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Assessing attitude toward religion: the Astley-Francis Scale of Attitude toward Theistic Faith.

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Summary

This study builds on the research tradition modelled by the Francis Scale of Attitude toward Christianity, the Katz-Francis Scale of Attitude toward Judaism, the Sahin-Francis Scale of Attitude toward Islam and the Santosh-Francis Scale of Attitude toward Hinduism to propose a generic instrument concerned with attitudes towards theistic faith. The scale properties of this new instrument, established among a sample of 284 16- to 18-year-old students (200 female and 84 male), commend it for use in future research.
Introduction

Working in the 1970s, Francis (1976) undertook a detailed assessment of extant research in the field of the empirical psychology of religious development for the practice of religious education. Two main conclusions emerged from this research. The first conclusion was that, by the mid-1970s, a growing body of empirically-based research was beginning to become available that was capable of influencing practical developments in religious education. The second conclusion was that the usefulness of the growing body of empirically-based research was limited by the lack of collaboration between individual researchers. Because different researchers were employing different understandings of religion and were operationalising their understandings of religion through a range of different measures, integration of their findings remained somewhat problematic. Working within an established scientific framework, Francis argued that the way forward in this field would be advanced and accelerated by a semi-coordinated series of studies that agreed on a common measure and accepted the benefit of systematic replication of studies employing such a common measure. In a paper published in *British Journal of Religious education* under the title ‘Measurement reapplied’, Francis (1978) advanced the view that the attitudinal dimension of religion offered a particularly fruitful basis for coordinating empirical enquiry into the correlates, antecedents, and consequences of religiosity across the life span. In that paper, Francis introduced what has subsequently become known as the Francis Scale of Attitude toward Christianity, and he invited colleagues to join with him in conducting and drawing together a series of empirical studies by use of that common instrument.

The attitudinal dimension appeared attractive to Francis in the 1970s and continues to appear attractive for four main reasons. First, at a conceptual level, social psychologists have developed a sophisticated and well-established understanding of attitude as a deep-seated and relatively stable and enduring covert predisposition, in contrast with more volatile and surface
behaviours and opinions. To assess attitude toward religion is to get close to the heart of religion in an individual’s life. Second, attitudes provide a purer measure of religion than either belief or practice. The affective dimension with which attitudes are concerned is able to transcend the divisions between denominational perspectives while beliefs tend to polarise such divisions. The attitudinal dimension of religion, being deep seated, is less likely to be distorted by personal and contextual factors, while practice tends to be subject to all kinds of personal and social constraints. Third, at an operational level, social psychologists have developed a range of sophisticated and well-established techniques for assessing and scaling attitudes, including the pioneering work of Thurstone (1928), Likert (1932), Guttman (1944), and Osgood, Suci, and Tannenbaum (1957). The social scientific study of religion is able to build on these foundations. Fourth, the attitudinal dimension of religion can be accessed by instruments which can function in a comparatively stable manner over a wide age range. While the sophistication with which beliefs are formulated and tested clearly develops over the life span (see, for example, Fowler, 1981), attitudinal statements concerned with positive and negative affect can be formulated in ways which are equally acceptable during childhood, adolescence and adulthood (Francis, 1989; Francis & Stubbs, 1987).

Against this background, Francis (1978) proposed a 24-item Likert scale, now known as the Francis Scale of Attitude toward Christianity, and designed for application in Christian and post-Christian cultural settings. This instrument contained both negative and positive items concerned with affective responses to five components of the Christian faith accessible to and recognised by both children and adults, namely God, Jesus, Bible, prayer and church. The English language form of this instrument has been tested in a number of contexts, including Australia and Canada (Francis, Lewis, Philipchalk, Brown, & Lester, 1995), England (Lewis, Cruise, & Lattimer, 2007), Kenya (Fulljames & Francis, 1987), Nigeria (Francis & McCarron, 1989), Northern Ireland (Lewis & Maltby, 1997), Republic of Ireland
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(Maltby, 1994), Scotland (Gibson & Francis, 1989), South Africa (Francis, Kerr, & Lewis, 2005), and the United States of America (Lewis & Maltby, 1995). Although scales of around 24 items are not generally problematic to administer, they can prove to be cumbersome when time is particularly restricted or when there is a large number of other issues to include within one questionnaire survey. It is for this reason that in addition to the full 24-item form of the Francis Scale of Attitude toward Christianity, a seven-item short form has been developed and tested among primary school pupils (Francis, 1992), secondary school pupils (Francis, Greer, & Gibson, 1991) and adults (Francis, 1993; Francis, Lewis, Philipchalk, Lester, & Brown, 1995; Maltby & Lewis, 1997; Lewis, Shevlin, Lloyd, & Adamson, 1998; Adamson, Shevlin, Lloyd, & Lewis, 2000; Lewis, Cruise, & McGuckin, 2005).

