Mystical orientation, mystical experience, and mysticism: psychological perspectives
Abstract

Since the pioneering work of William James at the dawn of the twentieth century, psychologists have been interested in the study of mysticism, with the consequence that mysticism is now the aspect of religious experience most adequately and most comprehensively discussed within the psychology of religion. The aims of this paper are threefold. First, attention is given to the detailed international research literature on the psychology of the three constructs identified as mystical orientation, mystical experience, and mysticism. Emphasis is placed 1) on the conceptualisation of Stace and the operationalisation afforded by the Hood Mysticism Scale, and 2) on the conceptualisation of Happold and the operationalisation afforded by the Francis-Louden Mystical Orientation Scale. Second, the new data concerning mysticism from the Religious Experience in Contemporary Taiwan survey are employed to construct the Index of Mystical Experience in Taiwan (IMET). Third, this new instrument is employed to examine the connections between mystical experience and individual differences of sex, age, education, religious identity and religious belief.
Introduction

The notion of religious experience proposes an intriguing and extremely broad concept that can be (and has been) studied from a wide variety of disciplinary (and interdisciplinary) perspectives. This basic point is well illustrated by the extraordinary bibliography offered by Grahame Miles (2007) in his book *Science and Religious Experience*. The academic study of religious experience is clearly at home within the domain of theology and religious studies, but practitioners in these disciplines have no monopoly on such a broad concept. History, philosophy, anthropology, sociology, and psychology (to name but some disciplines) may also have a part to play in the interdisciplinary examination of a field that is (so some would claim) core to understanding what it is to be human.

The aim of the present study is to examine how one scientific tradition established within the psychology of religion sets about discussing and examining religious experience and to assess the extent to which this tradition can work with the data collected by the Religious Experience Survey in Taiwan (REST). From the outset it needs to be recognised that the REST project was not established with this precise and particular perspective in mind. The analysis will consequently be both partial and programmatic: partial in the sense that all the desired variables are not in the existing data; programmatic in the sense that the analysis may stimulate the inclusion of variables shaped by the research tradition within the future family of studies of which the Taiwan project is part.

The scientific tradition in which the present study is based is rooted in a quantitative approach within social psychology and draws on the traditions of psychometrics and the measurement of individual differences. The tradition was shaped in a British context to embrace the psychology of religion by Michael Argyle, a good friend of the Alistair Hardy Religious Experience Research Centre (see Argyle 1958; Argyle & Beit-Hallahmi, 1975; Beit Hallahmi & Argyle, 1997). The tradition is now best exemplified by the fourth edition of the

The quantitative approach within the social psychology of religion begins by recognising and acknowledging the key contribution made by the pioneering researchers who honed single well-defined survey questions and ensured that these same questions were embedded in a series of surveys, generating comparative empirical data. In particular 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 closed to a powerful spiritual force that seemed to lift you out of yourself?’ Working within the tradition of Alastair 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?’

While these questions are (within their own terms) very useful, interpreting what they mean to respondents is nonetheless problematic. Two of them contain the word ‘God’, one ‘religious’, and one ‘spiritual’. It is not unlikely that such words are interpreted differently by different people. One response to the problem advanced within the social psychology of religion has recognised the diversity of phenomena embraced by the notion of religious experience, identified and defined more clearly some of the components within this diversity, and established well-calibrated instruments to operationalise these definitions. Within the scope of this kind of response to the problem of studying religious experience, the greatest effort and greatest advance (so far) has been located within the discussion of mystical orientation, mystical experience and mysticism.
Mysticism has been a topic of central interests to the psychology of religion from the very early days of the discipline. In his foundational study, *The varieties of religious experience*, James (1982, p. 301) referred to mysticism as ‘the root and centre’ of religion. Subsequently (and independently) two philosophically-based approaches have analysed, identified and discussed the recognised components of mysticism: one by Stace (1960) and one by Happold (1963). Stace’s framework was adopted by Hood (1975) to form the theoretical basis for the Hood Mysticism scale (M Scale). Happold’s framework was adopted by Francis & Louden (2000a) to form the basis of the Francis-Louden Mystical Orientation Scale (MOS) and the subsequent Short Index of Mystical Orientation (SIMO) reported by Francis and Louden (2004).

