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Religious Identity, Mystical Experience, and Psychopathology: A Study among Secular,
Christian, and Muslim Youth in England and Wales

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Abstract

This study addressed two research questions among three samples of 14- to 18-year-old adolescents: 203 Muslims, 477 Christians, and 378 religiously unaffiliated young people in England and Wales. The first question examined the comparative extent to which the religiously unaffiliated reported mystical experience. The second question examined the association between mystical experience and psychopathology as defined by the psychoticism and neuroticism scales within Eysenck's dimensional model of personality. The data found a lower level of reported mystical experience among the religiously unaffiliated, although such experiences were reported by between a quarter and a third of this group. The data found no association between reported mystical experience and psychopathology among the Christians, the Muslims, or the religiously unaffiliated.

Keywords: Mysticism, personality, psychology, religion, Muslim, Christian

Religious Identity, Mystical Experience, and Psychopathology: A Study among Secular,
Christian, and Muslim Youth in England and Wales

The notion of mystical experience has been a topic of central interest to the empirical psychology of religion from the early days of the discipline. In his foundational study, *The Varieties of Religious Experience*, James (1902/1985, p. 301) referred to mysticism as “the root and center of religion.” Within the broader field of religious studies Hick (1989) maintained that mysticism is integral to all faith traditions. This clear and repeated connection between mystical experience and religious traditions raises a question concerning the continuing prevalence of the underlying experience among three groups of young people: those shaped by the Christian tradition, those shaped by the Muslim tradition, and those growing up outside a living religious tradition.

Researching Mystical Experience

Step one in addressing this first research question concerns clarifying how research traditions within the empirical psychology of religion have conceptualized and operationalized assessment of mystical experience. Within the quantitative tradition, two main methods have been employed. The first method has employed single well-defined survey questions. Four questions of this nature have attracted repeated use. Glock and Stark (1965) framed their question: “Have you ever as an adult had the feeling that you were somehow in the presence of God?” Back and Bourque (1970) framed their question: “Would you say that you have ever had a ‘religious or mystical experience’ - that is, a moment of sudden religious awakening or insight?” Greeley (1974) framed his question, “Have you ever felt as though you were close to a powerful spiritual force that seemed to lift you out of yourself?” Working within the tradition of Hardy (1979), Hay and Morisy (1978) framed their question, “Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday self?” Two of these classic

questions contain the word *God*, one *religious*, and one *spiritual*. Such questions may elicit a higher level of response among people for whom such vocabulary carries saliency.

The second method has employed multi-item scales of known psychometric properties. Two scales of this nature have attracted multiple usage. In the mid 1970s, Hood, Jr. published the M Scale (Hood, 1975), drawing on the conceptual model of mysticism proposed by Stace (1960). The M Scale consists of 32 items (16 positively worded items and 16 negatively worded items). Several investigations have identified two factors within the M Scale (Caird, 1988; Hood, 1975; Reinert & Stifler, 1993). Factor one draws together items expressing an experience of unity; factor two draws together items referring to interpretation of these experiences. Other investigations of the M Scale (Hood et al., 2001; Hood & Williamson, 2000) have distinguished between two expressions of the experience of unity that can be either introvertive (an experience of pure consciousness) or extrovertive (an experience of unity in diversity). This distinction has been established by confirmatory factor analysis in such diverse cultures as the United States and Iran. Hood's M Scale has been applied in a number of studies, including Hood (1976, 1977), VandeCreek (1998), Mercer and Durham (1999), Byrd, Lear, and Schwenka (2000), Hood et al., (2001), Lazar (2004), Lazar and Kravetz (2005a, 2005b), Ghorbani and Watson (2009), and Byrom (2009).

