

Francis, Leslie J., Village, Andrew ORCID
logoORCID: <https://orcid.org/0000-0002-2174-8822> and Powell,
Ruth (2017) Quest religious orientation among church leaders in
Australia: A function of psychological predisposition or openness to
mystical experience? *Psychology of Religion and Spirituality*.

Downloaded from: <https://ray.yorks.ac.uk/id/eprint/2010/>

The version presented here may differ from the published version or version of record. If
you intend to cite from the work you are advised to consult the publisher's version:
<http://psycnet.apa.org/psycarticles/2017-18887-001>

Research at York St John (RaY) is an institutional repository. It supports the principles of
open access by making the research outputs of the University available in digital form.
Copyright of the items stored in RaY reside with the authors and/or other copyright
owners. Users may access full text items free of charge, and may download a copy for
private study or non-commercial research. For further reuse terms, see licence terms
governing individual outputs. [Institutional Repository Policy Statement](#)

RaY

Research at the University of York St John

For more information please contact RaY at ray@yorks.ac.uk

Quest religious orientation among church leaders in Australia: A function of psychological
predisposition or openness to mystical experience?

Leslie J Francis*

University of Warwick, UK

Andrew Village

York St John University, UK

Ruth Powell

NCLS Research / Australian Catholic University, Australia

Author note:

*Corresponding author:

Leslie J Francis

Warwick Religions & Education Research Unit

Centre for Education Studies

The University of Warwick

Coventry CV4 7AL United Kingdom

Tel: +44 (0)24 7652 2539

Fax: +44 (0)24 7657 2638

Email: leslie.francis@warwick.ac.uk

Abstract

Quest religious orientation among church leaders signifies a style of leadership committed to religious explorations more than to religious certainties. This study sets out to explore the extent to which quest religious orientation among religious leaders is a function of psychological predisposition (conceptualized in terms of psychological type theory) or a function of distinctive forms of religious experience (conceptualized in terms of Happold's model of mysticism) among a sample of 1,265 church leaders who participated in the 2011 Australian National Church Life Survey. The data demonstrated that higher levels of mystical orientation were associated with psychological predisposition, involving extraversion, intuition, feeling and perceiving. After controlling for sex, age, education, denominational groups and psychological type, higher levels of mystical orientation were also associated with higher levels of quest religious orientation. Mystical orientation partly mediated the effect of intuition on quest orientation, but psychological preferences (for intuition and for perceiving) and mystical orientation seemed independently to promote quest religious orientation. Thus, church leaders committed to religious explorations rather than to religious certainties seemed to have been shaped both by psychological predisposition and by distinctive forms of religious experience.

Keywords: Australian National Church Life Survey, clergy studies, mysticism, religious orientation, psychology of religion.

Introduction

Religious orientation theory

Religious orientation theory has its roots within the pioneering work of Allport (1966) and Allport and Ross (1967) who distinguished between two motivational bases for being religious, or between two religious orientations, that they styled intrinsic religiosity and extrinsic religiosity. For Allport (1966, p. 454) this distinction separated churchgoers whose church membership supported and served other, non-religious ends, from those for whom religion is an end in itself, that is to say individuals for whom their religion is a final good not an instrumental good. Allport and Ross (1967) proposed two scales to measure their construct of intrinsic (9 items) and extrinsic (11 items) religious orientations.

Somewhat later, Batson and Ventis (1982) critiqued Allport and Ross's model and proposed adding a third religious orientation that they styled quest religiosity. For Batson and Ventis the quest orientation gave recognition to a form of religiosity that embraces complexity, doubt, tentativeness, and honesty in facing existential questions. According to Batson and Ventis an individual who approaches religion with the quest orientation:

recognizes that he or she does not know, and probably will never know, the final truth about such matters. But still the questions are deemed important, and however tentative and subject to change, answers are sought. There may not be a clear belief in a transcendent reality, but there is a transcendent, religious dimension to the individual's life. (Batson & Ventis, 1982, p. 150)

Batson and Ventis (1982, p. 145) also provided a six-item instrument to measure the quest orientation. Subsequently, Batson and Schoenrade (1991a, 1991b) developed and tested a longer 12-item scale.

More recently, Francis (2007) revisited the conceptualizations offered by Allport and Ross (1967) of intrinsic and extrinsic religiosity and by Batson and Ventis (1982) and Batson

and Schoenrade (1991a, 1991b) of quest religiosity, in order to propose the New Indices of Religious Orientation in which each of the three orientations was conceptualized as comprising three components and each component was operationalised through three items. Within this new conceptualization, quest orientation comprised the three components of existentialism, self-criticism, and openness to change. The following three items illustrate these components: 'I was driven to ask religious questions by a growing awareness of the tensions in my world' (existentialism); 'I value my religious doubts and uncertainties' (self-criticism); and 'I am continually questioning my religious beliefs' (openness to change).

When religious orientation theory is applied to church leaders, the quest religious orientation signifies a style of leadership committed more to religious explorations than to religious certainties, a style of leadership that could be more inclined to lead others to ask religious questions than to accept religious dogmas. Understanding the factors that may contribute to shaping religious leaders of this distinctive religious orientation may be of interest both to the psychology of religion and to the field of practical and empirical theology. The aim of the present paper is to test two competing theories that the quest religious orientation may be a function of psychological preference or a function of distinctive forms of religious experience. In this context psychological preference will be conceptualized in terms of psychological type theory and distinctive religious experience conceptualized in terms of mystical orientation or openness to mystical experience. Each field will be examined in turn.

