The psychometric properties of the Sahin-Francis Scale of Attitude toward Islam Revised among Sunni students in Malaysia

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Abstract

This study examines the psychometric properties of a revised form of the Sahin-Francis Scale of Attitude toward Islam comprising only positive valence items. Data provided by 189 Sunni students in Malaysia (41 males and 148 females) support the internal consistency reliability and construct validity of this instrument and commend it for application in further studies.

Keywords: attitude, Islam, psychometrics, religion.
Introduction

The Sahin-Francis Scale of Attitude toward Islam, proposed by Sahin and Francis (2002), emerged as part of a wider venture designed to translate the conceptualisation and operationalisation of the affective dimension of religiosity captured by the Francis Scale of Attitude toward Christianity, as originally proposed by Francis (1978a, 1978b), across other major religious traditions. It stands alongside the Katz-Francis Scale of Attitude toward Judaism (Francis & Katz, 2007) and the Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008).

When Francis (1978a, 1978b) first published the Francis Scale of Attitude toward Christianity, he proposed a programme of empirical enquiry designed to establish and test the correlations, antecedents and consequences of individual differences in religiosity accessed and co-ordinated through agreement on a common measure of religious affect. By the mid-1990s, Kay and Francis (1996) drew together findings from around one hundred studies that had agreed on the use of this common instrument. The first step in extending the research beyond the English-speaking Christian or post-Christian involved the translation and testing of the Francis Scale of Attitude toward Christianity into a range of other languages, including: Arabic (Munayer, 2000), Czech (Francis, Quesnell, & Lewis, 2010), Chinese (Francis, Lewis, & Ng, 2002; Tiliopoulos, Francis, & Jiang, 2013), Dutch (Francis & Hermans, 2000), French (Lewis & Francis, 2003, 2004), German (Francis & Kwiran, 1999; Francis, Ziebertz, & Lewis, 2002), Greek (Youtika, Joseph, & Diduca, 1999), Italian (Crea, Baiocco, Ioorno, Buzzi, & Francis, 2014), Norwegian (Francis & Enger, 2002), Portuguese (Ferreira & Neto, 2002), Romanian (Francis, Ispas, Robbins, Ilie, & Iliescu, 2009), Slovakian (Lewis, Adamovová, & Francis, 2008), Slovenian (Flere, Klajsek, Francis, & Robbins, 2009), Spanish (Campo-Arias, Oviedo, Dtaz, & Cogollo, 2006), Swedish (Eek, 2001), and Welsh (Evans & Francis, 1996; Francis & Thomas, 2003).
The Sahin-Francis Scale of Attitude toward Islam was the first published attempt to take the research programme beyond the Christian or post-Christian context. In order to extend this research tradition within an Islamic context, Sahin and Francis (2002) proposed a thorough translation of the concepts of the Francis Scale of Attitude toward Christianity to produce a parallel instrument concerned with measuring attitude toward Islam. The items of the Francis Scale of Attitude toward Christianity were carefully scrutinised and debated by several Muslim scholars of Islam until agreement was reached on 23 items which mapped closely onto the area assessed by the parent instrument. These items were arranged for response on a five-point Likert-type scale: agree strongly, agree, not certain, disagree, and disagree strongly. The questionnaire was completed by 381 Muslim adolescents attending three sixth-form colleges in Birmingham. The sample comprised 164 females and 217 males; 50 sixteen year olds, 90 seventeen year olds, 123 eighteen year olds, 98 nineteen year olds, and 20 twenty year olds. Of the total sample, 24% prayed five times daily, 18% prayed several times a week, 11% prayed every Friday, 41% prayed sometimes and 7% never prayed. The respondents were mainly from Pakistani and Bangladeshi family backgrounds. According to these data, the 23 items comprised a scale characterised by homogeneity, unidimensionality and internal consistency reliability. The alpha coefficient was established as .90, while the proportion of variance accounted for by the first factor proposed by the unrotated solution generated by principal component analysis was 36%. Attitude scores correlated ($r = .24$, $p < .001$) with personal prayer/salāt. This statistic supports the construct validity of the attitude scale in light of the theory that attitudes should predict behaviour but in a complex and subtle manner. The correlation of this magnitude indicated that, although significantly correlated, attitude toward Islam and the practice of personal prayer accessed different aspects of religiosity.
Khan and Watson (2006) extended the work of Sahin and Francis (2002) by examining the factor structure and validity of the Sahin-Francis Scale of Attitude toward Islam among a sample of 75 male and 75 female English-speaking students from the University of Karachi in Pakistan. On the basis of this study they concluded that ‘these data identified the Sahin-Francis Scale as a useful measure for studying Muslim attitudes within an Islamic society’ (p 231).

