* < .01.