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Attitude toward Christianity and New Age beliefs among undergraduate
students in Slovenia: a study in implicit religion.

Leslie J. Francis*

University of Warwick, United Kingdom

Sergej Flere and Rudi Klanjšek

University of Maribor, Slovenia

and

Emyr Williams and Mandy Robbins

Glyndŵr University, United Kingdom

Author note:

*Corresponding author:

Leslie J Francis

Warwick Religions & Education Research Unit

Institute of Education

The University of Warwick

Coventry CV4 7AL United Kingdom

Tel: +44 (0)24 7652 2539

Fax: +44 (0)24 7657 2638

Email: leslie.francis@warwick.ac.uk

Abstract

This study examines two conflicting hypotheses regarding the association between traditional religiosity and new age belief: the ‘worldview hypothesis’ suggesting a positive association between these two sets of beliefs; and the ‘functional alternative hypothesis’ suggesting a negative association between these two sets of beliefs. A sample of 1,209 undergraduate students attending the University of Maribor, Slovenia, completed the Francis Scale of Attitude toward Christianity as a measure of traditional religiosity and the Lavrič Scale of New Age Belief, alongside a measure of frequency of church attendance. The data demonstrated a positive correlation between attitude toward Christianity and new age belief, even after taking into account different levels of church attendance. These findings support the worldview hypotheses in favour of the functional alternative hypothesis.

Introduction

Edward Bailey's notion of implicit religion, as discussed by Bailey (1997, 1998, 2002), provides a powerful heuristic tool for interrogating the persistence of religion within secular society. For Bailey, implicit religion may be characterised by (but not limited to) three key qualities. Implicit religion displays *commitment*; it is something to which individuals feel committed. Implicit religion provides *integrating foci*; it is something that draws together the identity of an individual (or a group) and in so doing furnishes meaning and generates purpose. Implicit religion displays *intensive concerns with extensive effects*; it is something that helps to shape a worldview and carries implications for the way in which life is lived.

Scholars working within the framework of implicit religion, presenting research at the annual Denton Hall implicit religion conference or publishing in the journal *Implicit Religion*, have employed this notion to examine three distinct fields. The first field concerns the implicit religion of Christianity outside the framework of the Churches, as displayed by Bailey's original study of a residential parish (Bailey, 1997, pp. 193-262), by Francis' examination of the significance of 'belonging without believing' (Francis & Robbins, 2004) and by Walker's examination of the belief that 'You don't have to go to church to be a Christian' (Walker, Francis, L. J., & Robbins, 2010). The second field concerns the implicit religion of purely secular activities, as displayed by Bailey's original study of the implicit religion of a British public house (Bailey, 1997, pp. 129-192), by French's study of the implicit religion of football (French, 2002), and by Till's study of the implicit religion of a contemporary rock musician (Till, 2010). The third field concerns the implicit religion of contemporary belief systems, and spiritual practices as displayed by the study of new age beliefs (Kemp, 2001), by the study of belief in luck as an alternative spirituality (Francis, Williams, & Robbins, 2008), and by the study of belly dance as a spiritual activity (Kraus, 2009).

Working within the framework of implicit religion the present study is concerned to chart the persistence of Christianity among undergraduates in Slovenia and to examine the relationship between Christianity and New Age beliefs in that context. Are these two worldviews to be seen as competing implicit religions in this cultural context, or do they merge into one more diffuse implicit religion. Such a research problem, posed within the framework of implicit religion, needs to be contextualised more widely within the scientific discussion of the place of religion within contemporary culture.

Commentators on the contemporary religious landscape consistently draw attention to two well-recognised phenomena: titles like *Drift from the Churches* (Kay & Francis, 1996) focus on the decline in traditional religiosity, while titles like *The Spiritual Revolution* (Heelas & Woodhead, 2005) focus on the new and emerging forms of religiosity and spirituality. A key problem in the social scientific study of religion concerns the definition, operationalisation and relationship between these two proposed worldviews of traditional religiosity and the alternative spiritualities characterising the spiritual revolution.

Major advances in the social scientific study of traditional religiosity have rested on the clarification of the various dimensions of religion and the development of scales designed to operationalise these dimensions, especially in the context of Christian or post-Christian societies (Hill & Hood, 1999). In this context clear distinctions have been made, for example, between the assessment of self-assigned religious affiliation, public practices, personal practices, beliefs, orientations, and attitudes. In a series of articles concerned with the measurement of traditional religiosity in Christian (Francis, Lewis, Philipchalk, Brown, & Lester, 1995), Hindu (Francis, Santosh, Robbins, & Vij, 2008), Islamic (Sahin & Francis, 2002), and Jewish (Francis & Katz, 2007) contexts, Francis has argued for the centrality of the attitudinal dimension in getting to the heart of traditional religiosity. Unlike self-assigned religious affiliation, the attitudinal dimension is not contaminated by the problem of

nominalism (Fane, 1999, pp. 115-116). Unlike public religious practice, the attitudinal dimension is not confounded by factors like social convention that may inflate church attendance or factors like impaired mobility that may inhibit church attendance. Unlike religious orientation, measures of the attitudinal dimension operate consistently across the range of individual differences in religiosity (Francis, 2007).

