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Religious affect among adolescents in a multi-faith society: The role of personality

and religious identity.

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#### Abstract

A sample of 3783 11- to- 16-year-old secondary school pupils completed the Astley-Francis Scale of Attitude toward Theistic Faith and the abbreviated form of the Junior Eysenck Personality Questionnaire Revised together with information on personal religious practice (prayer), public religious practice (attendance) and religious identity (secular, Christian and Muslim). The data demonstrated that individual differences in religious affect are a complex function of personal factors (particularly age), contextual factors (self-identity as secular, Christian or Muslim), religious factors (particularly personal prayer), and personality factors (particularly psychoticism scores).

Keywords: Psychology, religion, Christian, Muslim, attitude

#### Introduction

Quantitative research traditions within the social scientific study of religion in general and within the psychology of religion in particular have long recognised the complexity of religiosity as both a multi-faceted and a multi-dimensional construct. Religion is multifaceted in the sense of its expression through a range of discrete faith traditions (say, Buddhism, Christianity, Hinduism, Islam, Judaism, and Sikhism). Religion is multi-dimensional in the sense of its expression through a range of different indicators (say, affiliation, practice, beliefs and attitude). In the mid 1970s, Francis (1978a, 1978b) argued for the centrality of the attitudinal dimension as the basis on which to construct a series of interrelated studies concerned with the correlates, antecedents and consequences of individual differences in religiosity. According to this argument the attitudinal dimension facilitates a common measurement system across faith traditions and across denominational differences within faith traditions.

The research tradition proposed by Francis (1978a, 1978b) has been operationalised through a series of instruments, including the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Brown, & Lester, 1995), the Sahin-Francis Scale of Attitude toward Islam (Sahin & Francis, 2002), the Katz-Francis Scale of Attitude toward Judaism (Francis & Katz, 2007), the Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008) and the Astley-Francis scale of Attitude toward Theistic Faith (Astley, Francis, & Robbins, in press). By the mid 1990s Kay and Francis (1996) drew together the findings from around a hundred studies that had employed the Francis Scale of Attitude toward Christianity. This review confirmed the coherence and value of the research agenda, enabling widely disparate studies to be drawn together through agreement on common instrumentation. Subsequent to Kay and Francis' review, the number of studies published in the tradition has continued to grow.

The consensus from the range of studies so far published suggests that there is a consistent pattern of positive personal and social correlates associated with more positive religious affect as assessed by the Francis family of instruments. For example, one series of studies has consistently demonstrated a positive association between religious affect and personal happiness as assessed by the Oxford Happiness Inventory (Argyle, Martin, & Crossland, 1989). Data supporting this conclusion are provided by Robbins and Francis (1996) among 360 undergraduates in Wales; by Francis and Lester (1997) among 212 undergraduates in the USA; by Francis and Robbins (2000) among 295 adults ranging in age from late teens to late seventies in the UK; by Francis, Jones, and Wilcox (2000) among three separate samples in England of 994 15- to 16-year-old school pupils, 496 members of the University of the Third Age, and 456 undergraduates; by Francis, Robbins, and White (2003) among students in Wales; by Francis and Katz (2002) among 298 female students in Israel; and by Francis, Katz, Yablon, and Robbins (2004) among 203 male students in Israel.

A second series of studies has consistently demonstrated a positive association between religious affect and psychological health as assessed by the Eysenckian understanding of neuroticism and psychoticism (Eysenck and Eysenck, 1991). Data supporting this conclusion are provided in four recent studies by Francis, Lewis, and Ng (2003) among 598 Chinese-speaking secondary-school pupils in Hong Kong; by Francis and Burton (2007) among 5808 secondary-school pupils in England; by Francis, Robbins, ap Sion, Lewis, and Barnes (2007) among 2319 secondary-school

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pupils in Northern Ireland; and by Francis and Hermans (2009) among 980 secondary school pupils in the Netherlands.

Other positive outcomes associated with religious affect explored by this research tradition includes altruism (Eckert & Lester, 1997), empathy (Francis & Pearson, 1987), general health (Francis, Robbins, Lewis, Quigley, & Wheeler, 2004), openness (Greer, 1985), pro-social values (Schludermann, Schludermann, Needham, & Mulenga, 2001), psychological well-being (Francis, Hills, Schludermann, & Schludermann, 2008), purpose in life (French & Joseph, 1999), and self-esteem (Jones & Francis, 1996).

