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Go and observe the sower: Seeing empirical theology at work

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Abstract

This study explored and operationalised two theological constructs, one concerning the nature of being human (rooted in a theology of individual differences) and one concerning the nature of the church (rooted in ecclesiology). These two operationalised constructs were tested among a sample of 1,418 Anglican clergy resident in England to account for variance in three measures on which there was considerable variability among such clergy (after controlling for sex and age): traditional moral belief, traditional religious belief, and traditional worship. The data demonstrated that both theological constructs (concerning the nature of being human and concerning the nature of the church) explained significant variance in all three measures. The implications of these findings were discussed for ways in which diversity in belief is embraced or rejected within the Anglican Church.

Keywords: clergy religious beliefs, moral beliefs, churchmanship, psychological type
Introduction

Theology takes the idea of God seriously, and gives serious attention to the ways in which people reflect on the experience of God. Empirical theology is one of the serious ways in which theologians set about the tasks of taking the idea of God seriously and of giving serious attention to the ways in which people reflect on the experience of God. Within the Christian tradition empirical theologians draw inspiration from one of the characteristic ways in which Jesus is portrayed in the Gospels as dealing with theological questions. According to the Gospel tradition:

After John was arrested, Jesus came into Galilee, preaching the Gospel of God, and saying ‘The time is fulfilled, and the Kingdom of God is at hand. (Mark 1: 14-15) According to the same Gospel tradition, people became curious about Jesus’ claims concerning the Reign of God and in response to that curiosity Jesus began to urge them to open their eyes and to become engaged with the world as empirical theologians. As empirical theologians they were encouraged to learn from the techniques of natural scientists. The challenge was to go out into the fields and to observe the sower at work, to observe the patterns that occurred in the life cycle of the seed. Seeds that fell on the path became food for the birds; seeds that fell on rocky ground suffered from lack of moisture; seeds that fell among thorns were choked; seeds that fell on good soil brought forth fruit. The first task of the natural scientist was to describe and to classify the kinds of soils (qualitative research techniques). The second task was to count the yield, thirty fold, sixty fold, and a hundred fold (quantitative research techniques). Then away from the fields, the empirical theologians were led into the kitchen to observe the baker at work with yeast and the dough. Indeed there is a lot to learn about the Reign of God from the skills of the natural scientist.

According to the Gospel tradition, Jesus did not rest content with the skills of the natural sciences. Empirical theologians were encouraged to learn from the techniques of
social scientists as well. The challenge was to go out to the wedding feast and to observe the behaviour of the guests and to identify the fundamental patterns that shape human interaction, human ambition, and human humiliation.

Once let through the door into the wedding feast there is a discernable tendency for the guests to jockey for places and there is an established hierarchy in their minds about the significance of the table plan, the significance of proximity with those who issued the invitation. Careful social scientists, engaged in ethnographic field work or in participation observation, learn a lot about the human condition from the way in which people behave at the wedding feast. Social scientists equipped with theological insight, however, can learn so much more from such simple observation. Equipped with theological insight, social scientists can begin to observe the image of the divine creator within those wedding guests, can begin to see the hallmarks of the fall in ways in which those guests behave one to another, and can begin to glimpse the Reign of God through the ways in which the divine image is being restored before their very eyes. Then away from the wedding feast itself, empirical theologians were led into the back room where the bridesmaids were waiting for the groom to observe the debacle over the supply of oil for lamps. Indeed there is a lot to learn about the Reign of God from the skill of the social scientist.

Against this background and true to the dominical command to go to observe the sower, to go to observe the baker, to go to observe the guests at the wedding feast, or to go to observe the bridesmaids awaiting the arrival of the groom, the aims of this paper are to examine how empirical theology may work today, to illustrate how empirical theology is differentiated from the cognate field of the social scientific study of religion, and to test how these ideas are operationalised within a specific research question, and a specific dataset. The way in which empirical theology may work today is discussed in relation to two specific questions that are theological in nature. The first question, concerning what it means to be
human, is located within a discussion of the theology of individual differences. The second question, concerning, the nature of the Church, is located within a discussion of ecclesiology. These two theologically informed areas are then brought into conversation with a new dataset that documents the diversity of beliefs and opinions among Church of England clergy concerning matters of doctrine, matters of morality, and matters of worship. The research problem is to discover how much this diversity is attributable to basic human differences (a matter to do with the nature of humanity) or to basic ecclesiastical differences (a matter to do with the nature of the church).

The theology of individual differences

The theology of individual differences has its roots in the work of Francis (2005) and Francis and Village (2008) and draws on a background in the psychology of individual differences. The theology of individual differences is grounded in a systematic approach that takes seriously the building blocks of Christian doctrine, the doctrines of creation, fall, redemption, and sanctification.