The family of instruments developed by Francis and his associates have been employed in a number of research contexts designed to map the correlates, consequences and antecedents of the attitudinal dimension of traditional religiosity. For example, recent studies have been published on the relationship between attitude toward Christianity and abortion-related attitudes (Fawcett, Andrews, & Lester, 2000), alcohol-related attitudes (Francis, Fearn, & Lewis, 2005), Catholic schools (Flynn & Mok, 2002); conservatism (Lewis & Maltby, 2000), disassociation (Dorahy & Lewis, 2001), dogmatism (Francis, 2001), gender role orientation (Francis, 2005), general health (O'Connor, Cobb, & O'Connor, 2003), happiness (Francis, Jones & Wilcox, 2000), music (Bourke, 2000), paranormal belief (Williams, Francis, & Robbins, 2006), personality (Bourke, Francis, & Robbins, 2005), pre-marital sex (Francis, 2006), pro-social values (Schludermann, Schludermann, & Huynh, 2000), psychological health (Francis & Burton, 2007), psychological type (Fearn, Francis, & Wilcox, 2001), religious experience (Francis, ap Siôn, Lewis, Robbins, & Barnes, 2006), and science-related attitudes (Francis & Greer, 2001).

By way of contrast with the body of research established in the areas of traditional religiosity, the psychometric assessment of alternative spiritualities remains a relatively under-developed field. In this context the most significant advances so far have been made in the areas of conceptualising and operationalising paranormal beliefs and of examining the relationship between paranormal beliefs and traditional religiosity. Studies in this area have employed the revised Tobacyk Paranormal Belief Scale (Tobacyk, 1988; Williams, Francis, &

Lewis, 2009), the Astley-Williams Scale of Paranormal Belief (Williams, Francis, Astley, & Robbins, 2009), the Williams-Francis Paranormal Belief Scale (Francis & Williams, 2009), and the Williams Revised Index of Paranormal Belief (Francis, Williams, & Robbins, 2010).

Studies concerned with the relationship between traditional religiosity and paranormal belief have been illuminated by three theoretical perspectives in particular. The first perspective was provided by Thalbourne and O'Brien (1999), the second by Rice (2003), and third by Orenstein (2002) and McKinnon (2003).

Thalbourne and O'Brien (1999) proposed two contradictory hypotheses regarding the connection between paranormal belief and traditional religiosity. The first hypothesis, termed the 'worldview hypothesis', drew on conceptualisation proposed by Zusne and Jones (1982, pp. 190-191) and argued that both paranormalists and religionists subscribe to the subjectivist worldview in contrast with the empirical worldview. On this account, a positive correlation should be expected between belief in the paranormal and traditional religiosity. The second hypotheses, termed the 'functional alternative hypothesis', drew on conceptualisation proposed by Emmons and Sobal (1981) and Persinger and Makarec (1990) and argued that paranormal beliefs function as a substitute for traditional religious teaching. On this account, a negative correlation should be expected between belief in the paranormal and traditional religiosity.

A series of empirical studies that have explored Thalbourne and O'Brien's (1999) hypotheses (intentionally or unintentionally) have generated conflictual findings. On the one hand, one set of studies reported positive correlations between measures of traditional religiosity and measures of paranormal belief (Thalbourne & Hensley, 2001; Glendinning, 2006; Williams, Francis, & Robbins, 2006; Francis, Williams, & Robbins, 2009). On the other hand, a second set of studies failed to find significant correlations (either positive or negative) between measures of traditional religiosity and measures of paranormal belief

(Thalbourne & O'Brien, 1999; Krull & McKibben, 2006; Francis & Williams, 2009; Williams, Francis, Astley, & Robbins, 2009).

Rice (2003) proposed an insightful solution to the problem posed by the conflictual empirical evidence by re-examining both the conceptual basis for the notion of 'paranormal belief' and the item content of current indices of paranormal belief. Rice drew attention to two groups of items which may be confused in such measures. One group of items identify beliefs which are closely continuous with traditional Christian teaching (say, life after death), while the other groups of items identify beliefs which may be discontinuous with traditional Christian teaching (say, astrology). Rice styles these two groups as 'religious paranormal beliefs' and as 'classic paranormal beliefs'. Using item-level correlation analysis, Rice (2003) demonstrates the relatively low association in data provided by around 1,200 respondents to the 1998 Southern Focus Poll between three religious paranormal beliefs (heaven and hell, the devil, and God answers prayers) and seven classic paranormal beliefs (astrology, *déjà vu*, extra sensory perception, extraterrestrials, ghosts, psychic healing, and reincarnation).