Building on their earlier work, Francis, Sahin, and Al-Ansari (2006) set out to translate the Sahin-Francis Scale of Attitude toward Islam into Arabic. The items were first translated into Arabic and then back-translated in order to ensure accuracy. Initial pilot tests indicated that some of the negatively phrased items acceptable in England were less acceptable in a predominantly Islamic culture. For this reason the original item ‘Allah/God doesn’t mean anything to me’ was replaced by the positively phrased item ‘Allah/God means everything to me’. The original item ‘I find it hard to believe in Allah/God’ was replaced by the positively phrased item ‘I do not find it hard to believe in Allah/God’. The 23 items were arranged for response on a five-point Likert-type scale: agree strongly, agree, not certain, disagree and disagree strongly. This form of the instrument still retained four negatively worded items.

Following the modifications proposed by the pilot test, thoroughly completed questionnaires including the slightly revised Sahin-Francis Scale of Attitude toward Islam were returned by 1,199 students, selected from secondary schools in six educational districts in Kuwait. The sample comprised 603 males and 596 females; 812 were 17 years of age and 387 were 18 years of age. The majority of the respondents were highly religious in terms of their commitment to prayer: 20% practised the obligatory prayers and additional prayers; 60% practised the obligatory prayers; 17% prayed sometimes; 1% prayed on Fridays only; and 2% never prayed. According to these data the slightly revised instrument demonstrated
satisfactory homogeneity, unidimensionality and internal consistency reliability. The alpha coefficient was established as .85, while the proportion of variance accounted for by the first factor proposed by the unrotated solution generated by principal component analysis was 29%. Attitude scores correlated ($r = .41, p < .001$) with personal prayer supporting construct validity.

Building on the earlier work of Sahin and Francis (2002) and of Francis, Sahin, and Al-Ansari (2006), Musharraf, Lewis, and Sultan (2014) set out to translate the Sahin-Francis Scale of Attitude toward Islam into Urdu, as a first step toward establishing a coherent research programme examining the mental health correlates of the affective dimension of religiosity within the Islamic cultural setting of Pakistan. Assessment of the cultural relevance of the instrument in Pakistan raised questions about the opportunities of the remaining four negatively worded items, especially in light of the relevant blasphemy laws (Centre for Research and Security Studies, 2012). A second cultural relevance problem was identified in relation to the items concerning attending the mosque as not being equally applicable for both sexes (see Khan, Watson, & Habib, 2005). For this reason items originally referring to the mosque were expanded to refer to ‘mosque or religious gathering’.

In light of these considerations the following changes were made to the items. For this purpose, the negatively worded items were adapted before translation. The original item ‘I think going to mosque is a waste of my time’ was replaced as positively phrased item ‘I think going to mosque or religious gathering is not a waste of my time’. The item ‘I think mosque sermons/khutbah are boring’ was replaced with ‘I think mosque sermons/khutbah or religious meetings/deeni mehfilen are not boring’. The item ‘I think the Qur’ān is out of date’ was replaced by the positively phrased item ‘I think the Qur’ān is up to date’. The item ‘I think praying/du’ā does no good’ was rephrased as ‘praying/du’ā is beneficial’.
Masharraf, Lewis, and Sultan (2014) administered their revised measure to 174 bilingual university students (81 males and 93 females) in both English and Urdu. In both languages the revised instrument demonstrated satisfactory homogeneity, unidimensionality and internal consistency reliability. For the Urdu version the alpha coefficient was established as .89, while the proportion of variance accounted for by the first factor proposed by the unrotated solution generated by principal component analysis was 31%.