The present paper proposed to review in turn the Hood Mysticism Scale (built on Stace’s conceptualisation) and the Francis-Louden Mystical Orientation Scale (built on Happold’s conceptualisation). Then attention will be drawn to the kind of knowledge that can be generated by applying instruments of this nature within the wider context of the individual differences approach within social psychology. The first example selected to illustrate this approach concerns the way in which scale scores facilitate comparisons to be made between different groups of people. The second example concerns the classic question regarding the connection between mysticism and psychopathology. The third example concerns whether there are some normal personality profiles that are more open to mystical experience than others.

**Working with Stace’s definition**

Stace maintained that mysticism could be addressed in terms of an introvertive experience of unity (according to which the individual experiences a unity that involves the dissolution of the empirical self), and an extrovertive experience of unity (according to which the individual perceives a unity of all things). According to Stace both forms of mysticism
embraced a core of five characteristics in common, although not all characteristics are present in every case. These five characteristics are: a sense of objectivity or reality; feelings of blessedness, joy, peace, satisfaction, happiness; feeling that what is apprehended is holy, sacred, or divine; paradoxicality (for example God is closer than the air you breathe and further away than the most distant planet); and the experience is ineffable (it cannot be adequately put into words).

Additionally, Stace lists the common characteristics of extrovertive mysticism as follows:

- The unifying vision, which is expressed in the formula ‘All is One’. The ‘One’ may be perceived through the physical senses in or through the multiplicity of objects (p. 79).
- A person grasps the ‘One’, which is described as life, consciousness or living Presence, as the inner subjectivity of all things. Nothing is dead (p. 79).

According to Miles (2007, p. 218) extrovertive mysticism looks through the physical senses into the external world and finds the ‘One’ there. If one looks at glass, wood and stone, conceptual understanding identifies three objects, but if one passes beyond sensori-intellectual consciousness into mystical consciousness, then one sees these things as ‘all one’. In extrovert mysticism, the distinction between three things does not disappear but they are at-one, and the experience is at-one with them.

Additionally, Stace lists the common characteristics of introvertive mysticism as follows:

- The Unitory Consciousness from which all ... sensuous or conceptual or empirical content has been excluded, so that there remains only a void or empty unity (p. 111).
• Being, non-spatial and non-temporal (p. 111).

According to Miles (2007, p. 218) introvertive mysticism is characterised by an absence of all sensation through the physical senses, and by the exclusion from consciousness of all sensual images, i.e. ‘abstract thoughts, reasoning processes, volitions, and other particular mental contents.’ This leaves a complete sense of emptiness in a void which the mystic describes as ‘a state of pure consciousness’.

Hood's Mysticism Scale (M Scale) consists of 32 items (16 positively worded and 16 negatively worded items), covering all but one (paradoxicality) of the original common-core criteria of mysticism proposed by Stace. Independent investigators (Caird, 1988; Hood, 1975; Reinert & Stifler, 1993) have identified two factors to the M Scale. For our purposes, it is important to note that Factor I consists of items assessing an experience of unity (introvertive or extrovertive), while Factor II consists of items referring to interpretation of these experiences. This is compatible with Stace’s claim that a common experience (mystical experience of unity) may be variously interpreted. Hood’s Mysticism Scale has been used in a range of studies including Hood (1976, 1977), VandeCreek (1998), Mercer & Durham (1999), Byrd, Lear, & Schwenka (2000), Hood, Ghorbani, Watson, Ghamaleki, Bing, Davison, Morris, & Williamson (2001), Lazar (2004), Lazar and Kravetz (2005a, 2005b), Ghorbani & Watson (2009), and Byrom (2009).

**Working with Happold’s definition**

Happold’s definition of mysticism embraces seven key characteristics, the first four of which were taken directly from James (1982): ineffability, noesis, transiency, passivity, consciousness of the oneness of everything, sense of timelessness, and true ego. The Francis-Louden Mystical Orientation Scale (MOS) identified three indicators of each of these seven characteristics in order to construct a 21-item measure.
Ineffability is a negative description emphasising the private or incommunicable quality of mystical experience. According to James (1982, p. 380), those who have this kind of experience report that ‘it defies expression, that no adequate report of its content can be given in words’. The MOS accesses ineffability with items like ‘experiencing something I could not put into words’.