Psychological type theory

Psychological type theory has its roots within the pioneering work of Jung (1971) as subsequently developed by a series of psychometric instruments, including the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), the Keirsey Temperament Sorter (Keirsey & Bates, 1978) and the Francis Psychological Type Scales (Francis, 2005). Psychological type

measures, thus developed, operationalise four psychological constructs, generally defined as orientation (introversion and extraversion), perceiving (sensing and intuition), judging (thinking and feeling), and attitude toward the outer world (judging and perceiving).

The two processes of perceiving and judging stand at the heart of psychological type theory, distinguishing between two core psychological activities. The perceiving process is concerned with gathering information, and distinguishes between the two functions of sensing and intuition, each of which perceive the world in distinctive ways. Jung styled these the irrational functions since they were not concerned with evaluating the data thus perceived. The judging process is concerned with evaluating information, and distinguishes between the two functions of thinking and feeling, each of which evaluates the world in distinctive ways. Jung styled these the rational functions primarily because they were concerned with evaluating and making judgements.

Sensing types focus on the present realities of a situation. They are more concerned with specific details than with the overall picture. They tend to be down-to-earth and matter-of-fact individuals. They are concerned with the actual, the real, and the practical. By way of contrast, intuitive types focus on the future possibilities of a situation. They are more concerned with the overall picture than with specific details. They are concerned with meanings, with associations, and with the imaginative. Thinking types make decisions and judgements based on objective and impersonal logic. For them objectivity is more important than interpersonal relationships. Promoting truthfulness and fairness is more important than cultivating harmony. The mind is more important than the heart. Feeling types make decisions and judgements based on subjective personal values. They value compassion and mercy. For them interpersonal relationships are more important than abstract principles. The heart is more important than the mind.

The orientations are concerned with the source of psychological energy. Extraverts are oriented toward the outer world, and are energized by the people and events around them. They enjoy communicating and thrive in stimulating and exciting environments. They enjoy having many friends and acquaintances with whom to interact. Introverts are oriented toward the inner world, and are energized by their inner ideas and concepts. They enjoy solitude, silence and contemplation. They prefer communicating in depth with a small circle of intimate friends rather than with many acquaintances.

The attitude toward the outer world is shaped by which of the two core processes (perceiving or judging) is preferred in dealing with the outer world. Judging types who employ thinking or feeling in the outer world are people who enjoy routine and established patterns. They prefer to follow schedules, to be punctual, organized and tidy. They prefer to make decisions quickly and to stick to their conclusions. Perceiving types who employ sensing or intuition in the outer world are people who enjoy flexibility and spontaneity. They display an open approach to life and sometimes may appear somewhat impulsive and unplanned.

There is already an established research tradition concerned with the connection between psychological type preferences and the quest religious orientation. This research tradition builds on the discussion advanced by Ross (1992) who argues that intuitive types are intrigued by complexity and are likely to endorse the view that doubt strengthens faith (thus recording higher scores on the quest scale). In three of the four studies to test this thesis reported by Francis and Ross (2000), Ross and Francis (2010), Walker (2015), and Francis and Lankshear (forthcoming) higher levels of quest religiosity were reported among intuitive types compared with sensing types. These findings lead to the hypotheses that church leaders whose psychological predisposition prefers intuition may also be more likely to display the quest religious orientation.

Mystical experience

Mysticism as a distinctive form of religious experience has been of central interest within the psychology of religion since the early pioneering work of William James (1902/1982) and has been made accessible to quantitative studies in the psychology of religion through instruments like the Hood Mysticism Scale (Hood, 1975) and the Francis-Louden Mystical Orientation Scale (Francis & Louden, 2000a). These two established instruments by Hood and by Francis and Louden build on slightly different conceptual models of mysticism and tap slightly different aspects of responses to mysticism. Hood builds on the conceptual model proposed by Stace (1960) and is concerned specifically with mystical *experience*. Francis and Louden build on the conceptual model proposed by Happold (1963) and is concerned specifically with mystical *orientation* or openness to mystical experience. For further discussion of the differences between these two models see Hood and Francis (2013).

The present study draws on the Francis Louden Mystical Orientation Scale and is consequently grounded in Happold's conceptualization of mysticism. Happold's definition of mysticism embraces seven key characteristics, the first four of which were taken directly from James (1902/1982): 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. In their foundation paper, Francis and Louden (2000a) reported an alpha coefficient of internal consistency reliability of .94 for this instrument (Cronbach, 1951).

Ineffability is a negative description emphasizing 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 emphasizes 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 emphasizes 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 emphasizes 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 emphasizes 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 emphasizes 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 emphasizes 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’.

The Francis Loudon Mystical Orientation Scale and the shorter derivative, the Short Index of Mystical Orientation proposed by Francis and Loudon (2004) have been tested in a series of studies, including work reported by Francis and Thomas (1996), Francis and Loudon (2000b), Francis (2002), Bourke, Francis, and Robbins (2004), Francis, Village, Robbins, and Ineson (2007), Edwards and Lowis (2008a, 2008b), Francis and Littler (2012), Francis, Littler, and Robbins (2012), Francis, Robbins, and Cargas (2012), and Ross and Francis (2015).