Research question

Against this background, the aim of the present study was to examine the psychometric properties of the Sahin-Francis Scale of Attitude toward Islam Revised, as proposed by Musharraf, Lewis, and Sultan (2014) within a different Islamic cultural context, namely Malaysia. First, however, a critical review was undertaken of the evolving set of items and further revision implemented to improve some items further. Thus, ‘I think going to the mosque or religious gathering is not a waste of my time’ was rephrased as ‘Going to the mosque or religious gathering is a good use of my time’; ‘I think mosque sermons/khutbah or religious meetings/deeni mehfilen are not boring’ was rephrased as ‘Mosque sermons/khutbah or religious meetings/deeni mehfilen are interesting’.

Method

Sample

A sample of 189 students (41 males and 148 females) attending the International Islamic University in Kuala Lumpur, Malaysia, completed a short questionnaire as part of their coursework, across a range of courses such as educational psychology and counselling, and education curriculum and instruction. They were assured of complete confidentiality and anonymity and given the option not to participate in the project. All students attending the coursework session willingly participated. The majority of the participants were in the age range 20 to 24 years (N = 185) with 3 participants under the age of 20 and 1 participant over
the age of 24. All participants included in the following analyses self-identified as Sunni Muslims. The majority (N = 180) self-identified as Malay, with 5 from Indonesia, 2 from Thailand, 1 from India, and 1 from Turkey. The participants recorded a high level of religious commitment: 98% claimed to pray daily; 90% reported that they felt their life was being guided by God; 62% said that they recited the Qur’an daily, with a further 20% doing so weekly; 32% said that they gave to charity weekly, with a further 67% doing so but less frequently.

Measures

The Sahin-Francis Scale of Attitude toward Islam Revised is a 23-item self-report measure concerned with affective responses to Islamic religiosity, including the Qur’an, prayer, religious practices and belief in Allah/God. The items are rated on a five-point Likert scale: agree strongly (5), agree (4), not certain (3), disagree (2), and disagree strongly (1). There are no negatively worded items.

Frequency of reciting the Qur’an was assessed on a five-point scale: never (1), sometimes (2), at least once a month (3), weekly (4), and daily (5).

Feeling that life is being guided by God was assessed on a four-point scale: no (1), perhaps but not really sure (2), probably but I am not really certain (3), and yes definitely (4).

Religious experience was assessed on a four-point scale: no (1), perhaps but not really sure (2), probably but I am not really certain (3), and yes definitely (4).

Results

- insert table 1 about here -

Table 1 presents the correlations between the individual items and the sum of the remaining 22 items for the 23 items of the Sahin-Francis Scale of Attitude toward Islam Revised, together with the alpha coefficient (Cronbach, 1951), and proportion of the participants who endorsed the agree strongly response for the individual items. The alpha
coefficient was established as .92 and the item rest-of-scale correlations ranged between .46 and .73. These statistics support the conclusion that the scale is characterised by homogeneity, unidimensionality and internal consistency reliability. The mean scale score of 110.1 (SD = 6.1) demonstrates a highly positive attitude toward Islam among the participants. The nature of this positive attitude is illustrated by the high proportions of the participants who checked the agree strongly responses for individual items. For example, between 90% and 95% agreed strongly that: they are happy to be a Muslim; belief in Allah/God means much to them; they know that Allah/God helps them; and they believe that Allah/God listens to prayers/duʿā.

Construct validity was tested by exploring the correlations between scores recorded on the Sahin-Francis Scale of Attitude toward Islam Revised and the measures of religious experience, belief and practice included in the survey. Positive correlations were recorded with frequency of reciting the Qur’an ($r = .26, p < .001$), feeling that life is being guided by Allah/God ($r = .32, p < .001$), and religious experience ($r = .36, p < .001$). These statistics support the construct validity of the instrument. There was also a positive correlation between attitude toward Islam and sex ($r = .18, p < .05$), indicating that females recorded a significantly higher scale score than males.