Noesis emphasises how mystical experiences carry states of insight into levels of truth inaccessible to the discursive intellect. According to James (1982, pp. 380-381), those who have this kind of experiences regard them ‘to be also states of knowledge ... They are illuminations, revelations, full of significance and importance, all inarticulate though they remain.’ The MOS accesses noesis with items like ‘knowing I was surrounded by a presence’.

Transiency emphasises how mystical experience is brief, inconstant, and intermittent. According to James (1982, p.381), mystical states do not endure for long though they may recur ‘and from one recurrence to another it is susceptible of continuous development in what is felt as an inner richness and importance.’ The MOS accesses transiency with items like, ‘the passing moments of divine revelation’.

Passivity emphasises both the experience of being controlled by a superior power, and the undeserved, gratuitous nature of the mystical experience. According to James (1982, p. 381), mystical states are ‘not passive interruptions, an invasion of the subject’s inner life with no residual recollection of significance, and this distinguishes them from phenomenon like prophetic speech, automatic writing, and mediumistic trance’. The MOS accesses passivity with items like, ‘being grasped by a power beyond my control’.

Consciousness of the oneness of everything emphasises how mystical experience conveys the sense in which existence is perceived as a unity. According to Happold (1963, p.47), although it may be expressed in different ways by Hindu, Sufi and Christian
contemplatives, the resolution of the dilemma of duality through this sense of the oneness of everything ‘is at the heart of the most highly developed mystical consciousness’. The MOS accesses consciousness of the oneness of everything with items like, ‘sensing the unity of all things’.

*Sense of timelessness* emphasises how mystical experiences appear to have a timeless quality and to occupy an entirely different dimension from that of any known sense of time and to be wholly unrelated to anything that can be measured by what is known as clock-time. According to Happold (1963, p.48), ‘the mystic feels himself to be in a dimension where time is not, where “all is always now”.’ The MOS accesses sense of timelessness with items like, ‘being conscious only of timelessness and eternity’.

*True ego* emphasises how mystical experience speaks to the deep, the true inner-self, and how such experience addresses the soul or the inner spirit. According to Happold (1963, p.48) mystical experience gives rise to ‘the conviction that the familiar phenomenal *ego* is not the real *I*.’ The MOS accesses this notion of the true ego with items like, ‘feeling my everyday self absorbed in the depths of being’.

In the foundation paper for the Mystical Orientation Scale, Francis and Louden (2000a) draw on data provided by a sample of 1,468 Roman Catholic Priests in England and Wales. All 21 items loaded highly (between .46 and .79) on the first factor of the unrotated solution proposed by principal component analysis, and generated an alpha coefficient of internal consistency reliability of .94 (Cronbach, 1951). In a second study, Bourke, Francis, and Robbins (2004) checked the internal consistency reliability of the MOS among a sample of 168 church musicians (130 men and 38 women). In this new study, the 21 items also generated an alpha coefficient of .94, with the item rest-of-scale correlations ranging between .45 and .78. In addition to these two studies, the Mystical Orientation Scale and the Short Index of Mystical Orientation have been used in a range of studies, including Francis and
Thomas (1996), Francis and Louden (2000b), Francis (2002), Francis, Village, Robbins, and Ineson (2007), Edwards and Lowis (2008a, 2008b), Francis, Littler, and Robbins (in press), and Francis, Robbins, and Cargas (in press). While the Mystical Orientation Scale was originally constructed to identify mystical orientation within a Christian context, a modified form of the instrument is currently being tested in Hindu, Islamic, Jewish, and secular contexts.

