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Congregational bonding social capital and psychological type: an empirical enquiry among  
Australian churchgoers

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**Abstract**

This study explores the variation in levels of bonding social capital experienced by individual churchgoers, drawing on data generated by the Australian National Church Life Survey, and employing a five-item measure of church-related bonding social capital. Data provided by 2,065 Australian churchgoers are used to test the thesis that individual differences in bonding social capital are related to a psychological model of psychological types (employing the Jungian distinctions). The data demonstrated that higher levels of bonding social capital were found among extraverts (compared with introverts), among intuitive types (compared with sensing types) and among feeling types (compared with thinking types), but no significant differences were found between judging types and perceiving types.

## Introduction

Social capital theory has provided a fruitful lens through which to view and to interrogate the contribution of faith communities to three distinct areas of life, distinguishing between bonding social capital and bridging social capital (as rehearsed by Putnam, 2000) and linking social capital (as developed by Woolcock, 2001). Research in this tradition has discussed and identified the ways in which faith communities contribute to the development of social networks and social wellbeing among their members (*bonding* social capital); to the development of social life and interpersonal networks extending into local and wider communities (*bridging* social capital); and to the development of connections between individuals and networks operating within different strata of society (*linking* social capital). An extensive, insightful and analytic overview of this developing field of enquiry has been provided by Baker and Miles-Watson (2010). Within the diverse perspectives taken by this literature (in terms both of theoretical and empirical emphases), one emerging stream has concentrated specifically on the social capital created within Christian congregations. A good example of this kind of study is provided by Williams (2008).

Williams (2008) drew on data provided by 720 members of six cathedral congregations in England and Wales who completed a questionnaire including a battery of items concerning social capital, together with a range of other indices concerning aspects of their religious, social and personal lives. Factor analysis identified a group of 12 items that cohered to generate an instrument of good internal consistency reliability with an alpha coefficient of .83 (Cronbach, 1951). This instrument, named the Williams Religious Social Capital Index (WRSCI), combined items concerned both with bonding, bridging, and linking social capitals and with the notion of social trust underpinning social capitals. Each of the 12 items was rated on a five-point Likert scale, generating a range of scores between 12 and 60.

Williams' data demonstrated a strong association between frequency of attendance and scores on the WRSCI, confirming that individuals

who are regular members of the cathedral congregation have more access to bonding, bridging and linking social capital, and are more likely to confirm that their sense of trust has been increased through their involvement in the cathedral. (Williams, 2008, p.331)

Williams' success in measuring social capital generation among church congregations raises opportunities to pose (and to explore answers to) questions regarding individual differences in social capital contributed by church members. The present paper is designed to address questions of this nature against the theoretical background provided by research within the psychology of religion grounded in Jungian psychological type theory. The opportunity to test these questions is provided by the Australian National Church Life Survey.

### **Psychological type**

Psychological type theory has its roots in the pioneering work of Carl Jung (1971) and has been developed and popularised through a series of type indicators, type sorters or type scales. The most frequently employed of these measures in church-related research and congregational studies are the Keirsey Temperament Sorter (KTS: Keirsey & Bates, 1978), the Myers-Briggs Type Indicator (MBTI: Myers and McCaulley, 1985), and the Francis Psychological Type Scales (Francis, 2005). At its core, psychological type theory distinguishes between four aspects of personality: the two orientations, styled introversion and extraversion; the two perceiving functions, styled sensing and intuition; the two judging functions, styled feeling and thinking; and the two attitudes toward the outer world, styled judging and perceiving.

In Jung's theory, the orientations are concerned with the primary source of psychological energy. People who prefer introversion focus their attention on the inner world of ideas and draw their energy from that inner world. When introverts are tired and need energising they look to the inner world. Introverts are reflective, may consider deeply before acting, and they probe inwardly for stimulation. Introverts like quiet for concentration. Introverts work best alone and may resent distractions and interruptions from other people. People who prefer extraversion focus their attention on the outer world of people and things and draw their energy from that outer world. When extraverts are tired and need energising they look to the outer world. Extraverts like variety and action. Extraverts like to have other people around them in the working environment, and enjoy the stimulus of sudden interruptions and telephone calls. Extraverts like to act quickly and decisively, even when it is not totally appropriate to do so. The meaning of the terms extravert and introvert differ from the layperson's view, as they are often taken to mean sociable and shy, respectively. In Jung's theory, extraversion and introversion are concerned with the direction of psychological energy, rather than sociability.