Responding to Rice's challenge, Williams, Francis, and Lewis (2009) revised the now classic measure of paranormal belief proposed by Tobacyk (1988) by removing the traditional religious subscale to leave a scale of paranormal belief consisting of 24-items concerned with classic paranormal belief (concerned with black magic, horoscopes, superstitions, psychokinesis and divination) ($\alpha = 0.85$) and a four-item scale of religious paranormal beliefs as proposed by Tobacyk (concerned with belief in God, heaven and hell, continuance of the soul after death, and the devil) ($\alpha = 0.86$). The data, from 150 undergraduates in Wales and Northern Ireland, demonstrated a non-significant correlation between the classic paranormal scale and a measure of traditional religiosity and a highly significant correlation between the religious paranormal subscale and the same measure of traditional religiosity.

Orenstein (2002) and McKinnon (2003) proposed a second insightful solution to the problem posed by the conflictual empirical evidence regarding the association between traditional religiosity and paranormal belief by re-examining the levels of religiosity observed among the samples among whom the association was being examined. Orenstein's analysis found that greater sympathy for Christian beliefs was associated with higher levels of paranormal beliefs; that there was only a weak association between church attendance and levels of paranormal beliefs; and that, once conventional religious beliefs had been controlled for, greater church attendance is strongly associated with lower levels of paranormal belief. Drawing on the same Canadian national sample survey data, McKinnon (2003) renounced Orenstein's analysis and concluded that:

while it is true that levels of conventional belief are positively associated with (unconventional) paranormal belief, this is really only true for those who are not actively involved in religious communities (as measured by attendance) (McKinnon, 2003, p. 302).

Studies concerned with paranormal belief provide access to just one aspect of the wider phenomena characterised by the spiritual revolution. A broader and more inclusive description is provided by those analysts who focus on characterising the so-called 'New Age Worldview' (see, for example, Corrywright, 2003; Donahue, 1993; Hanegraaff, 1996; Heelas, 1996; Höllinger, 2004; Houtman & Mascini, 2002; Kemp, 2004; Kemp & Lewis, 2007; Lewis & Melton, 1992; Mears & Ellison, 2000; Pike, 2004; Sutcliffe, 2003; Yates & Chandler, 2000; York, 1995).

Several studies have attempted to develop scales of new age beliefs, although as yet no one instrument has emerged as a particular leader in the field. The difficulty of defining what actually characterises the so-called New Age Worldview is reflected in the diverse item content of existing measures in the field. For example, the six item scale proposed by Barnes,

Abd-El-Fattah, Chandler, and Yates (2008) comprised the following issues: extra-terrestrial craft, known as UFOs, sometimes visit the earth; past lives (that is, earlier reincarnations) can be uncovered through hypnosis; certain crystals possess magical healing properties; the star signs (astrology) can be used to analyse our personality makeup; the spirit world can be contacted through séances or through psychic people known as mediums; although he wrote over four hundred years ago, the philosopher and seer Nostradamus accurately predicated the course of modern history.

The 18-item scale proposed by Doktór (1999) accessed occult, magical, oriental, parapsychological and ufological notions, and a similar mix of themes emerged in the 15-item factor of new age beliefs published by Bainbridge (2004). The 22-item scale proposed by Granqvist and Hagekull (2001) embraced ten over-lapping content areas: a conviction that the individual's 'intuition' is a reliable source of knowledge; a belief that a new age is approaching, with dramatic implications for science and for the evaluation of human nature; a belief in the efficacy of alternative medicine; a belief in parapsychological and occult phenomena; an emphasis on personal development and spirituality; a favourable evaluation of pseudopsychological and pseudophysical jargon; an emphasis on nature and cosmos as animate; an emphasis on Eastern holism activities and beliefs; a favourable evaluation of religious syncretism and of practices of 'forgotten' cultures and traditions; and an emphasis on being an 'open seeker'. Sjöberg and Wåhlberg (2002) employed oblimin rotation to identify four intercorrelated subscales within their measure of new age belief: 12 items loaded on the higher consciousness factor; 28 items loaded on the reality of the soul factor; 9 items loaded on the denial of analytic knowledge factor; and 6 items loaded on the folk superstition factor.

A particularly interesting attempt to measure new age beliefs was provided by Lavrič (2002). Rather than identifying a large number of short statements, Lavrič set out to formulate

three key underlying principles of the new age worldview and to apply these principles to his index. Drawing on Heelas (1996, p. 18), the first principle was identified as a mystical theme connected with the belief of a higher latent spiritual self within each individual. This true *ego* or higher self lies dormant until awoken, aroused and called into being. Lavrič expressed this notion as follows.