Measurement in psychology

The Hood Mysticism Scale and the Francis-Louden Mystical Orientation Scale provide two examples of robust instruments of measurement within the individual differences approach to the psychology of religion. Such instruments have been designed to be both valid and reliable. A valid instrument is one that has been shown to measure what it claims to measure. A reliable instrument is one that has been shown to generate consistent readings. The theory of psychological measurement (psychometrics) maintains that the multiple items used to create a scale sample a wider and more stable domain than that assessed by single-item measures. Scale scores are consequently less volatile and more dependable than the percentage responses generated from single questions. One way of conceptualising scale measurements is through analogy with the thermometer.

Consequently scales can be used to ‘take the temperature’ of defined psychological constructs within different groups and allow comparisons to be made between groups. For example, comparison between the two sets of scores provided by Francis and Louden (2000a) among Roman Catholic priests and by Bourke, Francis, and Robbins (2004) among church musicians revealed higher levels of mystical orientation among the musicians than among the priests. Comparison between the three sets of scores provided by Francis (in press) among Christian, Muslim and secular young people revealed lower levels of mystical orientation among the secular young people.
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 association 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 Hans Eysenck and his associates (see Eysenck & Eysenck, 1975).

Two specific features of Eysenck’s dimensional world of personality are of particular relevance in this respect. First, Eysenck maintains 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 summarised 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 operationalised 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 characterised 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 characterised 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 & Eysenck (1975) suggest 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 characterised 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 ides 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 cites Malsow (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 & Louden, 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 Louden (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) also 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 (in press) took this research tradition one step further by employing a short (and experimental) scale of mystical experience that would function across religiously diverse populations, alongside the abbreviated form of the Eysenck Personality Questionnaire Revised (Francis, Brown, & Philipchalk, 1992) among three samples of young people between the ages of 14 and 16 year: 477 students (224 males and 253 females) who identified themselves as Christians, 203 students (111 males, 90 females, and 2 undisclosed) who identified themselves as Muslims, and 378 students (212 males, 164 females, and 2 undisclosed) who identified themselves as affiliated with no religion. 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.

These consistent findings from six previous studies demonstrating no link between mystical experience and psychopathology across several diverse populations demonstrate the value of patient replication studies designed to build up an integrated body of knowledge within the measurement-based individual differences approach to the social psychology of religion. Further replication studies nevertheless remain desirable.

**Mysticism and normal psychology**
A second key question throughout the literature on mysticism concerns whether within the range of normal personality there are some personality profiles that are more open to mystical experience than others. One set of studies that has addressed this questions has drawn on the model of personality initially advanced by Carl Jung (1971) in his study of psychological types, and developed and operationalised by instruments like the Myers Briggs Type Indicator (Myers & McCaulley, 1985), the Keirsey Temperament Sorter (Keirsey, 1998), and the Francis Psychological Type Scales (Francis, 2005). These instruments are designed to distinguish between two perceiving functions (sensing and intuition), two judging functions (thinking and feeling), two orientations (introversion and extraversion) and two attitudes toward the outer world (judging and perceiving). These instruments are designed primarily to categorise individuals within dichotomous psychological types, not to locate individuals along dimensions of personality.

The two perceiving processes are defined as sensing (S) and intuition (N). Sensers perceive their environment through their senses and focus on the details of the here and now, while intuitives perceive their environment by making use of the imagination and inspiration. Sensers are distrustful of jumping to conclusions and of envisioning the future, while intuitives are overloaded by too many details and long to try out new approaches.

The two judging processes are defined as thinking (T) and feeling (F). Thinkers reach their judgements by relying on objective logic, while feelers reach their judgements by relying on subjective appreciation of the personal and interpersonal factors involved. Thinkers strive for truth, fairness, and justice, while feelers strive for harmony, peace, and reconciliation.

The two orientations are defined as introversion (I) and extraversion (E). Introverts draw their energy from the inner world of ideas, while extraverts draw their energy from the outer world of people and things. Extraverts are energised by people and drained by too much solitude, while introverts are energised by solitude and drained by too many people.
The two attitudes toward the outer world are defined as judging (J) and perceiving (P). Judgers use their preferred judging process (either thinking or feeling) to deal with the outside world. Their outside world is organised, scheduled, and planned. Perceivers use their preferred perceiving process (either sensing or intuition) to deal with the outside world. Their outside world is flexible, spontaneous, and unplanned.