In Jung's theory, the perceiving functions are concerned with the way in which individuals take in information. People who prefer sensing are practical people. They make good use of all their five senses. They attend to practical and factual details, and are in touch with physical realities. They observe the small details of everyday life and attend to step-by-step experience. They prefer to let the eyes tell the mind. People who prefer intuition are imaginative people. They make good use of their memory and seek to find patterns and associations with previous experience. They see patterns and meanings and assess possibilities. They are good at reading between the lines and projecting possibilities for the future. They prefer always to go for the 'big picture'. They prefer to let the mind tell the eyes.

In Jung's theory, the judging functions are concerned with the ways in which individuals make decisions and form judgements. People who prefer to make judgements using feeling place people, relationships, and interpersonal matters high on their agenda. They develop good skills at applying personal priorities. They are good at weighing their own values and motives, as well as the values and motives of other people. They are characterised by qualities of empathy and sympathy. They prize harmony and trust. People who prefer to make judgements using thinking place justice, truth, and reason high on their agenda. They develop good powers of critical analysis. They use objective and impersonal criteria in reaching decisions. They follow rationally the relationships between cause and effect. They develop characteristics of being firm-minded and prizing logical order. They may sometimes appear sceptical.

In developments of Jung's theory, the attitudes towards the outer world distinguish between individuals who extravert their preferred perceiving function (sensing or intuition) and individuals who extravert their preferred judging function (thinking or feeling). People who use their preferred judging process in the outer world present a planned and orderly approach to the life. They prefer to have a settled system in place and display a preference for closure. They schedule projects so that each step gets done on time. They like to get things finished and settled, and to know that the finished product is in place. They work best when they can plan their work in advance and follow that plan. Judging types use lists and agendas to structure their day and to plan their actions. They may dislike interruption from the plans they have made and are reluctant to leave the current task even when something more urgent arises. People who use their preferred perceiving function in the outer world present a flexible and spontaneous approach to life. They prefer to keep plans and organisation to a minimum and display a preference for openness. They adapt well to changing situations. They make allowances for new information and for changes in the situation in which they are

living or acting. They may have trouble making decisions, feeling that they have never quite got enough information on which to base their decision.

While psychological type theory begins by introducing the building blocks of the four bipolar preferences, the real interest and power of the theory comes from the way in which these four bipolar preferences generate 16 discrete psychological types. Type dynamics identifies within each of these 16 types the relative strength of the four functions (sensing, intuition, thinking, and feeling) and thus distinguishes between an individual's dominant, auxiliary, tertiary and inferior functions.

Psychological type theory was introduced into congregational studies in North America by Gerhardt (1988), Rehak (1998), Delis-Bulhoes (1990), and Ross (1993, 1995); in the United Kingdom by Craig, Francis, Bailey, and Robbins (2003), Francis, Robbins, Williams, and Williams (2007), and Francis, Robbins, and Craig (in press); and in Australia by Robbins and Francis (2011). Studies in this tradition have drawn attention to ways in which the psychological type profile of congregations varies between denominations and between church traditions within denominations, and to the ways in which psychological type is related to attitudes within congregations. Against this background, it is reasonable to hypothesise that psychological type preferences will be reflected in individual differences in congregational bonding and social capital.

### **Australian National Church Life Survey**

Over the past two decades the Australian National Church Life Survey, conducted by NCLS Research, has provided a regular opportunity for the major denominations to listen to the views of their members across a wide range of issues. 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, Castle, & Hughes, 1999; Kaldor, Bellamy, Powell, Hughes, &

Castle, 1997; Kaldor, Dixon, Powell, Bellamy, Hughes, Moore, & Dalziel, 1999; Bellamy, Cussen, Sterland, Castle, Powell, & Kaldor, 2006; Kaldor & McLean, 2009). The method employed by NCLS Research is to design a number of different questionnaires that are randomly distributed throughout the participating congregations. There is a main Protestant survey and a main Catholic survey which is completed by most participants and multiple smaller survey variants, each of which as a random sample of the total participants. While the different questionnaires incorporate the same body of core questions, each variant also contains a number of distinctive questions. In the 2006 round of the NCLS one of the variants included a recognised measure of psychological type. Moreover this variant of the questionnaire was used across a range of denominations, and included a measure of social capital. The NCLS has already proved to be a fertile source of data for exploring social capital theory (see Dixon, 2010; Leonard & Bellamy, 2010).