If Happold’s (1963) definition of the essential components of mysticism holds good, mystical experience may be particularly relevant to shaping a preference for quest religious orientation. Those familiar with mystical experience that is not easily expressed in words may be less content with clear verbal formulations of faith (ineffability). Those familiar with mystical experience that carry insight into new levels of truth may be less content with

imagining that their faith may never change (noesis). Those familiar with mystical experience that is brief and yet part of continuous development may be more likely to envisage ongoing change and development in their faith (transiency). Those familiar with mystical experience that invades their inner life may yearn for further questioning and development to gain yet further enlightenment beyond their immediate control (passivity). Those familiar with mystical experience that conveys the sense in which existence is perceived as a unity may recognize that their current day-to-day experience is not the end of their life narrative (oneness of everything). Those familiar with mystical experience that stands outside time may glimpse beyond the constraints of the present moment (timelessness). Those familiar with mystical experience that speaks to the true inner-self may be more willing to travel further in self-discovery (true ego). This analysis leads to the hypothesis that church leaders who record higher levels of openness to mystical experience may also record higher levels of quest religiosity.

Research question

The basic research question that arises from this review of existing theory and previous empirical studies is to test the extent to which individual differences in quest religiosity among church leaders may be seen as a function of psychological predisposition or a function of openness to mystical experience. This basic question is, however, complexified by the further finding that openness to mystical experience is itself associated with psychological predisposition. There is already an established research tradition concerned with the connection between psychological type preference and mystical orientation in terms of exploring whether some psychological types are more open to mystical experience than others (Francis & Loudon, 2000b; Francis, 2002; Francis, Village, Robbins, & Ineson, 2007; Francis, Robbins, & Cargas, 2012; Francis, Littler, & Robbins, 2012; Ross & Francis, 2015). The main consensus that comes from this series of studies is that some types are indeed more

open to mystical experience than others. In particular intuitive types are more open to mystical experience than sensing types and feeling types are more open to mystical experience than thinking types. There is also some evidence to suggest that perceiving types are more open to mystical experiences than judging types.

Against this background, the aim of the present study is to test whether openness to mystical experience predicts additional variance in quest religious orientation after controlling for individual differences in psychological type. In order to frame this question using hierarchical linear modelling psychological type will be operationalised through the continuous scale scores that underpin the allocation of discrete type categories rather than through the type categories themselves. Additionally, age, sex, education level and denominational groups will be employed as further control variables.

Data to test this research question among church leaders are available through the Leader Survey administered within the 2011 Australian National Church Life Survey (NCLS). The Australian National Church Life Survey is now a well-established instrument for assessing congregational opinions and attitudes across a wide range of Christian denominations. Surveys have been conducted in 1991, 1996, 2001, 2006 and 2011, and the findings have been widely disseminated (Kaldor, Bellamy, Correy, & Powell, 1992; Kaldor, Bellamy, Moore, Powell, Castle, & Correy, 1995; Kaldor, Bellamy, Powell, Hughes, & Castle, 1997; Kaldor, Bellamy, Powell, Castle, & Hughes, 1999; Kaldor, Dixon, Powell, Bellamy, Hughes, Moore, & Dalziel, 1999; Bellamy, Cussen, Sterland, Castle, Powell, & Kaldor, 2006; Kaldor & McLean, 2009; Powell, Bellamy, Sterland, Jacka, Pepper, & Brady, 2012; Pepper, Sterland, & Powell, 2015; Powell & Robbins, 2015).

Method

Procedure

In 2011, 3,100 local churches from 23 denominations took part in the National Church Life Survey, which represents 25% of the estimated number of local churches in Australia (not including Orthodox, independent and house churches). In 2011 form two of the Leaders Survey included three sets of questions relating to religious experience, religious orientation and psychological type. These three sets of questions were presented alongside a wide range of questions exploring diverse aspects of church life.

Participants

This analysis is based on 1,265 church leaders who provided data in respect of all the relevant variables. Of these 1,265 leaders, 55% were Mainstream Protestant, 26% Other Protestant, 55% Roman Catholic, and 6% Pentecostal. Their average age was 52.0 years ($SD = 13.7$); 64% were male, 62% were educated to degree level or above, and 14% had only school level qualifications.

Instruments

Mystical orientation was assessed by the seven-item abbreviated form of the Francis-Louden Mystical Orientation Scale (MOS: Francis & Loudon, 2000a). This abbreviated measure selected one item representative of each of the seven components of mysticism that comprised the parent instrument: ineffability, noesis, transiency, passivity, oneness, timelessness, and true ego. The measure was created especially for the present project. Participants were asked to rate on a five-point scale, from low (1), through medium (3), to high (5), the importance of each of the seven listed 'experience to your own faith'. Scale scores on this measure ranged from 7 to 35.

Quest religious orientation was assessed by the six item short form of the quest orientation proposed by the New Indices of Religious Orientation (NIRO: Francis, 2007).

