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Christianity, paranormal belief and personality: A study among  
13- to 16-year-old pupils in England and Wales

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### Summary

Studies concerning the changing landscapes of religiosity and spirituality in the lives of young people in England and Wales draw attention to decline in traditional religiosity and to growth in alternative spiritualities. The present study examined whether such alternative spiritualities occupy the same personality space as traditional religiosity. A sample of 2,950 13- to 16-year-old pupils attending 11 secondary schools in England and Wales completed the Francis Scale of Attitude toward Christianity and an index of paranormal belief, alongside the abbreviated-form Junior Eysenck Personality Questionnaire Revised. The data demonstrated that these two forms of belief were related in different ways to Eysenck's dimensional model of personality space. While attitude toward Christianity occupied the space defined by low psychoticism scores (tendermindedness) and high lie scale scores (social conformity), paranormal belief was related to high psychoticism scores (toughmindedness) and was independent of lie scale scores. These findings support the view that alternative spiritualities may be associated with different personalities.

Christianity, paranormal belief and personality: A study among  
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A series of studies has drawn attention to the declining role of the Christian churches in the lives of young people in the United Kingdom (Kay & Francis, 1996; Brierley, 1993, 2002). For example, according to research by Kay and Francis (1996, p. 205) the proportion of 11- to 16-year-olds who dismissed church services as boring increased from 39% in 1974 to 56% in 1994. At the same time, the proportion who believed that God helped them to lead a better life declined from 39% in 1974 to 22% in 1994. In spite of such decline in allegiance to traditional religiosity, a second strand of research has drawn attention to the persistence of the spiritual quest among young people in the United Kingdom (Savage, Collins-Mayo, Mayo, & Cray, 2006) as well as among the wider population (Heelas & Woodhead, 2005).

As part of this wider attempt to map and to monitor the worldview of young people in the United Kingdom a third strand of research has concentrated specifically on the area of paranormal beliefs (Boyd, 1996; Francis & Williams, 2007, in press a). For example, according to Boyd (1996, pp. 234-235) 41% of 14- to 15-year-olds believed that it is possible to contact the spirits of the dead, 38% believed in their horoscope, 29% considered that everyone has psychic powers that can be developed, and 23% considered that fortune-tellers can tell the future.

A key question raised by the juxtapositioning of these studies is whether the alternative forms of spirituality in general or paranormal belief in particular fulfil the same functions in young lives as traditional religiosity. In other words, are these new and emerging spiritualities colonising the vacuum created by the decline in traditional religiosity, or are they fulfilling a somewhat different function? A fourth strand of recent research, as exemplified by Francis, Williams, and Robbins (in press), Robbins, Francis, and Williams (in press) and

Francis and Williams (in press b), has attempted to address this key question. Employing the Eysenckian dimensional model of personality, as proposed by Eysenck and Eysenck (1975, 1991), this strand of research has examined whether traditional Christianity and paranormal belief occupy the same or different locations within personality space. In so doing these studies have drawn on a long tradition concerned with modelling the relationship between, on the one hand, the Eysenckian dimensions of extraversion, neuroticism, psychoticism and the lie scale, and, on the other hand, a range of social attitudes, values and beliefs (Eysenck, 1975, 1976).

This fourth strand of research takes as its starting point what is now a fairly secure finding of a series of studies conducted from the early 1980s onwards linking traditional religiosity with low psychoticism scores (tendermindedness) and with high lie scale scores (social conformity). Support for this conclusion is provided, for example, in studies reported across a range of samples in Australia and Canada (Francis, Lewis, Brown, Philipchalk, & Lester, 1995), France (Lewis & Francis, 2000), Germany (Francis & Kwiran, 1999), Greece (Youtika, Joseph, & Diduca, 1999), Hong Kong (Francis, Lewis, & Ng, 2003), Northern Ireland (Lewis, 1999, 2000; Lewis & Joseph, 1994), Republic of Ireland (Maltby, 1997; Maltby & Lewis, 1997), South Africa (Francis & Kerr, 2003), the United Kingdom (Bourke & Francis, 2000; Carter, Kay, & Francis, 1996; Francis, 1991, 1992, 1999; Francis & Bennett, 1992), and the United States of America (Lewis & Maltby, 1995; Roman & Lester, 1999). The much smaller body of research concerned with the relationship between the Eysenckian dimensional model of personality and paranormal belief has consistently failed to find either negative correlations with psychoticism or positive correlations with lie scale scores (Lester, 1993; Willging & Lester, 1997; Peltzer, 2002; Williams, Francis, & Robbins, 2007; Francis, Williams, & Robbins, in press; Francis & Williams, in press b).

Against this background, the aim of the present study is to administer measures of

traditional religiosity and paranormal belief alongside the Eysenckian dimensional model of personality to a sample of adolescents in England in order to test further the stability of earlier findings.