The measure of psychological type included in the questionnaire was the Francis Psychological Type Scales (Francis, 2005). This instrument was selected because, unlike the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) and the Keirsey Temperament Sorter (Keirsey & Bates, 1978), it had been designed specifically for application within the self-completion questionnaire-style survey. This questionnaire has already been used extensively in surveys among religious professionals (Francis & Robbins, 2002; Craig, Francis, & Robbins, 2004; Francis, Gubb, & Robbins, 2009; Ryland, Francis, & Robbins, in press; Francis, Hancocks, Swift, & Robbins, 2009; Burton, Francis, & Robbins, 2010; Francis, Littler, & Robbins, 2010), as well as in pioneering surveys among church congregations (Craig, Francis, Bailey, & Robbins, 2003; Francis, Robbins, Williams, & Williams, 2007). This variant of the questionnaire was administered across congregation representatives of the four main church traditions, styled Catholic, Anglican, Protestant, and

Pentecostal, with sufficient representation of each category to allow meaningful comparison to be drawn.

The measure of social capital included in the questionnaire comprised five items focusing specifically on *bonding* social capital. While this index offers a more restricted view of social capital than the Williams Religious Social Capital Index (Williams 2008) that combined bonding, bridging, and linking social capitals, it provides a more appropriate test of the influence of psychological type and denominational context on congregational social capital generation. It allows one form of congregational social capital to be clearly identified and for clear hypotheses to be advanced regarding ways in which differences in psychological type are reflected in individual differences in congregational bonding social capital.

### **Research question**

Against this background, the aims of the present study are as follows. The first aim is to explore the psychometric properties of the five items concerning congregational bonding social capital included in the 2006 Australian National Church Life Survey and to test the viability of this new Congregational Bonding Social Capital Index (CBSCI).

The second aim is to test the association between scores recorded on the CBSCI and the Jungian psychological type profile of individual congregants as recorded by the Francis Psychological Type Scales (Francis, 2005). On the basis of the description of psychological type rehearsed above, the following four hypotheses are advanced.

1. In terms of the orientations, it is hypothesised that higher CBSCI scores will be recorded by extraverts than by introverts, on the grounds that extraverts are more likely than introverts to be energised by the social engagement dimension of local church life.
2. In terms of the perceiving process, it is hypothesised that higher CBSCI scores will be recorded by intuitive types than by sensing types, on the grounds that opportunities for

social capital generation may be more readily envisioned by intuitive types (more concerned with investing in future possibilities) than by sensing types (more concerned with present realities).

3. In terms of the judging process, it is hypothesised that higher CBSCI scores will be recorded by feeling types than by thinking types, on the grounds that opportunities for social capital generation may be more readily seized by feeling types (more concerned with personal and interpersonal values) than by thinking types (more concerned with objective logical analysis).
4. In terms of the attitude toward the outer world, it is hypothesised that higher CBSCI scores will be recorded by judging types than by perceiving types on the grounds that individuals who employ a judging function in the outside world (either thinking or feeling) may be more inclined to adopt a systematic and planned approach to social capital generation than individuals who employ a perceiving function in the outside world (either sensing or intuition).

## **Method**

### *Procedure*

In 2006 a wide range of Christian denominations participated in the Australian National Church Life Survey. Twenty different versions of the questionnaire were distributed among participating congregations (including main Protestant and Catholic variants), and version D included a measure of psychological type.

### *Measures*

*Psychological type* was assessed by the Francis Psychological Type Scales (FPTS: Francis, 2005). This is a 40-item instrument comprising four sets of 10 forced-choice items related to each of the four components of psychological type: orientation (extraversion or introversion), perceiving process (sensing or intuition), judging process (thinking or feeling),

and attitude toward the outer world (judging or perceiving). Recent studies have demonstrated that this instrument functions well in church-related contexts. For example, Francis, Craig, and Hall (2008) reported alpha coefficients of .83 for the EI scale, .76 for the SN scale, .73 for the TF scale, and .79 for the JP scale.

*Congregational bonding social capital* was assessed by a new five-item scale (specified in table 1). The five items were introduced as follows: ‘These questions deal with relationships you’ve had over the past year with other people here. Thinking back over the past year, how often have the *people* in this congregation /parish ... (In answering, please think just about the attenders, not the minister(s), pastor(s) or priest(s).’ Each item was rated on a four-point scale: very often, fairly often, once in a while, and never.

*Sense of belonging* was assessed by the question: ‘Do you have a strong sense of belonging to this congregation?’ which has seven response options: yes, a strong sense of belonging which is growing; yes, a strong sense – about the same as last year; yes, although perhaps not as strongly as in the past; no, but I am new here; no, and I wish I did by now; no, but I am happy as I am; and don’t know, not applicable.