This short measure included two items representative of each of the three components of quest religious orientation that comprised the parent instrument: existentialism, self-criticism, and openness to change. Participants were asked to rate their level of agreement or disagreement with each of the six items on a five-point scale, from strongly disagree (1), through neutral/unsure (3) to strongly agree (5). Scale scores on this measure ranged from 6 to 30.

Psychological type was assessed by the 40 item Francis Psychological Type Scales (FPTS: Francis, 2005). This instrument comprises four sets of 10 forced-choice items related to each of the four components of psychological type theory: orientation (extraversion and introversion), perceiving process (sensing and intuition), judging process (thinking and feeling), and attitude toward the outer world (judging and perceiving). Participants were asked to select the ‘characteristic which is closer to the real you, even in you feel both characteristics apply to you. Mark the characteristic that reflects the real you, even if other people see you differently’. Each set of 10 items generates two scale scores ranging from 0 to 10, and in each case the two scores sum to 10.

Educational level was assessed by a seven-point classificatory system: primary school (1), some secondary school (2), completed secondary school (3), trade certificate (4), diploma or associate diploma (5), bachelor degree from a university or equivalent institution (6), and postgraduate degree or diploma (7).

Analysis

Hierarchical linear models were employed to explore the influence of mystical orientation on quest religious orientation after controlling for sex, age, denomination, education level and psychological type preferences. In these models sex was coded in the conventional manner: male (1), female (2). Education level was coded into two dummy variables: school level and degree level, with the intermediate values as the reference point.

Denomination was coded into three dummy variables: Catholic, Mainstream Protestant and Pentecostal, with Other Protestants as the reference point. The four components of psychological type were entered as continuous scale scores with the following polarities for the high scores: orientation (extraversion), perceiving process (intuition), judging process (feeling), and attitude toward the outer world (perceiving).

Results

The first step in the data analysis explored the internal consistency reliability in terms of the alpha coefficient (Cronbach, 1951) for the six scales employed in the study: extraversion, $\alpha = .80$; intuition, $\alpha = .78$; feeling, $\alpha = .68$; perceiving, $\alpha = .76$; quest religious orientation, $\alpha = .72$; mystical orientation, $\alpha = .88$.

- insert table 1 about here -

The second step in the data analysis explored the mean scale scores recorded on the Quest Scale and on the Mystical Orientation Scale by sex, denomination and education level. The data presented in Table 1 demonstrate that men and women did not differ in terms of quest scores, but that women recorded significantly higher scores than men on mystical orientation. In terms of denominational groups, compared with either Mainstream Protestants or Other Protestants, Catholics recorded higher scores on both quest and mystical orientation. Compared with the other denominational groups Pentecostals recorded the lowest quest scores and the highest mystical orientation scores. In terms of educational level, graduates recorded the highest quest scores and the lowest mystical orientation scores.

- insert table 2 about here -

The third step in the data analysis explored the bivariate correlations between the variables. In addition to the findings in Table 1, the data presented in Table 2 demonstrate that sex and age are significant predictors of mystical orientation, where significantly higher scores were recorded by older people and by women, but are unrelated to quest. In terms of

denominational groups, Catholics recorded significantly higher scores of mystical orientation and quest; Mainstream Protestants recorded significantly lower scores of mystical orientation; and Pentecostals recorded significantly higher scores of mystical orientation and significantly lower scores of quest. In terms of education level, those with only school level education recorded significantly lower quest scores and significantly higher mystical orientation scores, while graduates recorded significantly higher quest scores and significantly lower mystical orientation scores. In terms of psychological type, those scoring higher perceiving, higher feeling, and higher intuition recorded both higher quest scores and higher mystical orientation scores. Additionally, those scoring higher extraversion recorded higher mystical orientation scores, but recorded no significant difference on quest. Finally there was a significant positive correlation between mystical orientation and quest. It is this complex pattern of bivariate correlations that necessitates the hierarchical linear modelling.

- insert table 3 about here -

The third step in data analysis, presented in Table 3, explored the effect of personal factors (sex and age), denominational groups (Catholic, Mainstream Protestant and Pentecostal, compared with Other Protestants), education factors (school level and degree level, compared with intermediate level), and psychological factors (extraversion, intuition, feeling, and perceiving), entered in that order, on mystical orientation scores. The data confirm that, taking these other factors into account, higher mysticism scores are associated with extraversion, with intuition, and with feeling, but independent of perceiving.

- insert table 4 about here -

The fourth step in the data analysis, presented in table 4, constructed two models. Both models entered personal factors first (sex and age), followed by denominational groups (Catholic, Mainstream Protestant, and Pentecostal), educational factors (school level and degree level), and psychological factors (extraversion, intuition, feeling, and perceiving).

Additionally, having controlled for these factors, the second model introduced mystical orientation. Model 1 demonstrates that, after controlling for sex, age, denominational groups and education level, intuition and perceiving were both positive predictors of higher quest scores. The addition of mystical orientation scores in Model 2 reduced the effect of intuition slightly, but left the effect of perceiving unchanged, suggesting that mystical orientation may have partially mediated the effect of intuition on quest. Moreover, the increase in R^2 from .10 in Model 1 to .15 in Model 2 demonstrated the independent effect of mystical orientation on quest.