At the beginning of the 21st century, Francis and Loudon (2000a) published the Mystical Orientation Scale (MOS), drawing on the conceptual model of mysticism proposed by Happold (1963), who had built on the definition originally advanced by James (1902/1985). The MOS consists of 21 items, three items accessing each of the seven components of mysticism proposed by Happold's model: ineffability, the private or incommunicable quality of the experience; noesis, the sense that the experience conveys insight into levels of truth inaccessible to the discursive intellect; transiency, the brief, inconstant, and intermittent nature of the experience; passivity, the sense of the undeserved,

gratuitous nature of the experience controlled by a superior power; unity, the consciousness of the oneness of everything; timelessness, the timeless quality of the experience that transcends established notions of past, present, and future; and true *ego*, the sense that the experience links with the real self beyond and above the normal recognition of ego.

Subsequently, Francis and Loudon (2004) generated a 9-item short form of the measure known as the Short Index of Mystical Orientation (SIMO). The MOS and SIMO have been applied in a number of studies, including Francis and Thomas (1996), Francis and Loudon (2000b), Francis (2002), Bourke, Francis, and Robbins (2004), Francis, Village, Robbins, and Ineson (2007), and Edwards and Lowis (2008a, 2008b).

The Francis-Louden Mystical Orientation Scale was designed originally to distinguish between different forms and expressions of religious experience articulated by Christian believers. The foundation study was conducted among 1468 Roman Catholic priests. As a consequence some of the items are explicitly rooted within linguistic and conceptual categories shaped by the Christian tradition. Hood's Mysticism Scale also contains items that interpret the experience within explicit religious categories. In order to address the first research question posed by the present study, it was necessary to design a new brief instrument that operationalizes the core of mystical experience equally accessible to secular youth and to those shaped by both the Christian and the Islamic traditions.

Mysticism and Psychopathology

A key question throughout the literature on mysticism within the psychology of religion concerns whether or not mystical experience is consistent with normal personality and whether mystical experience may be associated with forms of psychopathology. This question was posed by Caird (1987) in a way accessible to empirical testing by routine techniques available to measurement-based traditions within individual differences

psychology, drawing on the dimensional model of personality proposed by Eysenck and his associates (see Eysenck & Eysenck, 1975).

Two specific features of Eysenck's dimensional model of personality are of particular relevance in this respect. First, Eysenck maintained that psychological disorders or pathologies are not discontinuous from normal personality. In other words, clear precursors of psychotic and neurotic disorders are present within normal populations and are open to identification and assessment. Second, Eysenck demonstrated mathematically that individual differences in normal personality can be most adequately and economically summarized in terms of three higher order orthogonal factors, two of which are coterminous with neurotic and with psychotic disorders. Eysenck's dimensional model of personality has been operationalized through a series of instruments, including the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), and the Eysenck Personality Questionnaire Revised (Eysenck, Eysenck, & Barrett, 1985).

Eysenck's first dimension of personality is defined by a continuum moving from introversion, through ambiversion, to extraversion. The higher scorer on the extraversion scale is characterized by the test manual (Eysenck & Eysenck, 1975) as a social individual who likes parties, has many friends, needs to have people to talk to, and prefers meeting people to reading or studying alone. The typical extravert craves excitement, takes chances, acts on the spur of the moment, is carefree, easygoing, optimistic, and likes to laugh and be merry.

Eysenck's second dimension of personality is defined by a continuum moving from emotional stability, through emotional lability, to neurotic disorder. The high scorer on the neuroticism scale is characterized by the test manual as an anxious, worrying individual, who is moody and frequently depressed, likely to sleep badly, and to suffer from various psychosomatic disorders. In the test manual, Eysenck and Eysenck (1975) suggested that, if

the higher scorers on the neuroticism scale have to be described in one word, one might say that they are *worriers*, and that their main characteristic is a constant preoccupation with things that might go wrong and with a strong emotional reaction of anxiety to these thoughts.

Eysenck's third dimension of personality is defined by a continuum moving from tendermindedness, through toughmindedness, to psychotic disorder. The higher scorer on the psychoticism scale is characterized in their study of psychoticism as a dimension of personality by Eysenck and Eysenck (1976) as being cold, impersonal, hostile, lacking in sympathy, unfriendly, untruthful, odd, unemotional, unhelpful, lacking in insight, strange, and with paranoid ideas that people were against them.