This notion of the theology of individual differences is first and foremost grounded in a Christian doctrine of creation. The biblical basis for this doctrine of creation is informed by Genesis 1:27:

God created humankind in the image of God,

in the image of God, God created them,

male and female God created them.

The key insight provided by this biblical basis for a doctrine of creation is that God embraces diversity and that such diversity is reflected in those created in the image of God.

In contrast with the narrative concerning Adam and Eve, a doctrine of creation grounded in Genesis 1:27 is committed theologically to recognizing that both men and women are created equally in the image of God, and to arguing that individual differences
which are created equal (male and female) need to be accorded equal value and equal status. If such a theology of individual differences holds good for sex differences then, by extension, such a theology should hold good also for other differences equally grounded in creation, that is to say in the intentionality of the divine creator. Such differences may well include ethnic differences and psychological differences. Before examining the implications of such a view, the Christian doctrine of creation needs to be set alongside the Christian doctrine of the fall.

The key point made by the Christian doctrine of the fall is that the image of the creator seen in the human creature is no longer unsullied. The image has been corrupted. The task to be undertaken by a sound theology of individual differences is to attempt to untangle those differences which can reasonably be posited to reflect the fall and those which persist as proper indicators of the image and of the intention of the divine creator. Those individual differences which reflect the corruption brought about by the fall must rightly be subject to the saving and transforming power of Christ (the doctrine of redemption) and the perfecting power of the Holy Spirit (the doctrine of sanctification).

In the light of a doctrine of creation grounded in Genesis 1:27, the individual difference of sex (male and female) may be properly seen as reflecting creation rather than fall. It is for that reason that the authors of this paper would regard it as theologically inappropriate for us, as men, to wake up of a morning and to cry out in our prayer:

O God, we repent.

Forgive us for being created male.

Recreate us female,

that we may be more perfectly formed in your divine image.

But it would not be theologically inappropriate for us to wake up in the morning and to cry out in our prayer:

O God, we repent.
Forgive us for abusing our status as male.

Forgive us for creating you in our male image.

Forgive us for treating women
   as if they were a less perfect
   representation of your divine image.

Help us to recall that you are the God
   whose image embraces diversity.

The argument seems equally strong to propose that the individual difference of ethnicity may be properly seen as reflecting creation rather than fall. It is for that reason that the authors of this paper would regard it as theologically inappropriate for us, as white, to wake up of a morning and to cry out in our prayer:

   O God, we repent.
   
   Forgive us for being created white.
   
   Recreate us black,
       that we may be more perfectly formed
       in your divine image.

But it would not be theologically inappropriate for us to wake up of a morning and to cry out in our prayer:

   O God, we repent.
   
   Forgive us for abusing our status as white.
   
   Forgive us for creating you in our white image.
   
   Forgive us for treating other ethnic groups
       as if they were less than perfect
       representations of your divine image.

Help us to recall that you are the God
whose image embraces diversity.

The argument regarding individual differences of personality may prove to be somewhat more controversial. The problem arises, at least in part, from a real lack of clarity regarding the ways in which the term personality can be used to define and to describe psychological differences. The professional debate needs to be sharpened, therefore, by distinguishing between two related, but distinct, terms, namely personality and character.

Within the psychology of individual differences, the term personality is reserved for those deep-seated individual differences which reflect something of the individual’s genetic roots, while character reflects individual qualities which are nearer the surface. Qualities which define personality are largely immutable (like sex and ethnicity), while qualities which define character are open to change and development. Qualities which define personality should be morally neutral and value free (like sex and ethnicity), while qualities which define character should be highly significant in terms of morality and personal values.

An example of individual differences in personality is provided by the well-understood distinction between introversion and extraversion. Personality theory does not claim that extraverts are (in any sense) better or worse than introverts. It is for that reason that the authors of this paper would regard it as theologically inappropriate for us, as introverts, to wake up of a morning and to cry out in our prayer:

    O God, we repent.
    Forgive us for being created introvert.
    Recreate us extravert,
    that we may be more perfectly formed
    in your divine image.

But it would not be theologically inappropriate for us to wake up of a morning and to cry out in our prayers:
O God, we repent.

Forgive us for abusing our status as introvert.

Forgive us for creating you in our introvert image.

Forgive us for treating extraverts

as if they were less perfect

representatives of your divine image.

Help us to recall that you are the God

whose image embraces diversity.