- insert figure 1 about here -

The final step in the data analysis employed a path model to test the mediation of intuition through mystical orientation, using the Sobel test (Dudley & Benuzillo, 2004; Sobel, 1982). The data presented in Figure 1 indicates that a significant proportion of the effect of intuition on quest (10%) was mediated by the mystical orientation scale (Sobel's $t = 2.76$, $p < .01$).

Conclusion

This study drew on data provided by 1,265 church leaders who completed the Leaders Survey within the 2011 Australian National Church Life Survey by completing three measures, the Francis Psychological Type Scales (40 items), the short-form quest religious orientation scale proposed by the New Indices of Religious Orientation (6 items), and an experimental abbreviated form of the Mystical Orientation Scale (7 items). The main research question addressed by the study tested the hypothesis that openness to mystical orientation accounts for additional variance in quest religious orientation after controlling for personal factors (sex and age), for educational attainment, for denominational identity, and for psychological type. Four main conclusions emerge from this study.

The first conclusion concerns the internal consistency reliability of the three instruments employed in the study: the Francis Psychological Type Scales, the short-form quest religious orientation scale proposed by the New Indices of Religious Orientation, and the experimental abbreviated form of the Mystical Orientation Scale. Of particular significance is the data concerning the 7-item form of the Mystical Orientation Scale since this instrument had not been previously used or tested. This instrument may be commended for further use.

The second conclusion concerns the denominational difference in quest religiosity and mystical orientation. Quest religiosity is lower in Pentecostal churches than in Mainstream Protestant churches. Quest religiosity is higher in Catholic churches than in Mainstream Protestant churches. These findings may need closer interrogation against the self-perceptions of these denominational groups. Mystical orientation was higher in both Catholic churches and Pentecostal churches than in Mainstream Protestant churches. This finding may need closer interrogation in respect of the interrelationship between charismatic experience and mystical experience.

The third conclusion concerns the role of psychological type in shaping individual differences in religiosity. According to the bivariate correlation coefficients feeling types record higher scores than thinking types on both mystical orientation and quest religiosity. Also intuitive types record higher scores than sensing types on both mystical orientation and quest religiosity. These findings are consistent with a growing body of research that is demonstrating the importance of psychological type theory within both the psychology of religion and empirical theology (Francis, 2009; Village, 2011; Lewis, 2012, 2015).

The fourth and major conclusion concerns the answer to the main research question posed by the present study. After controlling for sex, age, education, denominational groups, and psychological types, higher levels of mystical orientation were reflected in higher levels

of quest religious orientation. While previous studies employing the Mystical Orientation Scale had been concerned to identify some antecedents of individual differences in openness to mystical experience (conceptualized in terms of psychological type theory), the present study has opened the possibility of identifying some consequences of individual differences in openness to mystical orientation in this case conceptualized in terms of religious orientation theory. It is this core finding that opens the way for future research to chart the effects of mystical experience as predicting other differences in religiosity and also across other areas of personal and social life.

Our results suggest that quest orientation to religion might be the product of both psychological predispositions (in this study represented by a preference for perceiving by intuition rather than by sensing, and by a preference for employing perceiving rather than judging functions in the outer world) and religious experience (in this study represented by openness to mystical experience). Psychological and experiential effects were not entirely separate because intuition predisposed ministers to both quest orientation and openness to mystical experience. However, the indirect effect of intuition was only one tenth of the direct effect, and for the most part intuition and openness to mystical experience seemed to promote quest orientation independently of one another.

These data then allow the conclusion to be formulated that church leaders committed to religious explorations rather than to religious certainties may themselves have been shaped both by distinctive psychological predisposition (conceptualized in terms of psychological type theory) and by distinctive forms of religious experience (conceptualized in terms of Happold's model of mysticism).

This conclusion is, however, necessarily qualified by the limitations imposed by the model of research employed. The research has employed three self-report measures, concerned with quest religious orientation, mystical orientation and psychological type. Each

of these measures is constrained by the limitations of its conceptualization and operationalization; and self-report measures always leave open issues of self-perception and conscious or unconscious fabrication. Although the sample is large and diverse, it is still restricted to one geographical setting (Australia). Replication is needed within other geographical and ecclesial contexts.

References

- Allport, G. W. (1966). Religious context of prejudice. *Journal for the Scientific Study of Religion*, 5, 447-457. doi.org/10.2307/1384172
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432-443. doi.org/10.1037/h0021212
- Batson, C. D., & Schoenrade, P. A. (1991a). Measuring religion as quest: Reliability concerns. *Journal for the Scientific Study of Religion*, 30, 430-447. doi.org/10.2307/1387278
- Batson, C. D., & Schoenrade, P. A. (1991b). Measuring religion as quest: Validity concerns. *Journal for the Scientific Study of Religion*, 30, 416-429. doi.org/10.2307/1387277
- Batson, C. D., & Ventis, W. L. (1982). *The religious experience: A social psychological perspective*. New York: Oxford University Press.
- Bellamy, J., Cussen, B., Sterland, S., Castle, K., Powell, R., & Kaldor, P. (2006). *Enriching church life: A practical guide for local churches*. Adelaide, South Australia: Openbook.
- Bourke, R., Francis, L. J., & Robbins, M. (2004). Mystical orientation among church musicians. *Transpersonal Psychology Review*, 2, 14-19.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334. doi.org/10.1007/BF02310555
- Dudley, W., & Benuzillo, J. (2004). [Syntax to perform a Sobel test on a single mediation effect in SPSS]. UCLA: Statistical Consulting Group. http://www.ats.ucla.edu/stat/spss/faq/mediation_1med.htm
- Edwards, A. C., & Lowis, M. J. (2008a). Construction and validation of a scale to assess attitudes to mysticism: The need for a new scale for research in the psychology of religion. *Spirituality and Health International*, 9, 16-21. doi.org/10.1002/shi.330