Eysenck's family of personality measures has also routinely carried a lie scale. These lie scales were originally introduced to detect the tendency of some respondents to *fake good* and so to distort the resultant personality scores (O'Donovan, 1969). The notion of the lie scales has not, however, remained as simple as that, and their continued use has resulted in them being interpreted as a personality measure in their own right, often as a measure concerned with social conformity (McCrae & Costa, 1983; Furnham, 1986).

Against this background, Caird (1987) drew attention to two conflicting views regarding the association between mysticism and Eysenck's dimensional model of personality. On the one hand, Caird cited the Group for the Advancement of Psychiatry (1976) as regarding mystical experiences as essentially introvert, with neurotic and psychotic sufferers especially tempted to seek relief in these ways. On the other hand, Caird cited Maslow (1964) as identifying mystical experiences with peak experiences, more characteristic of health than of neurosis or psychosis. Testing these conflicting theories among a sample of 115 first-year religious studies students at the University of Queensland, using Hood's M Scale (Hood, 1975) and the Eysenck Personality Questionnaire (Eysenck &

Eysenck, 1975), Caird found no significant correlations between mysticism and any of the three dimensions of personality: extraversion, neuroticism, or psychoticism.

Spanos and Moretti (1988) partly replicated Caird's (1987) study by administering Hood's M Scale (Hood, 1975) alongside the neuroticism scale of the Eysenck Personality Inventory (Eysenck & Eysenck, 1964), as part of a larger battery of tests, among a sample of 124 female university students. No significant correlation was found between the two variables.

Francis and Thomas (1996) replicated Caird's (1987) study by administering the SIMO (Francis & Loudon, 2004) alongside the short-form Revised Eysenck Personality Questionnaire (Eysenck, Eysenck, & Barrett, 1985) among a sample of 222 Anglican clergymen. Their data demonstrated a positive correlation between mystical orientation and extraversion but no relationship between mystical orientation and either neuroticism or psychoticism.

Francis and Loudon (2000a) replicated Caird's (1987) study by administering the MOS alongside the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) among a sample of 1,468 Roman Catholic priests engaged in parochial ministry. Their data also demonstrated a positive correlation between mystical orientation and extraversion but no relationship between mystical orientation and either neuroticism or psychoticism.

Edwards and Lowis (2008b) replicated Caird's study by administering the MOS alongside the psychoticism scale of the Eysenck Personality Questionnaire Revised (Eysenck, Eysenck, & Barrett, 1985) and the neuroticism scale of the NEO-PI Form S (Costa & McCrae, 1992). Their sample of 214 participants included Christian Protestants, Jews, Buddhists, and Pagans. Again, this study found no significant correlation (positive or negative) between mystical orientation and either neuroticism or psychoticism.

Francis and Littler (2012) also replicated Caird's study by administering the MOS alongside the short-form Eysenck Personality Questionnaire Revised (Eysenck, Eysenck, & Barrett, 1985) among a sample of 232 Anglican clergymen. Again, this study found no significant correlation (positive or negative) between mystical orientation and either neuroticism or psychoticism.

These consistent findings from six previous studies demonstrating no link between mystical experience and psychopathology across several diverse populations raises a question concerning the generalizability of these findings across other populations. This provides the second research question addressed by the present study, examining the personality correlates of religious experience among three groups of young people: distinguishing between those shaped by the Christian tradition, those shaped by the Muslim tradition, and those shaped by growing up outside a living religious tradition.

Self-Assigned Religious Affiliation

The present study has been designed to address two research questions: concerning the prevalence of mystical experience among young people growing up outside a living religious tradition, compared with those shaped by the Christian tradition and those shaped by the Muslim tradition; and concerning the personality correlates of mystical experience among those three groups of young people. The operationalization of this research question rests, in part, on the coherence of the way in which the three groups of young people are identified and distinguished one from another. The method employed of self-assigned religious affiliation is not uncontested.