Given the apparent significance of religious affect in predicting a range of positive personal and social outcomes, the aim of the present study is to examine the relative strengths of four predictors of individual differences in the direction and strength of religious affect among young people living in a multifaith society: personal factors (sex and age); contextual factors (self-identity as secular, Christian or Muslim); religious factors (particularly personal prayer and public attendance); and personality factors (drawing on Eysenck's dimensional model of personality). Use of the Astley-Francis Scale of Attitude toward Theistic Faith enables comparison to be made between young people claiming Christian and Muslim identity.

The Eysenckian dimensional model of personality was employed in the present study in the light of the significant body of research initially established during the 1990s that demonstrated the significant link between personality and individual differences in religiosity (Francis, Lewis, Brown, Philipchalk, & Lester, 1995) and the key role psychoticism (both theoretically and empirically) in shaping this link between personality and religiosity (Francis, 1992). In its current form the Eysenckian dimensional model of personality defines three higher-order orthogonal dimensions styled by the high-scoring poles as extraversion, neuroticism, and psychoticism (Eysenck & Eysenck, 1991). From the mid-1970s the Eysenckian family of measures concerned to operationalise the three dimensional model of personality have also included a fourth index. This fourth index, originally designed to detect dissimilation, although still styled as a lie scale, is routinely interpreted as a measure of social conformity.

#### Method

#### Procedure

Questionnaires were administered by class teachers during normal school activities to pupils aged between 11 and 19 years during 2007 and 2008 in three areas of northern England: Blackburn, Kirklees, and York. All pupils were assured of anonymity and confidentiality, and given the opportunity to opt out of the survey. Response rates were high, and nearly all pupils agreed to complete the questionnaire. **Procedure** 

The questionnaire included the seven-item Astley-Francis Scale Attitude toward Theistic Faith, which is a measure of positive affect toward theistic religions (Astley, Francis, & Robbins in press). Items were phrased so that both Christians and Muslims could be included on the same scale, which in this sample had a high internal consistency reliability (Cronbach's alpha = .78 for Asian pupils, .85 for white pupils) and construct validity (Francis, Brockett, & Village, in press). The questionnaire also included the 24-item abbreviated version of the Junior Eysenck Personality Questionnaire Revised, JEPQR-A (Francis, 1996). This consists of three six-item scales measuring three dimensions of personality, namely extraversion (E), neuroticism (N), and psychoticism (P), and a six-item lie scale (L). Public religious practice (attendance) and personal religious practice (prayer) were both assessed on five-point scales of frequency.

#### **Participants**

Analysis was confined to the 3783 students aged between 11 and 16 who gave valid answers to each item on all scales and who classed their religion as either 'no religion', 'Christian' or 'Muslim'. Of the 3783 pupils, 53% were girls and 47% boys. Of those who answered a question on religion, 1804 (48%) responded 'Christian', 755 (20%) responded 'Muslim' and 1224 (32%) responded 'no religion'.

### Analysis

A multiple regression model was constructed with attitude toward theistic faith as the dependent variable and predictor variables added in the following order: sex, age, Eysenck variables (P, E, N, L), attendance, prayer, and religious affiliation (Christian, Muslim). At each stage the change in  $r^2$  was calculated and tested for statistical significance. Standardised correlation coefficients were calculated for the final model which included all predictor variables.

#### Results

In terms of public religious practice, 46% never attended services, 24% attended monthly or less, and 30% attended more than once a month. In terms of personal religious practice, 52% never prayed, 9% prayed monthly or less, and 40% prayed more than once a month. Mean values for other variables are shown in Table 1.

#### -insert table 1 here -

Table 2 shows parameter values for the multiple regression model. In view of the sample size the probability level was set at the one percent level. All predictor variables significantly improved the model when added in the order specified. In the final full model according to the beta weights there was a significant positive association with lie scale scores (social conformity), a significant negative association with psychoticism scores (tendermindedness) and no significant association with either extraversion scores or neuroticism scores. There was no significant association with sex, but a significant negative association with age. Among the religious variables, according to the beta weights, being Muslim emerged as the strongest predictor of positive religious affect, followed by personal prayer, public attendance, and being Christian.

#### Conclusion

This study set out to assess the role of four factors in predicting individual differences in religious affect among 11- to 16-year-old adolescents living in multi-faith England: personal factors (sex and age); contextual factors (self-identity as secular, Christian or Muslim); religious factors (personal prayer and public attendance); and personality factors (extraversion, neuroticism, psychoticism, and social conformity). Three main conclusions emerged from the data provided by a sample of 3783 secondary school pupils.