- Edwards, A. C., & Lowis, M. J. (2008b). Attitudes to mysticism: Relationship with personality in Western and Eastern mystical traditions. *Spirituality and Health International*, 9, 145-160. doi.org/10.1002/shi.342
- Francis, L. J. (2002). Psychological type and mystical orientation: Anticipating individual differences within congregational life. *Pastoral Sciences*, 21, 77-99.
- Francis, L. J. (2005). *Faith and psychology: Personality, religion and the individual*. London: Darton, Longman and Todd.
- Francis, L. J. (2007). Introducing the New Indices of Religious Orientation (NIRO): Conceptualisation and measurement. *Mental Health, Religion and Culture*, 10, 585-602. doi.org/10.1080/13674670601035510
- Francis, L. J. (2009). Psychological type theory and religious and spiritual experiences. In M. De Souza, L. J. Francis, J. O'Higgins-Norman, & D. G. Scott (Eds.), *International Handbook of education for spirituality, care and wellbeing* (pp. 125-146). Dordrecht: Springer. doi.org/10.1007/978-1-4020-9018-9_8
- Francis, L. J., & Lankshear, D. W. (forthcoming). Psychological type, temperament theory, and religious motivation: Exploring the distinctive congregational profile of Southwark Cathedral.
- Francis, L. J., & Littler, K. (2012). Mystical orientation and psychological health: A study employing Eysenck's dimensional model of personality among clergymen in the Church in Wales. *Welsh Journal of Psychology*, 1, 4-10.
- Francis, L. J., & Littler, K., & Robbins. (2012). Mystical orientation and the perceiving process: A study among Anglican clergymen. *Mental Health, Religion and Culture*, 15, 945-953. doi.org/10.1080/13674676.2012.676257

- Francis, L. J., & Loudon, S. H. (2000a). The Francis-Louden Mystical Orientation Scale (MOS): A study among Roman Catholic priests. *Research in the Social Scientific Study of Religion*, 11, 99-116.
- Francis, L. J., & Loudon, S. H. (2000b). Mystical orientation and psychological type: A study among student and adult churchgoers. *Transpersonal Psychology Review*, 4 (1), 36-42.
- Francis, L. J., & Loudon, S. H. (2004). A short index of mystical orientation (SIMO): A study among Roman Catholic priests. *Pastoral Psychology*, 53, 49-51.
doi.org/10.1023/B:PASP.0000039325.40451.65
- Francis, L. J., Robbins, M., & Cargas, S. (2012). The perceiving process and mystical orientation: An empirical study in psychological type theory among participants at the Parliament of the World's Religions, *Studies in Spirituality*, 22, 341-352.
- Francis, L. J., & Ross, C. F. J. (2000). Personality type and quest orientation of religiosity. *Journal of Psychological Type*, 55, 22-25.
- Francis, L. J., & Thomas, T. H. (1996). Mystical orientation and personality among Anglican clergy. *Pastoral Psychology*, 45, 99-105. doi.org/10.1007/BF02260016
- Francis, L. J., Village, A., Robbins, M., & Ineson, K. (2007). Mystical orientation and psychological type: An empirical study among guests staying at a Benedictine Abbey. *Studies in Spirituality*, 17, 207-223. doi.org/10.2143/SIS.17.0.2024649
- Happold, F.C. (1963). *Mysticism: A study and an anthology*. Harmondsworth: Penguin.
- Hood, R. W. (1975). The construction and preliminary validation of a measure of reported mystical experience. *Journal for the Scientific Study of Religion*, 14, 29-41.
doi.org/10.2307/1384454

- Hood, R. W. jr., & Francis, L. J. (2013). Spiritual experience: Mysticism. In K. Pargament (Ed.), *APA Handbook of psychology, religion, and spirituality* (Volume 1, pp. 391-405). Washington DC: American Psychological Association.
- James, W. (1902/1982). *The varieties of religious experience*. Harmondsworth: Penguin.
- Jung, C. G. (1971). *Psychological types: The collected works* (volume 6). London: Routledge and Kegan Paul.
- Kaldor, P., Bellamy, J., Correy, M., & Powell, R. (1992). *First look in the mirror: Initial findings of the 1991 National Church Life Survey*. Homebush West, New South Wales: Lancer.
- Kaldor, P., Bellamy, J., Moore, S., Powell, R., Castle, K., & Correy, M. (1995). *Mission under the microscope: Keys to effective and sustainable mission*. Adelaide, South Australia: Openbook Publishers.
- Kaldor, P., Bellamy, J., Powell, R., Castle, K., & Hughes, B. (1999). *Build my Church: Trends and possibilities for Australian churches*. Adelaide, South Australia: Openbook Publishers.
- Kaldor, P., Bellamy, J., Powell, R., Hughes, B., & Castle, K. (1997). *Shaping a future: Characteristics of vital congregations*. Adelaide, South Australia: Openbook Publishers.
- Kaldor, P., Dixon, R., Powell, R., Bellamy, J., Hughes, B., Moore, S., & Dalziel, J. (1999). *Taking stock: A profile of Australian church attenders*. Adelaide, South Australia: Openbook Publishers.
- Kaldor, P., & McLean, J. (2009). *Lead with your strengths*. Sydney, New South Wales: NCLS Research.
- Keirsey, D., & Bates, M. (1978). *Please understand me*. Del Mar, CA: Prometheus Nemesis.