### *Sample*

A total of 2,065 adults successfully completed version D of the 2006 Australian National Church Life Survey, including 796 Catholics, 631 Protestants, 425 Anglicans, and 213 Pentecostals. Of the total participants, 57% were female and 43% were male; 6% were under the age of twenty, 12% in their twenties, 13% in their thirties, 16% in their forties, 19% in their fifties, 18% in their sixties, 11% in their seventies, 3% were aged eighty or over, and 2% failed to disclose their age; 77% had been born in Australia, 10% had been born in another English-speaking country, 12% had been born in a non-English speaking country, and 1% failed to disclose their country of origin; 60% were in their first marriage, 6% were in a subsequent marriage, 2% were in a *de facto* relationship, 6% were separated or divorced

and not re-married, 6% were widowed, 20% were never married, and 1% failed to disclose their marital status.

### *Data analysis*

The research literature concerning the empirical investigation of psychological type has developed a highly distinctive method for analysing, handling, and displaying statistical data in the form of 'type tables'. This convention has been adopted in the following presentation in order to integrate these new data within the established literature and to provide all the detail necessary for secondary analyses and further interpretation within the rich theoretical framework afforded by psychological type. Type tables have been designed to provide information about the sixteen discrete psychological types, about the four dichotomous preferences, about the six sets of pairs and temperaments, about the dominant types, and about the introverted and extraverted Jungian types. Commentary on this table will, however, be restricted to those aspects of the data strictly relevant to the research question.

## **Results**

Table 1 presents the scale properties of the five items of the Congregational

-insert table 1 about here -

Bonding Social Capital Index, in terms of the percentage endorsement, the correlations between each item and the sum of the other four items, and the alpha coefficient (Cronbach, 1951). The alpha coefficient, well in excess of the threshold of .65 proposed by DeVellis (2003), demonstrates a high level of internal consistency reliability. The high correlations between each item and the sum of the other four items demonstrate that each item is playing its full part in the homogenous scale score. The item endorsements demonstrate a high level of congregational bonding social capital. Three quarters (76%) of the participants reported that people in their congregation had made them feel loved or cared for very often or fairly

often; 61% had been helped to know God better by people in their congregation very often or fairly often; 55% had been helped by people in their congregation to live according to their religious beliefs very often or fairly often; 53% had been listened to by people in their congregation when talking about their problems and concerns very often or fairly often; and 47% had experienced others in their congregation sharing their religious experiences with them very often or fairly often.

Table 2 presents the responses to the item concerning sense of belonging, with the

- Insert table 2 here -

negative and uncertain answers collapsed into one category. Almost half of the participants (48%) reported a strong sense of belonging which is growing. A correlation of .53 ( $p < .001$ ) between this item concerning a sense of belonging and the Congregational Bonding Social Capital Index offers support for the construct validity of the new instrument, in the sense that high levels of bonding and social capital go hand-in-hand with a positive sense of belonging to the congregation.

All eight scales proposed by the Francis Psychological Type Scale achieved satisfactory internal consistency reliability in terms of the alpha coefficient (Cronbach, 1951) in line with the threshold of acceptability of .65 proposed by DeVellis (2003): extraversion and introversion,  $\alpha = .78$ ; sensing and intuition,  $\alpha = .65$ ; thinking and feeling,  $\alpha = .64$ ; judging and perceiving,  $\alpha = .70$ .

Table 3 presents the type distribution for the total sample of 2,065 Australian

- Insert table 3 about here -

churchgoers. These data demonstrate clear preference for introversion (57%) over extraversion (43%), for sensing (81%) over intuition (19%), and for judging (88%) over perceiving (12%), and slight preference for feeling (53%) over thinking (47%). In terms of dominant preferences, dominant sensing accounted for 48% of the participants, dominant

feeling for 25%, dominant thinking for 17%, and dominant intuition for 10%. The most frequently occurring types in these congregations were ISTJ (24%), ISFJ (21%), ESFJ (18%), and ESTJ (12%).

Table 4 examines the mean scale scores recorded on the Congregational Bonding

- Insert table 4 about here -

Social Capital Index by the dichotomous type preferences. These data demonstrate that significantly higher levels of congregational bonding social capital were recorded by extraverts than by introverts, by intuitive types than by sensing types, and by feeling types than by thinking types. There was, however, no significant difference between the mean scores of the congregational bonding social capital recorded by judging types and by perceiving types.