An example of individual differences in character is provided by the equally well-understood distinction between pride and humility. This distinction may be illustrated by Luke’s well-known account of two men who went up to the temple to pray. At first glance, looking at these two men from a distance, it could mistakenly be thought that Luke was describing the extravert who walked in boldly and who spoke up loudly, and the introvert who crept in at the back and knelt down quietly. If only that had been the case, us Anglicans could have claimed dominical authority for overvaluing the spirituality of introversion and undervaluing the spirituality of extraversion. Yet, alas, this contrast between introversion and extraversion was not the contrast that Luke had in mind. Rather here is a story of self-assurance that collapses into pride, a story of self-perceived unworthiness that rises into humility. Moral theology is clear that one of these qualities is superior to the other. Pride is looked upon as a consequence of the fall. This is not how in the beginning God intended people to be. Humility is looked upon as a sign of God’s grace and redemption. This is how God intends redeemed people to become.

Thus, while normal personality is value neutral, character is heavily value laden. Both extraverts and introverts can develop a good character, sharing the fruits of the Spirit as described in Galatians 5 (love, joy, peace, patience, kindness, generosity, faithfulness,
gentleness, and self-control). Similarly both extraverts and introverts can develop a bad character, sharing the works of the flesh as also described in Galatians 5 (licentiousness, strife, jealousy, anger, quarrels, envy, and drunkenness).

**The measurement of personality**

Within the domain of personality and social psychology, the concept of personality itself is employed in a variety of ways. Different models (and different measures) include different aspects of the self. The major difference concerns whether personality embraces aspects of psychopathology or not. The contrast between different approaches is perhaps best illustrated by comparing the three dimensional model of personality proposed by Eysenck and operationalised by the Eysenck Personality Questionnaire Revised (Eysenck & Eysenck, 1991) and the model of psychological type proposed by Jung (1971) and developed and operationalised by the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), the Keirsey Temperament Sorter (Keirsey & Bates, 1978), and the Francis Psychological Type Scales (Francis, 2005).

On the one hand, the Eysenckian dimensional model of personality makes an explicit theoretical link between individual differences in normal personality and psychopathology by maintaining that the precursors of neurotic disorders and of psychotic disorders are present in normal personality. This theoretical linkage is emphasised by the nomenclature of the Eysenckian dimensions of normal personality. Alongside the high scoring end of the first dimension, named extraversion, the high scoring end of the second and third dimensions are named neuroticism and psychoticism. A consequence of this understanding of personality is that some of the descriptors employed by Eysenck (in respect of personality) are not value free and might within the conceptual framework proposed by the theology of individual differences be better applied to character.
On the other hand, psychological type theory makes an explicit point of ensuring that the contrasting descriptions of personality are value free. On this account, introversion is not an absence of extraversion, but an equally valid expression of positive personality in its own right. Sensing and intuition are equally valid modes of perceiving, while thinking and feeling are equally valid modes of evaluating (or judging). Judging and perceiving are also considered equally valid ways of relating to the external world.

The well-established Big Five Factor model of personality developed by Costa and McCrae (1985, 1992) employs the notion of personality in a way that is closer to Eysenck’s usage than the usage of psychological type. Some of the descriptors employed by the Big Five Factor model do not appear to be value free (for example, openness to experience, agreeableness, and conscientiousness), and some of the items used to define emotionality are reminiscent of the Eysenckian construct of neuroticism.

In the light of these considerations, Francis (2005) and Francis and Village (2008) began to explore the appropriateness of integrating the model of personality proposed by psychological type theory into a theology of individual differences as a way of developing theologically informed psychological constructs that could be legitimately and professionally operationalised within the context of empirical theology.

**Introducing psychological type theory**

The basic building blocks of psychological type theory distinguish between two orientations (extraversion and introversion), two perceiving functions (sensing and intuition), two judging functions (thinking and feeling), and two attitudes toward the outer world (judging and perceiving).

The two orientations are concerned with where energy is drawn from; energy can be gathered either from the outside world or from the inner world. Extraverts (E) are orientated toward the outside world; they are energised by the events and people around them. They
enjoy communicating and thrive in stimulating and exciting environments. They prefer to act in a situation rather than reflect on it. They may vocalise a problem or an idea, rather than think it through privately. They may be drained by silence and solitude. They tend to focus their attention upon what is happening outside themselves. They are usually open individuals, easy to get to know, and enjoy having many friends. In contrast, introverts (I) are orientated toward their inner world; they are energised by their inner ideas and concepts. They may feel drained by events and people around them. They prefer to reflect on a situation rather than act in it. They enjoy solitude, silence, and contemplation, as they tend to focus their attention on what is happening in their inner life. They may appear reserved and detached, and they may prefer to have a small circle of intimate friends rather than many acquaintances.

The perceiving functions are concerned with the way in which people receive and process information; this can be done through use of sensing or through use of intuition. Sensing types (S) tend to focus on specific details, rather than the overall picture. They are concerned with the actual, the real, and the practical and tend to be down-to-earth and matter-of-fact. They may feel that particular details are more significant than general patterns. They are frequently fond of the traditional and conventional. They may be conservative and tend to prefer what is known and well-established. In contrast, intuitive types (N) focus on the possibilities of a situation, perceiving meanings and relationships. They may feel that perception by the senses is not as valuable as information gained from the unconscious mind; indirect associations and concepts impact their perceptions. They focus on the overall picture, rather than specific facts and data. They follow their inspirations enthusiastically, but not always realistically. They can appear to be up in the air and may be seen as idealistic dreamers. They often aspire to bring innovative change to established conventions.