The Francis scale of Attitude toward Christianity has also been translated into other languages, recognising that integration of cross-cultural quantitative studies in the psychology of religion has been hampered by the lack of common instrumentation. Examples are provided by editions in Arabic (Munayer, 2000), Czech (Francis, Quesnell, & Lewis, 2010) Chinese (Francis, Lewis, & Ng, 2002), Dutch (Francis & Hermans, 2000), French (Lewis & Francis, 2003), German (Francis & Kwiran, 1999; Francis, Ziebertz, & Lewis, 2002), Greek (Youtika, Joseph, & Diduca, 1999), Norwegian (Francis & Enger, 2002), Portuguese (Ferreira & Neto, 2002), Romanian (Francis, Ispas, Robbins, Ilie, & Iliescu, 2009), Slovenian (Flere, Klanjsek, Francis, & Robbins, 2008), Spanish (Campo-Arias, Oviedo, Dtaz, & Cogollo, 2006), Swedish (Eek, 2001), and Welsh (Evans & Francis, 1996; Francis & Thomas, 2003).

The short form is also available in Chinese (Lewis, Francis, & Ng, 2003), Dutch (Lewis & Hermans, 2003), French (Lewis & Francis, 2004), Norwegian (Lewis, Francis, & Enger, 2003), and Welsh (Lewis & Francis, 2002).

By the mid 1990s over one hundred independent studies had employed this scale to examine a wide range of correlates of religiosity during childhood, adolescence and
adulthood. These studies were summarised and synthesised by Kay and Francis (1996). Since
the 1990s the scale has been employed in further studies exploring the correlates of
religiosity, including: abortion attitudes (Fawcett, Andrews, & Lester, 2000); alcohol attitudes
(Francis, Fearn, & Lewis, 2005), altruism (Eckert & Lester, 1997); conservatism (Lewis &
Maltby, 2000); dissociation (Dorahy & Lewis, 2001); dogmatism (Francis, 2001; Francis &
Robbins, 2003); gender orientation (Francis & Wilcox, 1996, 1998; Francis, 2005); general
health (Francis, Robbins, Lewis, Quigley, & Wheeler, 2004); intelligence (Francis, 1998);
obsessionality (Lewis, 1996; Maltby, 1997); paranormal belief (Williams, Francis, &
Robbins, 2006); prosocial values (Schludermann, Schludermann, & Huynh, 2000);
psychological adjustment (Schludermann, Schludermann, Needham, & Mulenga, 2001);
psychological health (Francis & Burton, 2007; Francis, Robbins, ap Sion, Lewis, & Barnes,
2007); psychological wellbeing (Francis, Hills, Schludermann, & Schludemann, 2008);
purpose in life (French & Joseph, 1999); and science attitudes (Francis & Greer, 2001).

In order to test whether the growing body of evidence regarding the correlates,
antecedents and consequences of attitudes toward religion (established in a Christian context
by means of the Francis Scale of Attitude toward Christianity) also held true in a Jewish
context, Francis and Katz (2007) developed a comparable instrument, the Katz-Francis Scale
of Attitude toward Judaism. In order to achieve a proper comparability between the two
instruments the attempt was made to translate each of the original 24 items in a way
appropriate for a Hebrew speaking Jew living in Israel. The psychometric properties of the
instrument were assessed on a sample of 618 Hebrew-speaking undergraduate students
attending Bar-Ilan University.

The second development was the Sahin-Francis Scale of Attitude toward Islam (Sahin
& Francis, 2002). 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 Islam-related items which mapped closely onto the area assessed by the parent instrument. The psychometric properties of the new instrument of the Sahin-Francis Scale of Attitude toward Islam were assessed on 381 Muslim adolescents in England. Subsequently the instrument was tested among a sample of 1,199 Muslim adolescents in Kuwait (Francis, Sahin, & Al-Ansari, 2006; Francis, Sahin, & Al-Failakawi, 2008).

The third development was the Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008). Scholars familiar with the study of Hinduism debated the items presented in the Francis Scale of Attitude toward Christianity and suggested 19 equivalent translations into a Hindu context. The psychometric properties of the instrument were assessed on a sample of 330 individuals between the ages of 12 and 35 attending a Hindu youth festival in England. Subsequently the instrument was tested among a sample of 100 Hindu affiliates from the Bunt caste in the South India state of Karnataka (Tiliopoulos, Francis, & Slattery, 2010).

As a further development in this sequence of attitudinal measures, the aim of the present study is to develop a new short-measure that is accessible to the theistic traditions. To achieve this end, the seven items of the short form of the Francis Scale of Attitude toward Christianity were modified in order to become more widely inclusive of the theistic traditions. Specifically items concerned with Jesus were re-phrased to speak of God; items concerned with church were rephrased to speak of places of worship. It is these reformulated items that were tested among a sample of young people.

**Method**

**Instrument**

*Attitude* Adapted from the short-form of the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philiphchalk, Lester, & Brown, 1995), the Astley-Francis Scale of Attitude toward Theistic Faith proposes seven items concerned with affective responses to God, places
of worship, and prayer. Each item is assessed on a five-point Likert scale: agree strongly, agree, not certain, disagree, and disagree strongly.