An important and powerful attempt to establish self-assigned religious affiliation as a theoretically coherent and socially significant indicator has been advanced by Fane (1999), drawing on Bouma's (1992, p. 110) sociological theory of religions identification, according to which religious affiliation is defined as a "useful social category giving some indication of

the cultural background and general orientating values of a person.” Bouma (1992) then posited a process through which cultural background and general orientating values are acquired and which consists of meaning systems and plausibility structures. He described meaning systems as “a set or collection of answers to question about the meaning and purpose of life” (Bouma, 1992, p.106) and plausibility structures (borrowed from Berger, 1967) as “social arrangements which serve to inculcate, celebrate, perpetuate and apply a meaning system” (Bouma, 1992, p.107). He maintained that people possess meaning systems from which they derive their existential purpose. Although self-assigned religious identity might also imply commitment to a plausibility structure (practice) and adherence to its relating meaning system (belief), Bouma (1992) suggested that it might be equally, perhaps more, significant in terms of the exposure to the particular cultural background that it represents. Crucially, this alternative conceptualization avoids the difficult terrain of religious affiliation as proxy for practice and belief by recognizing that even non-churchgoers and non-believers “may still show the effect of the meaning system and plausibility structure with which they identify” (Bouma, 1992, p.108).

The value of Bouma’s (1992) sociological theory of religious identification is that it allows self-assigned religious affiliation to be perceived, and thus analyzed, as a key component of social identity, in a way similar to age, gender, class location, political persuasion, nationality, and ethnic group (Zavalloni, 1975). Religious affiliation informs our attitudes and, in turn, our modes of behavior by contributing to our self-definition both of who we are, but equally importantly, of who we are not.

Alongside Bouma’s (1992) theory of religious identification, Fane (1999) also drew on Bibby’s (1985, 1987) theory of *encasement* developed from his empirical surveys in Canada. Bibby argued that Canadian Christians are encased within the Christian tradition. In other words, this tradition has a strong influential hold over both its active and latent

members from which affiliates find it extremely difficult to extricate themselves. Contrary to the claims of secularization theorists that low levels of church attendance are indicative of the erosion of religion's social significance (Wallis & Bruce, 1992), Bibby (1985, 1987) argued that this trend is actually a manifestation of the re-packaging of religion in the context of late 20th century consumer-orientated society. Consumers are free to select *fragments* of faith.

Method

Participants

Usable data were provided by a total of 1,296 students. Of these students, 53% were male and 47% female; 13% were aged 14, 37% were aged 15, 30% were aged 16, 15% were aged 17, and 6% were aged 18.

Measures

Religious affiliation. Religious affiliation was assessed by the question, "My personal religion/worldview is ..." followed by a checklist, beginning with *non-religious* and including a range of religious options.

Eysenck Personality Questionnaire Revised (EPQR-A: Francis, Brown, & Philipchalk, 1992). Personality was assessed by the abbreviated form of the Eysenck Personality Questionnaire Revised. This instrument proposes three 6-item measures of extraversion, neuroticism, and psychoticism, together with a 6-item lie scale. Each item is rated on a 2-point scale: yes and no.

Mystical experience. Mystical experience was assessed by an experimental brief 3-item scale designed specifically for the present study to access mystical experience in ways that were not tied to explicit religious traditions and consequently appropriate for use among Christian, Muslim, and religiously unaffiliated students. Drawing on Stace's (1960) analysis of mystical experience, the items were designed to address both introvertive and extrovertive mysticism. The three items defined the following phenomena: feeling oneness with myself

and with all things; feeling everything in the world being part of the same whole; feeling my ownself merging into something greater. Each item was rated on a 5-point Likert-type scale: agree strongly, agree, not certain, disagree, and disagree strongly.