- Lewis, C. A. (2012). Psychological type, religion, and culture: Theoretical and empirical perspectives. *Mental Health, Religion and Culture*, 15, 817-821.
doi.org/10.1080/13674676.2012.721534
- Lewis, C. A. (2015). Psychological type, religion, and culture: Further empirical perspectives. *Mental Health, Religion and Culture*, 18, 531-534.
doi.org/10.1080/13674676.2015.1103520
- Myers, I. B., & McCaulley, M. H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Palo Alto, California: Consulting Psychologists Press.
- Pepper, M., Sterland, S., & Powell, R. (2015). Methodological overview of the study of well-being through the Australian National Church Life Survey. *Mental Health, Religion and Culture*, 18, 8-19. doi.org/10.1080/13674676.2015.1009717
- Powell, R., Bellamy, J., Sterland, S., Jacka, K., Pepper, M., & Brady, M. (2012). *Enriching church life: A guide to results from National Church Life Surveys for local churches. Second Edition*. Adelaide, South Australia: Openbook.
- Powell, R., & Robbins, M. (2015). The churches and well-being: Perspectives from the Australian National Church Life Survey. *Mental Health, Religion and Culture*, 18, 1-7. doi.org/10.1080/13674676.2015.1011370
- Ross, C.F.J. (1992). The intuitive function and religious orientation. *Journal of Analytical Psychology*, 37, 83-103.
- Ross, C. F. J., & Francis, L. J. (2010). The relationship of intrinsic, extrinsic, and quest religious orientations to Jungian psychological type among churchgoers in England and Wales. *Mental Health, Religion and Culture*, 13, 805-819.
doi.org/10.1080/13674670802207462

- Ross, C., & Francis, L. J. (2015). The perceiving process and mystical orientation: A study in psychological type theory among 16- to 18-year-old students. *Mental Health, Religion and Culture*, 18, 693-702. doi.org/10.1080/13674676.2014.961353
- Sobel, M. E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. *Sociological Methodology* 13, 290–312. doi.org/10.2307/270723
- Stace, W. T. (1960). *Mysticism and philosophy*. Philadelphia: Lippincott.
- Village, A., (2011). Gifts differing? Psychological type among stipendiary and non-stipendiary clergy. *Research in the Social Scientific Study of Religion*, 22, 230-250. doi.org/10.1163/ej.9789004207271.i-360.49
- Walker, D. S. (2015). Unsettling the guardian: Quest religiosity and psychological type among Anglican churchgoers. *Mental Health, Religion and Culture*, 18, 655-663. doi.org/10.1080/13674676.2014.963291

Table 1

Mean quest and mystical orientation scores by sex, denomination and education

		Quest		MOS	
		<i>M (SD)</i>	95% CI	<i>M (SD)</i>	95% CI
Sex	Male	18.5 (4.3)	18.2 - 18.8	18.1 (6.5)	17.7 - 18.5
	Female	18.9 (4.3)	18.5 - 19.3	20.0 (6.5)	19.4 - 20.6
Denomination	Catholic	19.7 (4.3)	19.2 - 20.3	20.3 (6.5)	19.3 - 21.2
	Mainstream Protestant	18.8 (4.3)	18.5 - 19.1	18.2 (6.5)	17.7 - 18.7
	Pentecostal	16.1 (4.3)	15.2 - 17.0	20.5 (6.5)	19.4 - 21.7
	Other Protestant	18.4 (4.3)	17.9 - 18.8	18.8 (6.5)	18.2 - 19.5
Education	School	17.7 (4.3)	17.1 - 18.3	20.1 (6.5)	19.2 - 21.1
	Trade	18.2 (4.3)	17.7 - 18.7	19.7 (6.5)	19.0 - 20.5
	Degree	19.0 (4.3)	18.7 - 19.3	18.1 (6.5)	17.7 - 18.6

Table 2

Bivariate correlations

		13	12	11	10	9	8	7	6	5	4	3	2
1	Quest	.19***	.10**	.19***	-.01	.11***	-.09**	-.15***	.04	.10***	.05	.04	.24***
2	MOS	.10***	.16***	.08**	.13***	-.13***	.08**	.07*	-.10***	.09***	.17***	.14***	
3	Female	-.07*	.16***	-.07*	.10***	-.18***	.18***	.04	.00	.08**	.11***		
4	Age	-.09**	.10***	-.19***	.01	-.27***	.16***	-.16***	.07*	.15***			
5	Catholic	-.11***	.08**	-.12***	-.01	.00	.07**	-.10***	-.43***				
6	Mainstream Protestant	.02	.00	.03	.01	.07*	-.08**	-.28***					
7	Pentecostal	-.01	-.06*	.05	.05	-.09**	.07*						
8	School level	-.03	.07**	-.14***	.07*	-.52***							
9	Degree level	.03	-.08**	.24***	-.06*								
10	Extraversion	.15***	.11***	.06*									
11	Intuition	.44***	.03										
12	Feeling	.25***											
13	Perceiving												