Public worship  Frequency of attendance at places of public worship was assessed on a five-point scale: weekly, at least once a month, sometimes, once or twice a year, and never.

Personal prayer  Frequency of personal prayer was assessed on a five-point scale: daily, at least once a week, sometimes, once or twice a year, and never.

Sample
A sample of 284 16- to 18-year-old students (200 female and 84 male), attending a sixth-form study day convened by the North of England Institute for Christian Education, completed the Science, Religion and Life Questionnaire. In terms of religious affiliation, 22% identified as Roman Catholic, 12% as Church of England, and 19% as belonging to other Christian denominations. Just one respondent identified as Buddhist, and the remaining 47% claimed association with no religious group. In terms of public religious practice, 19% reported that they attended a place of worship weekly and a further 5% attended at least once a month; 40% attended less frequently (but at least once a year), and the remaining 36% never attended. In terms of private religious practice, 16% reported that they prayed daily and a further 11% prayed at least once a month; 34% prayed less frequently but at least once a year, and the remaining 39% never prayed.

Data analysis
The data were analysed by the SPSS statistical package, using the the frequency, reliability, factor, and correlation routines.

Results
Table 1 presents the scale properties of the Astley-Francis Scale of Attitude toward Theistic Faith, in terms of the item rest-of scale correlations (column 1), the loadings on the first factor of the unrotated solution proposed by principal components analysis (column 2),
and the item endorsement in terms of the sum of the agree and agree strongly responses (column 3). The seven items generated an alpha coefficient (Cronbach, 1951) of .95. The first factor accounted for 77% of the variance. These statistics demonstrate a short scale of high internal consistency reliability.

The construct validity of the instruments following in the tradition of the Francis Scale of Attitude toward Christianity has generally been demonstrated in the initial stages by examining the association between the attitude scores and measures of personal and public religion. In the case of the present instrument, there were highly significant Pearson product moment correlations between scores recorded on the Astley-Francis Scale of Attitude toward Theistic Faith and both personal prayer ($r = .81, p < .001$) and attendance at public worship ($r = .69, p < .001$).

**Conclusion**

The present study has been set within a research tradition that has contributed significantly since the late 1970s to establishing a secure empirical psychology of religious development relevant for the practice of religious education. This research tradition continues to invite colleagues to contribute to this growing body of empirically-based knowledge by including in their research an appropriate instrument from the Francis family of attitude scales. The development of scales specifically designed for application in Christian, Jewish, and Islamic contexts has enabled undergraduate and postgraduate students to contribute their own research to this body of knowledge, as well as established scholars working within their different faith contexts. A major limitation with these instruments (shaped in Christian, Jewish and Islamic contexts), however, is found by researchers working in multi-faith classrooms, where young Christians, Jews and Muslims may be studying side-by-side, together with young people of no religious affiliation, as is so often the case in much of
Britain today. The present study has set out to address this problem by preparing and testing a modification of the short form of the Francis Scale of Attitude toward Christianity appropriate for application across the theistic traditions. The findings from this initial study support the internal consistency reliability and construct validity of this new instrument, the Astley-Francis Scale of Attitude toward Theistic Faith, and commend the instrument for further use. Returning to the invitation issued by Francis (1978) in the paper published in *British Journal of Religious Education* under the title ‘Measurement-reapplied’, the present paper offers to colleagues and students in religious education a more flexible choice of instruments, through which they can continue to explore and document the correlates, consequences and antecedents of individual differences in attitude toward religion.

It is important to recognise that this initial study is limited by the nature of the sample being restricted to one age group (16- to 18-year-olds), to one cultural context (pupils attending sixth-form classes in the north east of England), and to a predominantly Christian and post-Christian background. Such limitations need to be appropriately addressed by well-placed studies designed to replicate and to extend this initial study.
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References


Table 1

*Scale of Attitude toward Theistic Faith: scale properties*

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>Factor</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find it hard to believe in God*</td>
<td>0.77</td>
<td>0.83</td>
<td>38</td>
</tr>
<tr>
<td>Prayer helps me a lot</td>
<td>0.86</td>
<td>0.90</td>
<td>36</td>
</tr>
<tr>
<td>I think going to a place of worship is a waste of my time*</td>
<td>0.63</td>
<td>0.71</td>
<td>22</td>
</tr>
<tr>
<td>I know that God is very close to me</td>
<td>0.84</td>
<td>0.89</td>
<td>32</td>
</tr>
<tr>
<td>God helps me to lead a better life</td>
<td>0.87</td>
<td>0.91</td>
<td>35</td>
</tr>
<tr>
<td>I know that God helps me</td>
<td>0.90</td>
<td>0.93</td>
<td>36</td>
</tr>
<tr>
<td>God means a lot to me</td>
<td>0.89</td>
<td>0.93</td>
<td>39</td>
</tr>
</tbody>
</table>

Note * these items are reverse coded.