Procedure

Students, between the ages of 14 and 18, attending 12 schools in England and Wales were invited to complete during normal class activities, and under exam-like independence, a survey on religion and values. They were assured of anonymity and confidentiality, and that their responses would not be examined by staff in that school. Students who did not wish their answers to be submitted to the university for analysis were permitted to withdraw them from the survey. Very few students declined to participate.

The following analyses are based on three subsets of the data: 477 students (224 males and 253 females) who identified themselves as Christians, 203 students (111 males, 90 females, and two undisclosed) who identified themselves as Muslims, and 378 students (212 males, 164 females, and two undisclosed) who identified themselves as affiliated with no religion.

Results

The first step in data analysis concerned evaluating the psychometric properties of the new brief measure of mystical experience. Table 1 presents the items of the instrument, together with the correlation between the individual item and the sum of the other items, and

--Insert Table 1 about here --

the alpha coefficient (Cronbach, 1951). The alpha coefficient is satisfactory for such a short scale and each item contributes well to the scale.

The second step in data analysis concerned assessing whether the three groups defined by self-assigned religious affiliation differed in terms of the mean scores recorded on the mystical experience scale or on any of the four measures proposed by the Eysenckian

--Insert table 2 about here--

instrument. These data demonstrated that the religiously unaffiliated group recorded a significantly lower level mean score than either the Christian group or the Muslim group on the mystical experience scale, but there was no significant difference between the Christian and Muslim groups. There were also significant differences between the mean scores recorded by the three groups on the extraversion scale (Christians higher than Muslims), the psychoticism scale (Christians lower than either the non-affiliated or Muslims), and the lie scale (Muslims higher than either the non-affiliated or Christians) but not on the neuroticism scale. While the differences between the three groups are statistically significant, the size of the effects is relatively small.

The third step in data analysis concerned examining the association between mystical experience scores and the four indices of the Eysenckian instrument. Table 3 presents the

--Insert Table 3 about here--

relevant correlation matrices for the three groups of students separately. The key conclusion from these data is that there is no significant correlation between mystical experience scores and either neuroticism scores or psychoticism scores among unaffiliated students, among Christian students, or among Muslim students. Additionally, among the Christian students, there is a significant positive correlation between extraversion and mystical experience

scores, but this finding is replicated among neither the Muslim students nor the unaffiliated students.

Conclusion

This paper set out to address two research questions among three samples of 14- to 18-year-old students: Muslim, Christian, and religiously unaffiliated young people. The first question examined the comparative extent to which the religiously unaffiliated reported mystical experience. The second question examined the association between mystical experience and psychopathology as defined by the psychoticism and neuroticism scales within Eysenck's dimensional model of personality. Three main conclusions emerged from the findings of this study, together with recommendations for future research.

The first conclusion concerns the definition and measurement of mysticism in ways appropriate for comparative research among Muslim, Christian, and religiously unaffiliated young people (and adults). Recognizing that both Hood's Mysticism Scale and Francis and Loudon's Mystical Orientation Scale contained items specifically concerned with the religious interpretation of mysticism, the present study proposed a brief index of mysticism that focused on mystical experience without religious interpretation. The data confirmed the usefulness of this brief instrument for the purposes of comparative research. There are, however, two limitations with this instrument: its brevity and (as a consequence of brevity) the limited range of the components of mysticism sampled. Future research building on this study could consider modifying the Francis-Louden Mystical Orientation Scale (Francis & Loudon, 2000a) in a way that would protect the structural coherence of the instrument but modify the language to ensure comparability of measurement across the religiously affiliated and the religiously unaffiliated.

The second conclusion concerns the levels of mystical experience reported among the religiously unaffiliated. Although the data found a lower level of reported mystical

experience among the religiously unaffiliated compared with Muslim affiliates and Christian affiliates, mean scale score suggest that such experiences were reported by between a quarter and a third of the religiously unaffiliated. The limitation with the present study concerns the relatively restricted range of mystical experience sampled among the group. Future research building on this study and employing a modified form of the Francis-Louden Mystical Orientation Scale among the religiously unaffiliated could begin to map the prevalence of the seven component features of mysticism identified by this instrument.