Everyone has an internal spiritual nucleus that can be awoken to bring illumination. Drawing on Capra (1984), the second principle was identified as a holistic theme asserting that all reality is a linked and interconnected source of energy. This energy may be rooted in a pantheistic worldview. Lavrič expressed this notion as follows.

All reality, including human beings, is permeated by a unique spiritual energy. Drawing on Russell (1982), the third principle was identified as a millenarian theme, maintaining that the current *modus vivendi* has reached its limits and that a brave new age (Aquarius) is about to dawn bringing a true spiritual awakening. Lavrič expressed this notion as follows.

In the future there will be a time of spiritual awakening and accelerated development of consciousness.

A major strength of Lavrič's instrument is that it conceptualises new age belief in terms of a few core principles and allows the construct to be assessed independently from other related constructs. For example, employing this conceptualisation, it becomes possible to explore the empirical association between the core of new age belief and elements like paranormal belief which may be part of a broad new age worldview but which may also operate quite independently from the key principles of mysticism, holism and millenarianism.

Against these theoretical backgrounds the aim of the present study is to examine the association between traditional religiosity (as operationalised by the Francis Scale of Attitude toward Christianity) and new age beliefs (as operationalised by Lavrič) among undergraduate

students in Slovenia. On the one hand, according to Thalbourne and O'Brien's (1999) 'worldview hypothesis', a positive correlation should be expected between traditional religiosity and new age beliefs, since both subscribe to the so-called subjectivist worldview in contrast with the so-called empirical worldview. On the other hand, according to Thalbourne and O'Brien's 'functional alternative hypothesis', a negative correlation should be expected between traditional religiosity and new age beliefs since these two belief systems propose alternative conceptualisations of transcendence. In adjudicating between these two contradictory hypotheses, the perspective advanced by Rice (2003) advocates a close scrutiny of the items comprising Lavrič's scale in order to assess the levels of continuity or discontinuity between these individual aspects of new age belief and traditional religiosity. In essence Lavrič's three key principles rooted in mysticism, holism and millenarianism have much in common with established aspects of the Christian tradition. This analysis would lend weight to the worldview hypotheses rather than to the functional alternative hypotheses. The research question is further nuanced by the perspective advanced by Orenstein (2002) and McKinnon (2003) whose work leads to the suggestion that the relationship between traditional religiosity and new age beliefs may vary according to the level of religiosity displayed by the sample. On this account, if new age beliefs are really differentiated from traditional religiosity we may expect an inverse relationship among those for whom traditional religiosity is highly salient (say, weekly churchgoers) but a positive relationship among those for whom traditional religiosity is not highly salient (say, those who never attend church).

Method

Sample

A sample of 1,209 undergraduate students attending the University of Maribor, Slovenia, participated in a supervised survey conducted in 2003. The purposes of the survey

were fully described, and confidentiality and anonymity were assured. The students willingly assented to participate. Of the total respondents, 700 were female, 504 were male and 5 failed to disclose their sex; 175 were 18 or 19 years of age, 554 were 20 or 21, 364 were 22 or 23, 89 were 24 or 25, 24 were over the age of 25, and 5 failed to disclose their age.

Instruments

Traditional religiosity was assessed by the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Brown, & Lester, 1995). This is a 24-item Likert type instrument concerned with affective response toward God, Jesus, bible, prayer and church. The items had been translated into Slovenian and then back-translated into English in order to test for inaccuracies and ambiguities. Each item was assessed on a five point scale: *agree strongly* (5), *agree* (4), *not certain* (3), *disagree* (2) and *disagree strongly* (1).

Church attendance was assessed on a five-point scale: *never* (1), *rarely* (2), *sometimes* (3), *at least monthly* (4), and *at least weekly* (5).

New age belief was assessed by the Lavrič Scale of New Age Belief (Lavrič, 2002). This is a three item scale concerned with three underlying principles of the new age worldview: a mystical theme, a holistic theme, and a millenarian theme. Each item was assessed on a five-point scale: *agree strongly* (5), *agree* (4), *not certain* (3), *disagree* (2) and *disagree strongly* (1).

Analysis

The analysis examined the internal consistency reliability and item endorsement of the two instruments and then examined the relationship between scores recorded on the two instruments for the whole sample and for three levels of church attendance (never, occasionally, and weekly).