The set of studies concerned with the connection between Jungian psychological type and mysticism was motivated by Christopher Ross’ thesis regarding the centrality of the perceiving process (the sensing function and the intuitive function) in shaping individual differences in religious experience, expression and belief. (Ross, 1992). In his initial empirical examinations of this thesis, Ross began to chart the distinctive profiles of religiosity among sensing types and among intuitive types. For example, Ross, Weiss and Jackson (1996) found intuitives contrasted to sensers in terms of greater comfort with regard to complexity of religious belief, while sensers tended to be more definite in regard to what counted as religious to them. Sensers evidenced firmer boundaries between what was secular and what was sacred. Intuitives showed a more welcoming attitude toward religious change, viewing new insights as essential for a healthy religious life and narrow minded religion as a significant problem. Sensing types by contrast saw religious change as a problem, and change in personal faith as an indication of weakness. Ross and Jackson (1993) concluded in their study of Catholics that the pattern of responses to individual items suggested that religion functioned in different ways for sensing and for intuitive types. According to this study religion tended to function as a guide to right living for sensers, and as a source of insight for intuitives. Studies of college students by Burris and Ross (1996) confirmed the relevance of the perceiving preference of sensing or intuition for orientation to religion, even among less religiously committed groups.
In a subsequent paper, Francis and Ross (1997, p.95) set out to examine differences between sensing types and intuitive types with regard to preferences in Christian spirituality, and to test the following two specific hypotheses.

As consistent with a preference for more traditional patterns of worship and more conservative forms of belief, it is hypothesised that sensers will display a greater preference for traditional expressions of Christian spirituality (like church attendance and personal prayer) in comparison with intuitives, while intuitives will display a greater openness to the experiential aspects of spirituality (like witnessing a fine sunset or being inspired by a star filled sky) in comparison with sensers (Francis and Ross, 1997:95).

Ross’ general theory that the perceiving process (sensing or intuition) plays a central role in predicting preferred ways of being religious or expressing religiosity, together with the findings presented by Francis and Ross (1997) that intuitives show a higher appreciation than sensers of experiential spirituality, leads to the clear hypothesis that intuitives will record higher scores than sensers on the indices of mystical orientation.

So far five studies have examined the association between scores recorded on the MOS or the SIMO and individual differences recorded on the Jungian perceiving process. Two of these studies employed the SIMO. Francis and Louden (2000b) administered the SIMO together with the Keirsey Temperament Sorter (Keirsey, 1998) to a sample of 100 student and adult churchgoers. These data supported Ross’ hypothesis with significantly higher scores of mystical orientation reported among intuitive types (M = 30.6, SD = 7.5) than among sensing types (M = 25.6, SD = 8.7). Francis (2002) administered the SIMO together with the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) to a sample of 543 participants attending workshops concerned with personality and spirituality. These data did
not support Ross’ hypothesis with no significant differences reported between intuitive types (M = 30.2, SD = 7.6) and sensing types (M = 29.0, SD = 7.7).

The other three studies employed the MOS. Francis, Village, Robbins, and Ineson (2007) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 318 guests who had stayed at a Benedictine Abbey. These data supported Ross’ hypothesis with significantly higher scores of mystical orientation reported among intuitive types (M = 77.9, SD = 17.4) than among sensing types (M = 71.4, SD = 18.3). Francis, Robbins, and Cargas (in press) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 580 participants from a range of religious and spiritual traditions attending the Parliament of the World’s Religions in Barcelona, 2004. Again these data supported Ross’ hypothesis with significantly higher scores of mystical orientation reported among intuitive types (M = 78.7, SD = 18.5) than among sensing types (M = 71.3, SD = 15.8). Francis, Littler, and Robbins (in press) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 232 Anglican clergymen serving in the Church in Wales. Again, these data supported Ross’ hypothesis with significantly higher scores of mystical orientation reported among intuitive types (M = 65.1, SD = 15.8) than among sensing types (M = 59.9, SD = 15.1).

Once again, further replication studies remain desirable to build on the foundation laid by these five studies.