Table 5 examines the mean scale scores recorded on the Congregational Bonding

- Inset table 5 about here -

Social Capital Index by the dominant type preferences. These data demonstrate that the highest level of bonding social capital was found among dominant feeling types and the lowest level among dominant sensing types; dominant intuitive types ranked second and dominant thinking types ranked third.

Table 6 takes the story one step further by examining the mean scale score recorded

- Insert table 6 about here -

on the Congregational Bonding Social Capital Index by the dominant and auxiliary pairs. These data demonstrate that the highest levels of bonding social capital are linked to dominant feeling with auxiliary intuition, followed by dominant intuition with auxiliary feeling. The lowest levels of bonding social capital are linked to dominant sensing with auxiliary thinking, followed by dominant thinking with auxiliary sensing.

Table 7 completes the analysis concerned with psychological type by examining the

- Insert table 7 about here -

mean scale scores recorded on the Congregational Bonding Social Capital Index by the 16 complete types. These data demonstrate that the highest levels of bonding social capital were displayed by ENFJs, while the lowest levels of bonding social capital were displayed by the mirror image of ENFJs, namely ISTPs.

### **Discussion and Conclusion**

This study had two primary aims: to explore the psychometric properties of the five items concerning congregational bonding social capital included in the 2006 Australian National Church Life Survey and to test the viability of this new Congregational Bonding Social Capital Index (CBSCI); and to test the association between scores recorded on the CBSCI and the Jungian psychological type profile of individual congregants. Seven main conclusions emerge from this study.

The first conclusion concerns the new Congregational Bonding Social Capital Index (CBSCI). This instrument displayed good properties of internal consistency reliability ( $\alpha = .91$ ) and good properties of construct validity alongside a measure of the sense of congregational belonging ( $r = .53$ ). The instrument may be commended for further use.

The second conclusion concerns the overall high level of congregational bonding social capital reflected within the Australian National Church Life Survey. For example, three quarters of the participants (76%) reported that people in their congregations had made them feel loved or cared for very often or fairly often. Half of the participants (53%) had been listened to talking about their problems and concerns very often or fairly often. Such evidence suggests that these congregations are strong generators of bonding social capital and that they are contributing powerfully to the social wellbeing of their participants.

The third conclusion concerns the overall psychological type profile of Australian churchgoers. The data from the present study confirms the profile of 1,527 Australian

churchgoers reported by Robbins and Francis (2011), emphasising preferences for introversion over extraversion, for sensing over intuition, for feeling over thinking, and for judging over perceiving. In both studies dominant sensing types accounted for almost half of the churchgoers. At heart these churchgoers are matter-of-fact and practical people. In both studies the two most frequently occurring types were ISTJs and ISFJs. In her booklet, *Introduction to Type*, Myers (1998, p.7) provides the following insightful profiles of these two types. The ISTJ profile is as follows:

Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of-fact, logical, realistic and dependable. See to it that everything is well organised. Take responsibility. Make up their own minds about what should be accomplished and work towards it steadily, regardless of protests or distractions.

The ISFJ profile is as follows:

Quiet, friendly, responsible and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal considerate, perceptive, concerned with how other people feel.

The fourth conclusion concerns the connection between dichotomous psychological type profile preferences and the generation of bonding social capital. Four hypotheses were advanced and tested. Three of these hypotheses were supported by the data. Higher levels of bonding social capital were generated by extraverts than by introverts. This finding is consistent with the view that extraverts are more likely to be energised by the social engagement dimension of church life. Higher levels of bonding social capital were generated by intuitive types than by sensing types. This finding is consistent with the view that opportunities for developing social capital may be more readily envisioned by intuitive types, who are more concerned with future possibilities, than with present realities. Higher levels of

bonding social capital were generated by feeling types than by thinking types. This finding is consistent with the view that opportunities for developing social capital forming links with others may be more readily seized by feeling types, who are more concerned with personal and interpersonal values. On the other hand, no significant differences in levels of congregational bonding social capital were found between judging types and perceiving types.

The fifth conclusion concerns the connection between dominant psychological type preferences and the generation of bonding social capital. Dominant feeling types (who account for 25% of Australian churchgoers) generate the highest level of congregational bonding social capital. Dominant sensing types (who account for 48% of Australian churchgoers) generate the lowest level of congregational bonding social capital. This finding is consistent with the view that dominant feeling types are those individuals who are most concerned with the wellbeing of others. These are the people who run the social committee at their church. Dominant sensing types are those who are most concerned with the practical details of life. These are the people who run the fabric committee at their church.