Results and discussion

Table 1 presents the item rest-of-test correlations and item endorsement for the Francis

- insert table 1 about here -

Scale of Attitude toward Christianity. The alpha coefficient (.96) demonstrates a high level of internal consistency reliability. Overall, the item endorsement reveals a largely negative attitude toward Christianity with the negatively phrased items attracting a higher level of endorsement than the positively phrased items. For example, 46% think going to church is a waste of their time, compared with 22% who say that the church is very important to them; 45% think saying prayers does no good, compared with 28% who claim that saying their prayers helps them a lot; 48% say that Jesus does not mean anything to them, compared with 20% who want to love Jesus; 38% find it hard to believe in God, compared with 27% who say that God means a lot to them.

Table 2 presents the item rest-of-test correlations and item endorsement for the Lavrič

- insert table 2 about here -

Scale of New Age Belief. The alpha coefficient (.78) demonstrates a high level of internal consistency reliability for such a short instrument. Overall, the item endorsement reveals quite a high level of endorsement of new age beliefs. Thus, 45% believe that everyone has an internal nucleus that can be awoken to bring illumination; 37% believe that all reality, including human beings, is permeated by a unique spiritual energy; 22% believe that in the future there will be a time of spiritual awakening and accelerated development of consciousness.

Table 3 presents the Pearson product moment correlation coefficients between attitude

- insert table 3 about here -

toward Christianity and new age belief for the whole sample and for three different levels of religiosity as measured by frequency of church attendance (weekly, occasionally, and never). These correlations demonstrate a highly significant positive covariance between traditional religiosity and new age belief for all four analyses.

Conclusion

Building on theoretical frameworks and earlier empirical evidence generated in the context of exploring the association between traditional religiosity and paranormal beliefs, the present study set out to examine the relationship between traditional religiosity and new age beliefs among a sample of 1,209 undergraduates attending the University of Maribor in Slovenia. In this study traditional religiosity was measured by the Francis Scale of Attitude toward Christianity and new age belief was measured by the Lavrič Scale of New Age Belief. The data demonstrated that, in this context, the two worldviews were highly compatible in the sense that those who held a more positive attitude toward Christianity were also more accepting of new age beliefs, while those who rejected new age belief also hold more negative attitudes toward Christianity. Moreover, this association held true irrespective of the individual students' personal level of traditional religiosity as reflected through frequency of church attendance.

These findings, therefore, provide some support for accepting the 'worldview hypotheses' advanced by Thalbourne and O'Brien (1999), according to which traditional religiosity and new age beliefs both represent the subjectivist worldview in contrast with the empirical worldview, and some support for rejecting their 'functional alternative hypothesis', according to which new age beliefs function as a substitute for traditional religious teaching.

In terms of Bailey's notion of implicit religion, these findings commend the 'worldview hypothesis' advanced by Thalbourne and O'Brien (1999) as a model illuminating and interrogating the persistence of religion within secular society. On this account, it is the subjectivist worldview that matters, rather than the specific content of that worldview, whether it be Christian or New Age. With this subjectivist worldview can come the three key qualities of implicit religion: *commitment*, in the sense of something to which individuals feel committed; *integrating foci*, in the sense of something that draws together the identity of an

individual and in so doing furnishes meaning and generates purpose; and *intensive concerns with extensive effects*, in the sense of being a worldview that carries implications for the way in which life is lived.

There remain, however, two major limitations with the present study, recognition of which may help to shape the agenda for future research. The first limitation concerns the issues of operationalisation and measurement. In terms of traditional religiosity the application of the Francis Scale of Attitude toward Christianity has located the present study within a well-established stream of research concerned with the attitudinal dimension of religiosity. Other studies conducted employing the same instrument help to clarify what it is precisely that is captured by this measure. In terms of new age beliefs, however, the Lavrič Scale of New Age Belief is as yet a much less well-established instrument and remains somewhat controversial in terms of its restriction to just three items. Future research should consider replicating the present study, using the Lavrič measure, but also including other indices of new age belief.

The second limitation concerns the issue of sampling. The present innovative study has been conducted among undergraduate students whose worldviews have been shaped within one specific cultural context, namely Slovenia. The routine development of scientific knowledge within the empirical social psychology of religion would be enhanced by the replication of studies of this nature within other and diverse cultural contexts.