Religious Experience Survey in Taiwan

The Religious Experience Survey in Taiwan was not established to stand within the research tradition developed by the individual differences approach to the psychology of religion. For that reason it includes neither the Hood Mysticism Scale nor the Francis-Louden Scale of Mystical Orientation. The questionnaire does, however, contain a well-designed set
of items concerned with accessing aspects of mystical experience. The first research aim of the present paper is to test the scaling properties of these items and to propose an Index of Mystical Experiences in Taiwan (IMET).

The Religious Experience Survey in Taiwan was not established to test psychologically-informed theories regarding the connections between mystical experience and either psychopathology or normal personality difference. For this reason it includes neither the Eysenck Personality Questionnaire nor the Francis Psychological Type Scales. The questionnaire does, however, contain a well-designed set of items concerned with the demographic profile of the participants. The second research aim of the present paper is to test the associations between scores recorded on the new Index of Mystical Experience in Taiwan and such factors as sex, age, years of education, religious identity, and religious belief.

**Method**

**Procedure**

The Religious Experience Survey in Taiwan questionnaire was based closely on the earlier work conducted in China as reported by Yao and Badham (2007) among the Han Chinese. The sampling frame was island-wide and comprised a stratified probability-sample of adults (18 years and above). It was based on household registration records and was followed by a three-stage sampling with probability proportionate to size. The final completed sample size was 1,714.

**Measures**

In addition to sex, year of birth, and years of education received, the following measures were extracted from the survey to use in the present analysis.

*Mystical experience* was assessed in the survey within the context of 14 items concerned with ‘mystical or extraordinary feelings’. These items were rated twice. The first
time respondents were asked to rate whether they have had such experiences on a five-point scale: frequently, sometimes, once or twice, never, or unable to determine. The second time respondents were asked to rate whether they might have such experiences in the future on a five-point scale: totally possible, relatively possible, relatively impossible, totally impossible, and unable to determine.

Religious identity was accessed in the survey by eight pre-coded categories in response to the question ‘What is your religion?’: none, popular religion, Buddhism, Taoism, I-Kuan Tao, Catholicism, Protestantism, Buddhism-Taoism combined. These categories were followed by the open option ‘other’ and by ‘unable to determine’.

Religious belief was accessed in the survey by the question ‘How would you describe your current degree of religiousness?’ rated on a six-point scale: I completely believe, I believe, I somewhat believe, I do not really believe, I do not believe at all, and unable to determine.

Analysis

The data were analysed by SPSS employing the frequency, reliability, and analysis of variance routines.

Results

Stage one of data analysis examined the scaling properties of the items related to ‘mystical or extraordinary feelings’. Conceptually seven of the 14 items were consistent with a broad definition of mysticism, while the other items were not consistent with a broad definition of mysticism, but related either to specific religious traditions (referring to Jesus or the Buddha) or to extraordinary experiences (referring to involuntary trembling, spirit possession, or powers to predict the future). Statistically the data on past experience were more powerful than the data on future potential.
Table 1 presents the scale properties for the seven items selected to constitute the
Index of Mystical Experience in Taiwan (IMET) in terms of the correlation between each
item and the sum of the remaining six items, the alpha coefficient (Cronbach, 1951) and the
percentage item endorsement. The alpha coefficient, well in excess of the threshold of .65
recommended by DeVellis (2003), demonstrates that the scale possesses a high level of
internal consistency reliability. The item rest-of-scale correlations demonstrate that each item
is contributing to the overall scale score. The percentage endorsements demonstrate a
relatively low level of reported mystical experience among this population.

According to these data, just 9% have experienced being touched by something
mystical or extraordinary; 11% have experienced forgetting themselves and becoming one
with nature and the universe; 11% have experienced seeing mystical or extraordinary objects
or visions; 13% have experienced hearing mystical or extraordinary sound or music; 15%
have experienced some mystical or extraordinary scent; 18% have experienced some sudden
mystical or extraordinary warmth or cold all over; and 27% have experienced a sudden
revelation or insight.