The third conclusion concerns the hypothesized association between mystical experience and psychopathology. The data found no association between reported mystical experience and psychopathology among the Christian affiliates, the Muslim affiliates, and the religiously unaffiliated. This finding is consistent with the broader literature reviewed above (Caird, 1987; Edwards & Lowis, 2008b; Francis & Loudon, 2000a; Francis & Thomas, 1996; Spanos & Moretti, 1988) that responded to the challenge put forward by Caird (1987) to test the association between mystical experience and psychopathology within the conceptual framework proposed by the Eysenckian dimensional model of personality. The limitation with the present study concerns the very brief measures of psychopathology (neuroticism and psychoticism) provided by the abbreviated form of the Eysenck Personality Questionnaire Revised (Francis, Brown, & Philipchalk, 1992). Future research building on this study and employing a modified form of the Francis-Louden Mystical Orientation Scale could enhance the richness and depth in which neuroticism and psychoticism are explored by employing the scales proposed by the Eysenck Personality Profiler in either its full, short, or abbreviated forms (Francis & Jackson, 2004).

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Table 1

Mystical Experience Scale: Scale Properties

	<i>r</i>
I have had an experience of feeling oneness with myself and all things	.44
I have had an experience of feeling everything in the world being part of the same whole	.50
I have had an experience of feeling my own self merging into something greater	.33
Alpha	.61

Note: *r* represents the correlation between the individual item and the sum of the other two items

Table 2

Mean Scores by Religious Group

Scale	<i>n</i> =	No religion		Christian		Muslim		<i>F</i>
		378		477		203		
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	
Extraversion		4.30	1.91	4.58 [†]	1.73	4.20 [†]	1.70	4.29*
Neuroticism		3.09	1.71	3.14	1.71	2.94	1.60	1.09
Psychoticism		0.94 [^]	1.12	0.60 ^{^†}	0.90	1.00 [†]	1.20	16.25***
Lie scale		1.84 [^]	1.45	2.05 [†]	1.48	2.52 ^{^†}	1.49	14.01***
Mysticism		6.10 ^{^†}	3.88	7.27 [^]	4.42	7.53 [†]	4.07	11.15***

Note. [†]Post-hoc comparisons using Bonferroni alpha test: Within any row, means carrying the same symbols were significantly different from one another at $p < .05$.

*** $p < .001$

* $p < .05$

Table 3

Correlation Matrix for Mystical Experience, Lie Scale, Personality, and Demographic Variables by Religious Group

	Myst	L	P	N	E	Age
<u>No religion (n = 378)</u>						
Sex	.02	.02	-.05	.10*	.24**	.13**
Age	.02	.04	.05	.01	.03	
Extraversion (E)	.08	-.04	.04	-.24***		
Neuroticism (N)	-.03	-.04	-.07			
Psychoticism (P)	.03	-.11*				
Lie scale	.02					
<u>Christian (n = 477)</u>						
Sex	-.10*	.12*	-.15***	.24***	.10*	.20***
Age	-.11*	.07*	.03	.08*	.05	
Extraversion (E)	.10*	.08	.01	-.24***		
Neuroticism (N)	-.08	-.14**	.00			
Psychoticism (P)	.08	-.24**				
Lie scale	.02					
<u>Muslim (n = 203)</u>						
Sex	-.04	.13	-.24***	.18**	.05	.25***
Age	-.00	.08	-.03	-.08	.03	
Extraversion (E)	.12	-.14*	.04	.08		
Neuroticism (N)	.12	-.15*	.05			
Psychoticism (P)	.00	-.17*				
Lie scale	.08					

Note. *** $p < .001$, ** $p < .01$, * $p < .05$