References

- Bailey, E. I. (1997). *Implicit religion in contemporary Society*. G A Kampen, The Netherlands: Kok Pharos.
- Bailey, E. I. (1998). *Implicit religion: An introduction*. London: Middlesex University Press.
- Bailey, E. I. (Ed.). (2002). *The secular quest for meaning in life: Denton papers in implicit religion*. New York: The Edwin Mellon Press Ltd.
- Bainbridge, W. S. (2004). After the New Age. *Journal for the Scientific Study of Religion*, 43, 381-394.
- Barnes, A., Abd-El-Fattah, S., Chandler, M., & Yates, G. C. R. (2008). New Age beliefs among teacher education students. *Critical and Creative Thinking*, 16, 23-37.
- Bourke, R. (2000). Music and spirituality: Are musicians more religious. In J. Astley, T. Hone, & M. Savage (Eds.), *Creative chords: Studies in music, theology and Christian formation* (pp. 126-140). Leominster: Gracewing.
- Bourke, R., Francis, L. J., & Robbins, M. (2005). Personality and attitude toward Christianity among church musicians. *North American Journal of Psychology*, 7, 85-88.
- Capra, F. (1984). *The tao of physics*. New York: Bantam Books.
- Corrywright, D. (2003). *Theoretical and empirical investigations into New Age Spiritualities*. Bern: Peter Lang.
- Doktór, T. (1999). The "New Age" worldview of Polish students. *Social Compass*, 46, 215-224.
- Donahue, M. J. (1993). Prevalence and correlates of new age beliefs in six Protestant denominations. *Journal for the Scientific Study of Religion*, 32, 177-184.
- Dorahy, M. J., & Lewis, C. A. (2001). The relationship between dissociation and religiosity: An empirical evaluation of Schumaker's theory. *Journal for the Scientific Study of Religion*, 40, 317-324.

- Emmons, C. F., & Sobal, J. (1981). Paranormal beliefs: Functional alternatives to mainstream religion? *Review of Religious Research*, 22, 310-312.
- Fane, R. S. (1999). Is self-assigned religious affiliation socially significant?, In L.J. Francis (Ed.), *Sociology, theology and the curriculum* (pp. 113-124). London: Cassell.
- Fawcett, J., Andrews, V., & Lester D. (2000). Religiosity and attitudes about abortion. *Psychological Reports*, 87, 980.
- Fearn, M., Francis, L. J., & Wilcox, C. (2001). Attitude toward Christianity and psychological type: A survey among religious studies students. *Pastoral Psychology*, 49, 341-348.
- Flynn, M., & Mok, M. (2002). *Catholic schools 2000*. Catholic Education Commission: Sydney.
- Francis, L. J. (2001). Christianity and dogmatism revisited: A study among fifteen and sixteen year olds in the UK. *Religious Education*, 96, 211-226.
- Francis, L. J. (2005). Gender role orientation and attitude toward Christianity: A study among older men and women in the United Kingdom. *Journal of Psychology and Theology*, 33, 179-186.
- Francis, L. J. (2006). Attitude toward Christianity and premarital sex. *Psychological Reports*, 98, 140.
- Francis, L. J. (2007). Introducing the New Indices of Religious Orientation (NIRO): Conceptualisation and measurement. *Mental Health, Religion and Culture*, 10, 585-602.
- Francis, L. J., ap Siôn, T., Lewis, C. A., Robbins, M., & Barnes, L. P. (2006). Attitude toward Christianity and religious experience: Replication among 16- to 18-year-old adolescents in Northern Ireland. *Research in Education*, 76, 56-61.
- Francis, L. J., & Burton, L. (2007). The relationship between psychological health and attitude toward Christianity among pupils aged 11 to 15 years in England. *Journal of*

Research on Christian Education, 16, 83-102.

Francis, L. J., Fearn, M., & Lewis, C. A. (2005). The impact of personality and religion on attitudes toward alcohol among 16-18 year olds in Northern Ireland. *Journal of Religion and Health, 44*, 267-289.

Francis, L. J., & Greer, J. E. (2001). Shaping adolescents' attitudes toward science and religion in Northern Ireland: The role of scientism, creationism and denominational schools. *Research in Science and Technological Education, 19*, 39-53.

Francis, L. J., Jones, S. H., & Wilcox, C. (2000). Religiosity and happiness: During adolescence, young adulthood and later life. *Journal of Psychology and Christianity, 19*, 245-257.

Francis, L. J., & Katz, Y. J. (2007). Measuring attitude toward Judaism: The internal consistency reliability of the Katz-Francis Scale of Attitude toward Judaism. *Mental Health, Religion and Culture, 10*, 309-324.

Francis, L. J., Lewis, J. M., Philipchalk, R., Brown, L. B., & Lester, D. (1995). The internal consistency reliability and construct validity of the Francis Scale of Attitude toward Christianity (adult) among undergraduate students in the UK, USA, Australia and Canada. *Personality and Individual Differences, 19*, 949-953.

Francis, L. J., & Robbins, M. (2004). Belonging without believing: A study in the social significance of Anglican identity and implicit religion among 13-15 year old males. *Implicit Religion, 7*, 37-54.

Francis, L. J., Santosh, R., Robbins, M., & Vij, S. (2008). Assessing attitude toward Hinduism: The Santosh-Francis Scale. *Mental Health, Religion and Culture, 11*, 609-621.