Stage two of data analysis examined the association between mean scores recorded on
the Index of Mystical Experience in Taiwan and the selected variables concerned with the
demographic profile of the participants. These data are presented in Table 2. The following

conclusions emerge from these data. First, there is no significant difference between the mean
scale scores of mystical experience recorded by men and women. Second, the year of birth is
a significant predictor of scores recorded on the index of mystical experience. Overall, higher
scores are recorded by those born in the 1950s, 1960s and 1970s compared with those born
before 1950. Third, the number of years spent in education is a significant predictor of scores
recorded on the index of mystical experience. Overall, those who have received at least ten years of education recorded higher scores than those who received under ten years of education. Fourth, religious identity is a significant predictor of scores recorded on the index of mystical experience. The highest scores are among those who identify (in descending order) with Protestantism, Buddhism and Taoism combined, Buddhism, and Taoism. The lowest scores are among those who identify (in ascending order) with popular religion and no religion. Fifth, religious belief is a significant predictor of scores recorded on the index of mystical experience. The mean scores of mystical experience follow (in descending order) the clarity of belief: I completely believe, I believe, I somewhat believe, I do not really believe, and I do not believe at all.

Conclusion

The first aim of this paper was to summarise and to review the psychological approach to mystical orientation, mystical experience and mysticism shaped within the psychometric tradition of individual differences research. Particular attention has been given to the perspectives promoted by the Hood Mysticism Scale and by the Francis-Louden Mystical Orientation Scale, and to the application of such instruments in addressing questions concerned with the relationship between mysticism and psychopathology and with the relationship between mysticism and psychological type.

The second aim of this paper was to assess the extent to which the data generated by the Religious Experience Survey in Taiwan was amenable to interrogation from this perspective. Three main conclusions emerge from the analysis of the Taiwan data.

The first conclusion is that it has been possible to retrieve from the data a seven-item instrument styled Index of Mystical Experience in Taiwan (IMET). This new instrument shows good psychometric properties in terms of high internal consistency reliability that
commend it as a suitable tool to sustain further analysis and interrogation. There are nonetheless two limitations with this instrument.

The first limitation is that, being a new instrument specially derived from the Taiwan data, it cannot facilitate direct comparison with data generated by studies employing the more widely used Hood Mysticism Scale or Francis-Louden Mystical Orientation Scale. The second limitation concerns the content of the scale items. These items have not been generated to map a conceptually defined field in the way in which Hood drew on Stace’s model or Francis and Louden drew on Happold’s model. The way in which five of the items include not only the word ‘mystical’ but also the word ‘extraordinary’ may have opened these items to multiple interpretations by the participants. There is the added problem for the author working with translated texts in which ‘mystical’ and ‘mysterious’ seem to be employed as synonyms. Moreover, the way in which the items included the word ‘mystical’ may itself be problematic, on the grounds that some people may be more open to reporting the core components of mystical experience than to owning the description of these experiences as mystical.

The second conclusion is that the number of individuals in Taiwan who acknowledge and report the kind of experiences listed in the new Index of Mystical Experience in Taiwan appears to be quite small. Given that these precise questions have not been taken from instruments used elsewhere the comparison with other groups is somewhat precarious. Nonetheless, the item ‘Forgetting oneself and becoming one with nature and the universe’ used in Taiwan is quite similar to the item ‘I have had an experience of feeling oneness with myself and with all things’ used in England and Wales by Francis (in press). While only 10% of the Taiwan participants reported this experience, in England and Wales it was reported by 31% of those who identified with no religious group, by 35% of Christians and by 39% of Muslims.
The third conclusion is that the related variables concerned with the demographic profile of the participants provide some predictive power regarding individual differences in mystical experience scores. Higher levels of acknowledged and reported mystical experience are found among those born after 1950 compared with those born earlier than 1950, among those who have experienced at least ten years of education compared with those who have experienced less than ten years of education, among those who hold religious belief compared with those who hold no religious belief, and among those who identify with Protestantism, Buddhism and Taoism combined, Buddhism and Taoism, compared with those who identify with no religion or with popular religion. These data help to nuance the contours of mystical experience in Taiwan as defined by the Index of Mystical Experience in Taiwan. At the same time, among these participants there were no significant sex differences in acknowledged and reported levels of mystical experience.