First, in terms of contextual factors, it is clear that being Muslim carries much more weight than being Christian in shaping positive religious affect. Overall young Muslims growing up in multi-faith England embrace higher levels of positive religious affect than is the case among young Christians. In this sense, religious identity is important.

Second, in terms of religious factors, it is clear that commitment to personal religious practice (prayer) carries much more weight than commitment to public religion practice (attendance) in shaping positive religious affect. Overall young people growing up in multi-faith England who pray embrace higher levels of religion affect. In this sense, personal religious practice is important.

Third, in terms of personality factors, it is clear that, even after taking the role of religious practice and religious identity into account, personality carries some additional weight in shaping positive religious affect. According to the beta weights, within the overall system the two Eysenckian variables that made a significant contribution to positive religious affect were low psychoticism scores (tendermindedness) and high lie scale scores (social conformity). These two findings are consistent with a broader literature on the association between the Eysenckian dimensional model of personality and religious affect (Francis, Lewis, Brown, Philipchalk, & Lester, 1995). In this sense personality is important.

Fourth, in terms of personal factors, it is clear that within the overall model, age plays a significant role in shaping levels of religious affect. As young people progress through the year groups of secondary schooling between the ages of 11- and 16-years, so their attitudes toward theistic faith become less positive. This finding is consistent with broader literature on trends in religiosity during the period of secondary schooling as documented by Kay and Francis (1996). In this sense personal factors are important.

Fifth, also in terms of personal factors, the conclusion that sex did not play a significant role within the overall model in shaping levels of religious affect among young people in the present study deserves further amplification. While sociologically-driven research has routinely documented the finding that women are more religious than men (Francis, 1997), psychologically-driven research has demonstrated that this difference is better accounted for in terms of feminine personality characteristics (Francis, 2005). This notion of feminine personality

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characteristics is captured within the Eysenckian dimension of psychoticism, where both theoretically and empirically women record significantly lower scores than men, as documented in the foundation study reported by Eysenck and Eysenck (1976). Once this personality dimension of psychoticism has been taken into account, biological sex ceases to be a statistically significant predictor of individual differences in levels of religious affect (according to the probability level accepted by the present study for assessing beta weights), although in terms of increase in  $r^2$  sex was statistically significant when entered first into the model. In this sense sex is a particularly complex factor.

Taken together the findings demonstrate that individual differences in religious affect among young people are a complex function of contextual factors (the environment in which they are nurtured: secular, Christian, or Muslim), of religious factors (particularly personal prayer, but public attendance as well), of personality factors (psychoticism scores and lie scale scores), and personal factors (particularly age, but also sex in interaction with personality). Building on previous research, the present study has added new knowledge by being able to measure religious affect among secular, Christian and Muslim and young people within the same study and thereby confirming the usefulness of the Astley-Francis Scale of Attitude toward Theistic Faith in extending the scope of studies in the psychology of religion within a multi-faith context.

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## Table 1

## Mean (SD) scores for scale variables

	Mean	SD	Minimum	um Maximum	
Theistic Belief Scale	21.4	8.8	7	35	
Age	13.2	1.6	10	16	
Psychoticism	0.9	1.2	0	6	
Extraversion	5.0	1.3	0	6	
Neuroticism	2.9	1.8	0	6	
Lie	2.6	1.6	0	6	

Note. N = 3783

## Table 2

		Change <sup>1</sup>			F	Full model <sup>2</sup>		
	$R^2$	$R^2$	F	P<	β	t	<i>P</i> <	
Sex	.01	.01	43.40	.00	.02	2.11	.03	
Age	.03	.02	62.83	.00	03	-3.30	.00	
Psychoticism	.04	.01	35.81	.00	04	-4.41	.00	
Extraversion	.04	.00	13.34	.00	.02	1.71	.09	
Neuroticism	.04	.00	15.92	.00	.02	2.41	.02	
Lie	.09	.05	195.06	.00	.07	7.26	.00	
Attendance	.54	.45	3654.74	.00	.16	10.83	.00	
Prayer	.63	.10	987.68	.00	.36	25.12	.00	
Christian	.64	.01	96.14	.00	.15	11.50	.00	
Muslim	.70	.06	782.11	.00	.43	27.76	.00	

Note. <sup>1</sup>Change when variable is added to the model along with those in preceding

rows. <sup>2</sup>Beta weights and significance values when all variables in the model.