- Francis, L. J., & Williams, E. (2009). Alternative spiritualities: Different personalities? An empirical enquiry concerning paranormal beliefs and traditional religiosity among 14- to 16-year-old students. *Research in the Social Scientific Study of Religion, 20*, 69-84.
- Francis, L. J., Williams, E., & Robbins, M. (2008). Church attendance, implicit religion and belief in luck: The relationship between conventional religiosity and alternative spiritualities among adolescents. *Implicit Religion, 11*, 239-254.
- Francis, L. J., Williams, E., & Robbins, M. (2009). Christianity, paranormal belief and personality: A study among 13- to 16-year-old pupils in England and Wales. *Archive for the Psychology of Religion, 31*, 337-344.
- Francis, L. J., Williams, E., & Robbins, M. (2010). Personality, conventional Christian belief and unconventional paranormal belief: A study among teenagers. *British Journal of Religious Education, 31*: 31-39.
- French, H. W. (2002). Religion and football: The cult of the fighting game-cock. In E. I. Bailey (Ed.) *The secular quest for meaning in life* (pp. 319-336). Lewiston, New York: Edwin Mellen Press).
- Glendinning, T. (2006). Religious involvement, conventional Christian, and unconventional nonmaterialist beliefs. *Journal for the Scientific Study of Religion, 45*, 585-595.
- Granqvist, P., & Hagekull, B. (2001). Seeking security in the New Age: On attachment and emotional compensation. *Journal for the Scientific Study of Religion, 40*, 527-545.
- Hanegraaff, W. (1996). *New Age religion and western culture: esotericism in the mirror of secular thought*. Leiden: Brill.
- Heelas, P. (1996). *The New Age Movement: The celebration of the self and the sacralisation of modernity*. Oxford: Blackwell Publishers Ltd.
- Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality*. Oxford: Blackwell.

- Hill, P. C., & Hood, R. W. (Eds.) (1999). *Measures of religiosity*. Birmingham, Alabama: Religious Education Press.
- Höllinger, F. (2004). Does the counter-cultural character of New Age persist? Investigating social and political attitudes of New Age followers. *Journal of Contemporary Religion, 19*, 289-309.
- Houtman, D., & Mascini, P. (2002). Why do churches become empty, while New Age grows? Secularisation and religious change in the Netherlands. *Journal for the Scientific Study of Religion, 41*, 455-473.
- Kay, W. K., & Francis, L. J. (1996). *Drift from the churches: Attitude toward Christianity during childhood and adolescence*. Cardiff: University of Wales Press.
- Kemp, D. (2001). Christaquarianism: A new socio-religious movement of post-modern society? *Implicit Religion, 4*, 27-40.
- Kemp, D. (2004). *New Age: A guide. Alternative spiritualities from Aquarian conspiracy to next age*. Edinburgh: Edinburgh University Press.
- Kemp, D., & Lewis, J. R. (Eds.) (2007). *Handbook of New Age*. Leiden: Brill.
- Kraus, R. (2009). The many faces of spirituality: A conceptual framework considering belly dance. *Implicit Religion, 12*, 51-72.
- Krull, D. S., & McKibben, E. S. (2006). Skeptical saints and critical cognition: On the relationship between religion and paranormal beliefs. *Archiv für Religionspsychologie, 28*, 269-285.
- Lavrič, M. (2002). Pristop k mergenju razširjenosti novodobnih idej. *Anthropos (Ljubljana), 34*(1/3), 231-242.
- Lewis, C. A., & Maltby, J. (2000). Conservatism and attitude toward Christianity. *Personality and Individual Differences, 29*, 793-798.

- Lewis, J. R., & Melton, J. G. (Eds.) (1992). *Perspectives on the New Age*. Albany, New York: State University of New York Press.
- McKinnon, A. M. (2003). The religious, the paranormal, and church attendance: A response to Orenstien. *Journal for the Scientific Study of Religion* 42, 299-303.
- Mears, D. P., & Ellison, C. G. (2000). Who buys New Age materials? Exploring sociodemographic, religious, network, and contextual correlates of New Age consumption. *Sociology of Religion*, 61, 289-313.
- O'Connor, D. B., Cobb, J., & O'Connor, R. C. (2003). Religiosity, stress and psychological distress: No evidence for an association among undergraduate students. *Personality and Individual Differences*, 34, 211-217.
- Orenstien, A. (2002). Religion and paranormal belief. *Journal for the Scientific Study of Religion*, 41, 301-311.
- Persinger, M. A. and Makarec, K. (1990) Exotic beliefs may be substitutes for religious beliefs. *Perceptual and Motor Skills* 71, 16-18.
- Pike, S. M. (2004). *New Age and neopagan religions in America*. New York: Columbia University Press.
- Rice, T. W. (2003) Believe it or not: religious and other paranormal beliefs in the United States. *Journal for the Scientific Study of Religion* 42, 95-100.
- Russell, P. (1982). *The global brain awakened*. London: Global Brain Inc.
- Sahin, A., & Francis, L. J. (2002). Assessing attitude toward Islam among Muslim adolescents: The psychometric properties of the Sahin Francis scale. *Muslim Educational Quarterly*, 19(4), 35-47.
- Schludermann, E. H., Schludermann, S. M., & Huynh, C. - L.(2000). Religiosity, prosocial values, and adjustment among students in Catholic high schools in Canada. *Journal of Beliefs and Values*, 21, 99-115.