The sixth conclusion concerns the role of the auxiliary function, complementing the dominant function, in shaping individual differences in the generation of congregational bonding social capital. The highest level of congregational bonding social capital was found among those individuals shaped by dominant feeling with auxiliary intuition.

The seventh conclusion concerns the additional information that is conveyed when the 16 complete types are considered individually. According to this analysis the highest level of congregational bonding social capital is generated by ENFJs, who account for 4% of Australian churchgoers. ENFJs are characterised by extraverted dominant feeling with introverted auxiliary feeling. (Myers (1988, p. 7) describes the ENFJ profile as follows:

Responsive and responsible. Feel real concern for what others think or want, and try to handle things with due regard for others' feelings. Can present a proposal or lead a group discussion with concern and tact. Sociable, popular, sympathetic. Responsive to praise and criticism. Like to help others and enable people to achieve their potential.

Here are individuals well attuned to developing congregational bonding social capital.

Also according to this analysis, the lowest level of congregational bonding social capital is generated by the mirror image of ENFJs, namely ISTPs. ISTPs are characterised by introverted dominant thinking with extraverted auxiliary sensing. Myers (1998, p.7) describes the ISTP profile as follows:

Cool onlookers – quiet, reserved, observing and analysing life with detached curiosity and unexpected flashes of original humour. Usually interested in cause and effect, how and why mechanical things work and in organising facts using logical principles. Excel at getting to the core of a practical problem and finding the solution.

Here are the individuals who are least likely to concern themselves with developing congregational bonding social capital.

These seven conclusions, drawing attention to the contributions of psychological theory (concerning psychological type) to explaining variations in congregational bonding social capital, have been based on a (relatively) random sample of 2,065 Australian churchgoers, made possible by the way in which the Australian National Church Life Survey employs a number of variants alongside its core congregational survey. One of these variants included a measure of psychological type and a measure of congregational bonding social capital. The main weakness in the study concerns the weight placed on a sample size of 2,065 analysed across 16 complete psychological types. This study would now benefit from replication among a larger sample of churchgoers.

### References

- Baker, C., & Miles-Watson, J. (2010). Faith and traditional capitals: Defining the public scope of spiritual and religious capital - a literature review. *Implicit Religion, 13*, 17-69.
- 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.
- Burton, L., Francis, L. J., & Robbins, M. (2010). Psychological type profile of Methodist circuit ministers in Britain: Similarities with and differences from Anglican clergy. *Journal of Empirical Theology, 23*, 64-81.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334.
- Craig, C. L., Francis, L. J., Bailey, J., & Robbins, M. (2003). Psychological types in Church in Wales congregations. *The Psychologist in Wales, 15*, 18-21.
- Craig, C., Francis, L. J., & Robbins, M. (2004). Psychological type and sex differences among church leaders in the United Kingdom. *Journal of Beliefs and Values, 25*, 3-13.
- Delis-Bulhoes, V. (1990). Jungian psychological types and Christian belief in active church members. *Journal of Psychological Type, 20*, 25-33.
- DeVellis, R. F. (2003). *Scale development: Theory and applications*. London: Sage.
- Dixon, R. E. (2010). Ingenious communities: Catholic parishes in Australia as creators of social capital and religious social goods. Unpublished PhD dissertation, Monash University.
- Francis, L. J. (2005). *Faith and psychology: Personality, religion and the individual*. London: Darton, Longman and Todd.

- Francis, L.J., Craig, C.L., & Hall, G. (2008). Psychological type and attitude towards Celtic Christianity among committed churchgoers in the United Kingdom: An empirical study. *Journal of Contemporary Religion, 23*, 181-191.
- Francis, L. J., Gubb, S., & Robbins, M. (2009). Psychological type profile of Lead Elders within the Newfrontiers network of churches in the United Kingdom. *Journal of Beliefs and Values, 30*, 61-69.
- Francis, L. J., Hancocks, G., Swift, C., & Robbins, M. (2009). Distinctive call, distinctive profile: The psychological type profile of Church of England full-time hospital chaplains. *Practical Theology, 2*, 269-284.
- Francis, L. J., Littler, K., & Robbins, M. (2010). Psychological type and Offa's Dyke: Exploring differences in the psychological type profile of Anglican clergy serving in England and Wales. *Contemporary Wales, 23*, 240-251.
- Francis, L. J., & Robbins, M. (2002). Psychological types of male evangelical church leaders. *Journal of Belief and Values, 23*, 217-220.
- Francis, L. J., Robbins, M., & Craig, C. L. (in press). The psychological type profile of Anglican churchgoers in England: Compatible or incompatible with their clergy? *International Journal of Practical Theology*.
- Francis, L. J., Robbins, M., Williams, A., & Williams, R. (2007). All types are called, but some are more likely to respond: The psychological profile of rural Anglican churchgoers in Wales. *Rural Theology, 5*, 23-30.
- Gerhardt, R. (1983). Liberal religion and personality type. *Research in Psychological Type, 6*, 47-53.
- 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.