Note. $N = 1265$. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3

Linear regression of MOS

	<i>B (SE)</i>	β	<i>t</i>
Female	1.20 (0.38)	.09	3.20**
Age	0.07 (0.01)	.16	5.38***
Catholic	0.86 (0.60)	.05	1.43
Mainstream Protestant	-0.97 (0.42)	-.08	-2.32*
Pentecostal	1.72 (0.78)	.06	2.20*
School level education	-0.22 (0.58)	-.01	-0.37
Degree level education	-1.12 (0.44)	-.08	-2.54*
Extraversion	0.19 (0.06)	.09	3.13**
Intuition	0.31 (0.08)	.12	3.76***
Feeling	0.27 (0.08)	.10	3.59***
Perceiving	0.09 (0.08)	.04	1.14

Note. $N = 1265$. * $p < .05$; ** $p < .01$; *** $p < .001$. Model $R^2 = .10$.

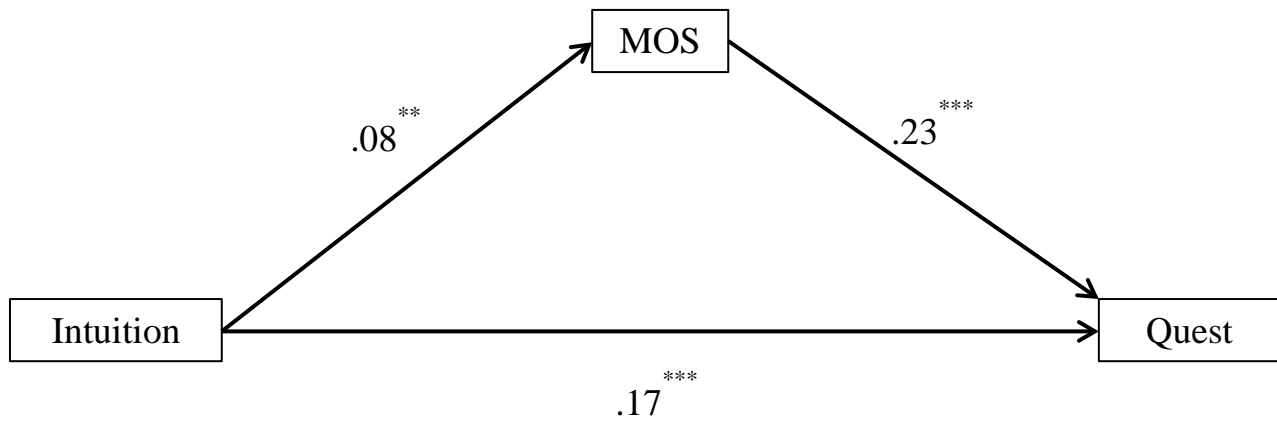
Table 4

Hierarchical linear regression of Quest Orientation

		<i>B</i> (<i>SE</i>)	β	<i>t</i>
Model 1	Female	0.59 (0.25)	.07	2.37*
	Age	0.02 (0.01)	.07	2.27*
	Catholic	1.54 (0.40)	.12	3.86***
	Mainstream Protestant	0.36 (0.28)	.04	1.30
	Pentecostal	-2.03 (0.52)	-.11	-3.88***
	School level education	-0.69 (0.39)	-.06	-1.77
	Degree level education	0.52 (0.29)	.06	1.76
	Extraversion	-0.05 (0.04)	-.03	-1.20
	Intuition	0.25 (0.06)	.14	4.47***
	Feeling	0.07 (0.05)	.04	1.41
	Perceiving	0.24 (0.05)	.14	4.61***
Model 2	Female	0.41 (0.24)	.05	1.67
	Age	0.01 (0.01)	.03	1.04
	Catholic	1.41 (0.39)	.11	3.63***
	Mainstream Protestant	0.51 (0.27)	.06	1.89
	Pentecostal	-2.29 (0.51)	-.13	-4.50***
	School level education	-0.66 (0.38)	-.05	-1.73
	Degree level education	0.69 (0.29)	.08	2.41*
	Extraversion	-0.08 (0.04)	-.05	-1.97*
	Intuition	0.20 (0.05)	.11	3.67***
	Feeling	0.03 (0.05)	.02	0.59
	Perceiving	0.23 (0.05)	.14	4.47***
	Mystical orientation scale	0.15 (0.02)	.23	8.43***

Note. $N = 1265$. * $p < .05$; ** $p < .01$; *** $p < .001$. Model 1 $R^2 = .10$; Model 2 $R^2 = .15$.

Figure 1

Mediation model for the effect of intuition on quest orientation

Note: Paths show standardized regression coefficients. ** $p < .01$; *** $p < .001$.