Given the apparent fruitfulness of the individual differences approach to interrogating and illuminating one aspect of religious experience in Taiwan (mystical experience), future research conducted on this topic within this context may wish to consider embracing such a perspective with the formative research design.

Acknowledgment

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Table 1

*Index of Mystical Experience in Taiwan (IMET): scale properties*

<table>
<thead>
<tr>
<th>Experience</th>
<th>r</th>
<th>some %</th>
<th>once %</th>
<th>never %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgetting oneself and becoming one with nature and the universe</td>
<td>.45</td>
<td>3</td>
<td>7</td>
<td>89</td>
</tr>
<tr>
<td>Having a sudden revelation or insight</td>
<td>.51</td>
<td>12</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>Hearing mystical or extraordinary sound or music</td>
<td>.58</td>
<td>3</td>
<td>10</td>
<td>86</td>
</tr>
<tr>
<td>Seeing mystical or extraordinary objects or visions</td>
<td>.56</td>
<td>3</td>
<td>8</td>
<td>88</td>
</tr>
<tr>
<td>Smelling mystical or extraordinary scent</td>
<td>.51</td>
<td>5</td>
<td>10</td>
<td>84</td>
</tr>
<tr>
<td>Experiencing sudden mystical or extraordinary warmth or cold all over</td>
<td>.55</td>
<td>5</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td>Being touched by something mystical or extraordinary</td>
<td>.54</td>
<td>2</td>
<td>7</td>
<td>90</td>
</tr>
</tbody>
</table>

alpha = .79

Note: the items were rated on frequency of experience
some = frequently or sometimes; once = once or twice
percentages do not add to 100 because ‘the unable to determine’ responses have been omitted from the table.
r = the correlation between the individual item and the sum of the other six items.
N = 1711 cases
Table 2

*Index of Mystical Experience in Taiwan (IMET): mean scores*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total group</td>
<td>1711</td>
<td>8.92</td>
<td>3.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Differences by sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>842</td>
<td>8.79</td>
<td>3.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>869</td>
<td>9.05</td>
<td>3.72</td>
<td>2.44</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Differences by year of birth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1930</td>
<td>228</td>
<td>8.17</td>
<td>2.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1930s</td>
<td>226</td>
<td>8.67</td>
<td>3.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940s</td>
<td>334</td>
<td>8.52</td>
<td>2.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950s</td>
<td>353</td>
<td>9.38</td>
<td>3.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960s</td>
<td>300</td>
<td>9.15</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td>270</td>
<td>9.43</td>
<td>3.87</td>
<td>5.87</td>
<td>.001</td>
</tr>
<tr>
<td><strong>Differences by years of education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>under 10 years</td>
<td>527</td>
<td>8.64</td>
<td>3.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 years or more</td>
<td>1047</td>
<td>9.18</td>
<td>3.65</td>
<td>8.07</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Differences by religious identity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>263</td>
<td>8.44</td>
<td>2.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>popular religion</td>
<td>657</td>
<td>8.34</td>
<td>2.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddhism</td>
<td>319</td>
<td>9.47</td>
<td>3.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taoism</td>
<td>224</td>
<td>9.18</td>
<td>3.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-Kuan Tao</td>
<td>41</td>
<td>8.61</td>
<td>2.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholicism</td>
<td>23</td>
<td>8.61</td>
<td>2.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestantism</td>
<td>62</td>
<td>10.85</td>
<td>5.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddhism-Taoism combined</td>
<td>87</td>
<td>10.31</td>
<td>5.10</td>
<td>8.67</td>
<td>.001</td>
</tr>
<tr>
<td><strong>Differences by religious belief</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I completely believe</td>
<td>291</td>
<td>10.45</td>
<td>5.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe</td>
<td>545</td>
<td>8.99</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I somewhat believe</td>
<td>644</td>
<td>8.41</td>
<td>2.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not really believe</td>
<td>149</td>
<td>8.30</td>
<td>2.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not believe at all</td>
<td>53</td>
<td>7.70</td>
<td>1.38</td>
<td>16.82</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note: N = 1711; the sum of the groups fall short of this N to reflect missing data or the response ‘unable to determine’