Keirse, D., & Bates, M. (1978). *Please understand me*. Del Mar, California: Prometheus Nemesis.

Leonard, R. & Bellamy, J. (2010). The relationship between bonding and bridging social capital among Christian denominations across Australia. *Nonprofit Management and Leadership*, 20, 445-460.

Myers, I. B. (1998). *Introduction to type: A guide to understanding your results on the Myers-Briggs Type Indicator* (fifth edition, European English version). Oxford: Oxford Psychologists Press.

- 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.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Touchstone.
- Rehak, M.C. (1998). Identifying the congregation's corporate personality. *Journal of Psychological Type, 44*, 39-44.
- Robbins, M., & Francis, L. J. (2011). All are called, but some psychological types are more likely to respond: Profiling churchgoers in Australia. *Research in the Social Scientific Study of Religion, 22*, 212-229.
- Ross, C. F. J. (1993). Type patterns among active members of the Anglican church: comparisons with Catholics, Evangelicals and clergy. *Journal of Psychological Type, 26*, 28-35.
- Ross, C. F. J. (1995). Type patterns among Catholics: Four Anglophone congregations compared with Protestants, Francophone Catholics and priests. *Journal of Psychological Type, 33*, 33-41.
- Ryland, A., Francis, L.J., & Robbins, M. (in press). Called for leadership: Psychological type profile of leaders within the Newfrontiers network of churches in the United Kingdom.
- Williams, E. (2008). Measuring religious social capital: The scale properties of the Williams Religious Social Capital Index (WRSCI) among cathedral congregations. *Journal of Beliefs and Values, 29*, 327-332.
- Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *ISUMA: Canadian Journal of Policy Research, 41*, 669-684.

Table 1

*Congregational Bonding Social Capital Index: scale properties*

	<i>r</i>	Very %	Fairly %	Once %	Never %
<u>How often have the people in this congregation</u>					
made you feel loved and cared for?	.72	39	37	18	6
listened to you talk about your private problems and concerns	.75	23	30	28	20
shared their religious experiences with you?	.79	19	28	35	19
helped you to live according to your religious beliefs?	.81	20	35	27	18
helped you to know God better?	.79	26	35	26	13
alpha	.91				

Note: *r* = correlation between each item and the sum of the other four items

Table 2

*Sense of belonging*

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	%
Yes, a strong sense of belonging which is growing	48
Yes, a strong sense – about the same as last year	27
Yes, although perhaps not as strongly as in the past	10
No	16