- Sjöberg, L., & af Wåhlberg, A. (2002). Risk perception and New Age beliefs. *Risk Analysis*, 22, 751-764.
- Sutcliffe, S. J. (2003). *Children of the New Age: A history of spiritual practices*. London: Routledge.
- Thalbourne, M. A., & Hensley, J. H. (2001). Religiosity and belief in the paranormal. *Journal of the Society for Psychological Research*, 65, 47.
- Thalbourne, M. A., & O'Brien, R. (1999) Belief in the paranormal and religious variables. *Journal of the Society for Psychological Research*, 63, 110-122.
- Till, R. (2010) The personality cult of Prince: *Purple Rain*, sex and the sacred, and the implicit religion surrounding a popular icon. *Implicit Religion*, 13, 141-159.
- Tobacyk, J. (1988), *A revised Paranormal Belief Scale*, Unpublished manuscript, Louisiana Tech University, Ruston, Louisiana.
- Walker, D., Francis, L. J., & Robbins, M. (2010). You don't have to go to church to be a good Christian: the implicit religion of rural Anglican churchgoers celebrating harvest. *Implicit Religion*, 13, 319-325.
- Williams, E., Francis, L. J., Astley, J., & Robbins, M. (2009). The relationship between paranormal beliefs and attitude toward theistic faith. *Journal for the Society of Psychological Research* 73(1), 33-40.
- Williams, E., Francis, L. J., & Lewis, C. A. (2009). Introducing the Modified Paranormal Belief Scale: distinguishing between classic paranormal beliefs, religious paranormal beliefs and conventional religiosity among undergraduates in Northern Ireland and Wales. *Archive for the Psychology of Religion*, 31, 345-356.
- Williams, E., Francis, L. J., & Robbins, M. (2006). Attitude toward Christianity and paranormal belief among 13- to 16-year-old students, *Psychological Reports*, 99, 266.

Yates, G. C. R., & Chandler, M. (2000). Where have all the sceptics gone?: Patterns of New Age beliefs and anti-scientific attitudes in preservice primary teachers. *Research in Science Education, 30*, 377-387.

York, M. (1995). *The emerging network: A sociology of new age and neo-pagan movements*. London: Rowman and Littlefield.

Zusne, L., & Jones, W. H. (1982). *Anomalistic psychology: A study of extraordinary phenomena of behaviour and experience*. New Jersey: Lawrence Erlbaum.

Table 1

Scale of Attitude toward Christianity: item rest of test correlations and item endorsement

Scale item	<i>r</i>	%
I find it boring to listen to the bible*	0.52	45
I know that Jesus helps me	0.83	29
Saying my prayers helps me a lot	0.83	28
The church is very important to me	0.77	22
I think going to church is a waste of my time*	0.59	46
I want to love Jesus	0.75	20
I think church services are boring*	0.43	36
I think people who pray are stupid*	0.31	72
God helps me to lead a better life	0.83	25
I like to learn about God very much	0.78	18
God means a lot to me	0.89	27
I believe that God helps people	0.85	31
Prayer helps me a lot	0.87	26
I know that Jesus is very close to me	0.86	20
I think praying is a good thing	0.74	40
I think the bible is out of date*	0.27	46
I believe that God listens to prayers	0.82	25
Jesus doesn't mean anything to me*	0.65	48
God is very real to me	0.79	23
I think saying prayers does no good*	0.61	45
The idea of God means much to me	0.82	25
I believe that Jesus still helps people	0.84	25
I know that God helps me	0.87	26
I find it hard to believe in God*	0.61	38
alpha coefficient/% of variance	0.96	

Note. * these negative items were reverse scored.

Table 2

Scale of New Age Belief: item rest of test correlations and item endorsement

	r	%
Everyone has an internal spiritual nucleus that can be awoken to bring illumination	.62	45
All reality, including human beings, is permeated by a unique spiritual energy	.70	37
In the future there will be a time of spiritual awakening and accelerated development of consciousness	.55	22
alpha coefficient	.78	

Table 3

Correlations between attitude toward Christianity and new age belief

sample	N	r
whole sample	1209	.44***
never attend church	254	.37***
attend church occasionally	430	.31***
attend church weekly	129	.35***

Note *** = $p < .001$