## Method

### *Sample*

The Teenage Values Survey was completed by a random sample of 2,950 13- to 15-year-old pupils (1,480 males and 1,470 females) attending year-nine and year-ten classes in 11 secondary schools in England and Wales. Pupils were asked not to write their name on the booklet and to complete the inventory under examination-like conditions. Although pupils were given the choice not to participate, very few decided not to take part in the survey. They were assured of confidentiality and anonymity. They were informed that their responses would not be read by anyone in the school, and that the questionnaires would be despatched to the University of Wales for analysis. The participants comprised 1,554 year-nine pupils and 1,396 year-ten pupils. The majority of the participants never attended church (59%), with 9% attending at least once a month and 32% attending less frequently than this.

### *Measures*

*Personality* was assessed by the abbreviated-form Junior Eysenck Personality Questionnaire Revised (Francis, 1996). This instrument proposes four six-item indices of extraversion, neuroticism, psychoticism and a lie scale. Each item is rated on a two-point scale: 'yes' and 'no'.

*Traditional religiosity* was assessed by the short form of the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Lester, & Brown, 1995). This is a seven-item index concerned with affective responses to God, Jesus, bible, prayer and church which

provides a good predictor of scores recorded on the original longer version of the instrument. Each item is rated on a five-point Likert-type scale: 'agree strongly', 'agree', 'not certain', 'disagree' and 'disagree strongly'.

*Paranormal belief* was assessed by The Williams Revised Index of Paranormal Belief. That is a five-item index concerned with belief in contacting the spirits of the dead, in ghosts, in fate, in horoscopes, and in tarot cards. Each item is rated on a five-point Likert-type scale: 'agree strongly', 'agree', 'not certain', 'disagree' and 'disagree strongly'.

### *Analyses*

The data were analysed by the SPSS statistical package using the frequencies, reliability, t-test, Pearson correlation and partial correlation routines

### Results

Table 1 presents the properties of the six scales employed in the study in terms of the alpha coefficients (Cronbach, 1951) and the mean scale scores and standard deviations for males and females separately. Table 2 presents more detailed information about the scale of

- insert tables 1 and 2 about here -

attitude towards Christianity and the scale of paranormal belief in terms of the item endorsement (the sum of the agree and agree strongly responses) and in terms of the item-rest-of-test correlations (the correlation between each item and the sum of the other items).

Table 3 present the partial correlation coefficients between paranormal belief, attitude

- insert table 3 about here -

toward Christianity and the four Eysenckian scales, controlling for sex differences.

### Discussion and conclusion

In terms of the theory being tested by the present study the main interest in the data presented in table 3 concerns the patterns of relationships between the two measures of transcendental concern (attitude toward Christianity and paranormal belief) and two of the Eysenckian measures (the psychoticism scale and the lie scale). The patterns of relationship are consistent with the findings of the earlier research discussed in the introduction of the present paper. On the one hand, attitude toward Christianity is negatively correlated with psychoticism and positively correlated with the lie scale. On the other hand, paranormal belief does not follow the same pattern. In the present data, paranormal belief is positively correlated with psychoticism and independent of lie scale scores. These findings add further weight, therefore, to the view that paranormal beliefs occupy a different psychological space, as defined by Eysenck's personality theory, in comparison with the space occupied by traditional religiosity. In other words, the data suggest that paranormal belief is not merely filling a vacuum left in the lives of young people by the erosion of traditional religiosity.

A second feature of the data presented by the correlation matrix also deserves reflection, namely the positive correlation between attitude toward Christianity and paranormal belief. A positive correlation of this nature suggests that for some young people paranormal belief is not an alternative to traditional religiosity, but a complement to it. Further research is now needed to examine more closely the interrelationships between different belief systems within the adolescent worldview.

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Table 1

## Scale properties

	alpha	male		female		t	p<
		mean	sd	mean	sd		
extraversion	0.69	4.91	1.43	5.22	1.26	6.3	.001
neuroticism	0.72	2.26	1.75	3.28	1.86	15.3	.001
psychoticism	0.62	1.43	1.43	0.69	1.06	16.0	.001
lie scale	0.56	2.17	1.50	2.40	1.48	4.0	.001
paranormal belief	0.74	12.74	4.35	15.00	4.24	13.8	.001
attitude toward Christianity	0.90	16.30	6.75	17.42	6.51	4.6	.001

Table 2

## Scale of paranormal beliefs and attitude toward Christianity

	<i>r</i>	agree %
<i>attitude toward Christianity</i>		
I know that Jesus helps me	0.82	15
Going to church is a waste of my time	0.65	45
God helps me to lead a better life	0.76	15
God means a lot to me	0.79	15
Prayer helps me a lot	0.69	14
I know that Jesus is very close to me	0.82	13
I think that the bible is out of date	0.50	40
<i>paranormal belief</i>		
I believe in ghosts	0.55	39
I believe in my horoscope	0.50	30
I believe that it is possible to contact the spirits of the dead	0.58	2
I believe in fate	0.37	40
I believe that tarot cards can tell the future	0.50	15

Table 3

Correlation matrix controlling for sex differences

	E	N	P	L	Ch
paranormal belief	+0.01	+0.21***	+0.07***	-0.02	+0.20***
attitude toward Christianity	-0.09***	+0.12***	-0.16***	+0.18***	
lie scale	-0.17***	+0.01	-0.36***		
psychoticism	+0.10***	-0.03			
neuroticism	-0.23***				

Note. \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$