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Table 3

*Type distribution for Australian churchgoers*

<b>The Sixteen Complete Types</b>				<b>Dichotomous Preferences</b>	
ISTJ <i>n</i> = 489 (23.7%) +++++	ISFJ <i>n</i> = 423 (20.5%) +++++	INFJ <i>n</i> = 63 (3.1%) +++	INTJ <i>n</i> = 86 (4.2%) ++++	E <i>n</i> = 895 (43.3%)	I <i>n</i> = 1170 (56.7%)
+++++	+++++			S <i>n</i> = 1674 (81.1%)	N <i>n</i> = 391 (18.9%)
+++++	+++++			T <i>n</i> = 967 (46.8%)	F <i>n</i> = 1098 (53.2%)
+++++	+++++			J <i>n</i> = 1816 (87.9%)	P <i>n</i> = 249 (12.1%)
++++	+			<b>Pairs and Temperaments</b>	
ISTP <i>n</i> = 21 (1.0%) +	ISFP <i>n</i> = 42 (2.0%) ++	INFP <i>n</i> = 26 (1.3%) +	INTP <i>n</i> = 20 (1.0%) +	IJ <i>n</i> = 1061 (51.4%)	IP <i>n</i> = 109 (5.3%)
				EP <i>n</i> = 140 (6.8%)	EJ <i>n</i> = 755 (36.6%)
				ST <i>n</i> = 782 (37.9%)	SF <i>n</i> = 892 (43.2%)
				NF <i>n</i> = 206 (10.0%)	NT <i>n</i> = 185 (9.0%)
ESTP <i>n</i> = 24 (1.2%) +	ESFP <i>n</i> = 59 (2.9%) +++	ENFP <i>n</i> = 44 (2.1%) ++	ENTP <i>n</i> = 13 (0.6%) +	SJ <i>n</i> = 1528 (74.0%)	SP <i>n</i> = 146 (7.1%)
				NP <i>n</i> = 103 (5.0%)	NJ <i>n</i> = 288 (13.9%)
				TJ <i>n</i> = 889 (43.1%)	TP <i>n</i> = 78 (3.8%)
				FP <i>n</i> = 171 (8.3%)	FJ <i>n</i> = 927 (44.9%)
ESTJ <i>n</i> = 248 (12.0%) +++++	ESFJ <i>n</i> = 368 (17.8%) +++++	ENFJ <i>n</i> = 73 (3.5%) ++++	ENTJ <i>n</i> = 66 (3.2%) +++	IN <i>n</i> = 195 (9.4%)	EN <i>n</i> = 196 (9.5%)
+++++	+++++			IS <i>n</i> = 975 (47.2%)	ES <i>n</i> = 699 (33.8%)
+++++	+++++			ET <i>n</i> = 351 (17.0%)	EF <i>n</i> = 544 (26.3%)
++	+++++			IF <i>n</i> = 554 (26.8%)	IT <i>n</i> = 616 (29.8%)
	+++				

	<b>Jungian Types (E)</b>		<b>Jungian Types (I)</b>		<b>Dominant Types</b>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
E-TJ	314	15.2	I-TP	41	2.0	Dt.T	355 17.2
E-FJ	441	21.4	I-FP	68	3.3	Dt.F	509 24.6
ES-P	83	4.0	IS-J	912	44.2	Dt.S	995 48.2
EN-P	57	2.8	IN-J	149	7.2	Dt.N	206 10.0

Note: N = 2065      + = 1% of N

Table 4

*Congregational Bonding Social Capital Index: by dichotomous type*

	N	Mean	SD	F	<i>p</i> <
<u>Orientations</u>					
Extraversion	895	14.0	4.3		
Introversion	1170	12.9	4.2	37.2	.001
<u>Perceiving functions</u>					
Sensing	1674	13.3	4.2		
Intuition	391	14.0	4.2	9.3	.01
<u>Judging functions</u>					
Thinking	967	12.8	4.3		
Feeling	1098	13.9	4.1	36.3	.001
<u>Attitudes</u>					
Judging	1816	13.4	4.2		
Perceiving	249	13.5	4.2	0.2	NS

Table 5

*Congregational Bonding Social Capital Index: by dominant type*

Dominant type	N	Mean	SD	F	<i>p</i> <
Feeling	509	14.3	4.0		
Intuition	206	13.7	4.2		
Thinking	355	13.1	4.4		
Sensing	995	12.9	4.2	12.7	.001

Table 6

*Congregational Bonding Social Capital Index: by dominant and auxiliary*

Dominant and auxiliary	N	Mean	SD	F	<i>p</i> <
Dominant feeling with intuition	99	15.0	3.9		
Dominant intuition with feeling	107	14.3	4.3		
Dominant feeling with sensing	410	14.2	4.0		
Dominant thinking with intuition	86	13.6	4.3		
Dominant sensing with feeling	482	13.4	4.1		
Dominant intuition with thinking	99	13.0	4.0		
Dominant thinking with sensing	269	13.0	4.4		
Dominant sensing with thinking	513	12.5	4.3	8.4	.001

Table 7

*Congregational Bonding Social Capital Index: by 16 complete types*

Dominant type	N	Mean	SD	F	<i>p</i> <
ENFJ	73	15.6	3.8		
ENFP	44	15.0	3.4		
ESFP	59	14.3	4.4		
ESFJ	368	14.3	4.0		
INTP	20	14.0	4.0		
INFJ	63	13.8	4.2		
ENTP	13	13.8	3.4		
ENTJ	66	13.5	4.4		
ISFJ	423	13.3	4.1		
ESTJ	248	13.3	4.4		
INFP	26	13.3	3.8		
ISFP	42	12.9	3.5		
INTJ	86	12.9	4.1		
ISTJ	489	12.5	4.3		
ESTP	24	12.4	4.9		
ISTP	21	10.1	3.4	5.8	.001