**Conclusion**

The Sahin-Francis Scale of Attitude toward Islam was proposed by Sahin and Francis (2002) and modified in stages by Francis, Sahin, and Al-Ansari (2006) and by Musharraf, Lewis, and Sultan (2014). The instrument was further modified by the present study to generate the Sahin-Francis Scale of Attitude toward Islam Revised. In the present study data provided by 189 Muslim Sunni students in Malaysia have supported the internal consistency reliability and construct validity of this instrument.
The revised instrument can be commended for further use within Islamic cultural contexts and among Islamic participants on both conceptual and empirical grounds. Conceptually, the Sahin-Francis Scale of Attitude toward Islam Revised is grounded in a long research tradition initiated by Francis (1978a, 1978b) concerned with clarifying and operationalising measures concerned with the attitudinal or affective dimension of religion. Application of the Sahin-Francis Scale of Attitude toward Islam Revised can facilitate the integration of research findings generated within an Islamic context alongside studies that have utilised the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Brown, & Lester, 1995), the Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008) and the Katz-Francis Scale of Attitude toward Judaism (Francis & Katz, 2007). In this way the empirical psychologies of religion evolving across different religious traditions may be more effectively brought into the dialogue. Empirically the Sahin-Francis Scale of Attitude toward Islam Revised has been developed and tested across four cultural contexts, namely the Islamic community in England, in Kuwait, in Pakistan, and in Malaysia. At each stage the measure has been refined and modified in light of evolving datasets and the experience of the research groups involved.

Further studies are now needed within other Islamic cultural contexts and among a wider age range of participants in order to test and to develop this instrument further.
References


Table 1

*Item rest of test correlations and item endorsements*

<table>
<thead>
<tr>
<th>Scale item</th>
<th>r</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find it inspiring to listen to the Qur’ān</td>
<td>.58</td>
<td>80</td>
</tr>
<tr>
<td>I know that Allah/God helps me</td>
<td>.68</td>
<td>94</td>
</tr>
<tr>
<td>Saying my prayers/du’ā’ helps me a lot</td>
<td>.64</td>
<td>91</td>
</tr>
<tr>
<td>Attending the Mosque or religious gathering is very important to me</td>
<td>.53</td>
<td>39</td>
</tr>
<tr>
<td>Going to the Mosque or religious gathering is a good use of my time</td>
<td>.46</td>
<td>47</td>
</tr>
<tr>
<td>I want to obey Allah/God’s law/sharī‘ah in my life</td>
<td>.58</td>
<td>86</td>
</tr>
<tr>
<td>Mosque sermons/khutbah or religious meetings/deeni mehfilen are interesting</td>
<td>.46</td>
<td>49</td>
</tr>
<tr>
<td>Allah/God helps me to lead a better life</td>
<td>.61</td>
<td>88</td>
</tr>
<tr>
<td>I like to learn about Allah/God very much</td>
<td>.61</td>
<td>85</td>
</tr>
<tr>
<td>Allah/God means a lot to me</td>
<td>.68</td>
<td>93</td>
</tr>
<tr>
<td>I believe that Allah/God helps people</td>
<td>.52</td>
<td>95</td>
</tr>
<tr>
<td>Prayer/salāt helps me a lot</td>
<td>.64</td>
<td>90</td>
</tr>
<tr>
<td>I feel that I am very close to Allah/God</td>
<td>.53</td>
<td>56</td>
</tr>
<tr>
<td>I think praying/salāt is a good thing</td>
<td>.56</td>
<td>88</td>
</tr>
<tr>
<td>I think the Qur’ān is up to date</td>
<td>.53</td>
<td>83</td>
</tr>
<tr>
<td>I believe that Allah/God listens to prayers/du’ā’</td>
<td>.62</td>
<td>91</td>
</tr>
<tr>
<td>Islam means a lot to me</td>
<td>.63</td>
<td>91</td>
</tr>
<tr>
<td>Allah/God is very real to me</td>
<td>.62</td>
<td>91</td>
</tr>
<tr>
<td>I think praying/du’ā’ is beneficial</td>
<td>.65</td>
<td>92</td>
</tr>
<tr>
<td>Belief in Allah/God means much to me</td>
<td>.73</td>
<td>95</td>
</tr>
<tr>
<td>I do not find it hard to believe in Allah/God</td>
<td>.52</td>
<td>89</td>
</tr>
<tr>
<td>I am happy to be a Muslim</td>
<td>.65</td>
<td>95</td>
</tr>
<tr>
<td>I love to follow the life/sunnah of the Prophet</td>
<td>.65</td>
<td>86</td>
</tr>
</tbody>
</table>

Alpha .92

Note:  
- *r* = correlation between the individual item and the sum of the remaining items  
- % = the agree strongly response