The judging functions are concerned with the way in which people make decisions and judgements; this can be done through use of objective impersonal logic or subjective
interpersonal values. Thinking types (T) make judgements based on objective, impersonal logic. They value integrity and justice. They are known for their truthfulness and for their desire for fairness. They consider conforming to principles to be of more importance than cultivating harmony. They are often good at making difficult decisions as they are able to analyse problems in order to reach an unbiased and reasonable solution. They may consider it to be more important to be honest and correct than to be tactful, when working with others. In contrast, feeling types (F) make judgements based on subjective, personal values. They value compassion and mercy. They are known for their tactfulness and for their desire for peace. They are more concerned to promote harmony, than to adhere to abstract principles. They are able to take into account other people’s feelings and values in decision-making and problem-solving, ensuring they reach a solution that satisfies everyone. They are often thought of as ‘warm-hearted’. They may find it difficult to criticise others, even when it is necessary. They find it easy to empathise with other people and tend to be trusting and encouraging of others.

The attitudes towards the outside world are concerned with the way in which people respond to the world around them, either by imposing structure and order on that world or by remaining open and adaptable to the world around them. Judging types (J) have a planned, orderly approach to life. They enjoy routine and established patterns. They prefer to follow schedules in order to reach an established goal and may make use of lists, timetables, or diaries. They tend to be punctual, organised, and tidy. They may find it difficult to deal with unexpected disruptions of their plans. Likewise, they are inclined to be resistant to changes to established methods. They prefer to make decisions quickly and to stick to their conclusions once made. In contrast, perceiving types (P) have a flexible, open-ended approach to life. They enjoy change and spontaneity. They prefer to leave projects open in order to adapt and improve them. They may find plans and schedules restrictive and tend to be easygoing about issues such as punctuality, deadlines, and tidiness. Indeed, they may consider last minute
pressure to be a necessary motivation in order to complete projects. They are often good at dealing with the unexpected. Indeed, they may welcome change and variety as routine bores them. Their behaviour may often seem impulsive and unplanned.

Psychological type data can be reported and interpreted in a number of different ways, drawing on the four dichotomous type preferences (the two orientations, the two perceiving functions, the two judging functions, and the two attitudes), on the 16 complete types (like ISTJ or ENFP), on the four dominant types (dominant sensing, dominant intuition, dominant feeling, or dominant thinking) or on the eight dominant and auxiliary pairs (like dominant thinking with auxiliary intuition, or dominant intuition with auxiliary thinking). Keirsey and Bates (1978) proposed an interpretive framework drawing on and distinguishing between four temperaments characterised as SJ, SP, NT and NF.

In the language shaped by Keirsey and Bates (1978) the Epimethean Temperament characterises the SJ profile, people who long to be dutiful and exist primarily to be useful to the social units to which they belong. The Dionysian Temperament characterises the SP profile, people who want to be engaged, involved, and doing something new. The Promethean Temperament characterises the NT profile, people who want to understand, explain, shape and predict realities, and who prize their personal competence. The Apollonian Temperament characterises the NF profile, people who quest for authenticity and for self-actualisation, who are idealistic and who have great capacity for empathic listening.

**Psychological type theory as empirical theology**

Psychological type theory has been employed within the context of empirical theology in a variety of ways. Two specific examples are located within the field of clergy studies and within the field of hermeneutics and homiletics.

Within the field of clergy studies, for example, Oswald and Kroeger (1988) built on Keirsey and Bates’ (1978) characterisation of the four temperaments to create profiles of how
these four temperaments may shape four very different styles of religious leadership. This theoretical framework has been subsequently tested empirically in a variety of ways.

The Epimethean Temperament (SJ) is styled ‘the conserving, serving pastor’. SJ clergy tend to be the most traditional of all clergy temperaments, bringing stability and continuity in whatever situation they are called to serve. They proclaim a single and straightforward faith, committed to down-to-earth rules for the Christian life. They serve as protectors and conservers of the traditions inherited from the past. If change is to take place, it emerges by evolution, not revolution. They excel at building community, fostering a sense of loyalty and belonging. They bring order and stability to their congregations, creating plans, developing procedures and formulating policies; and they are keen that these procedures should be followed. They can be trusted for their reliability, punctuality and efficiency. They are effective pastors, showing particular concern for the young, the elderly, and the weak. They are realists who offer practical and down-to-earth solutions to pastoral problems.

The Dionysian Temperament (SP) is styled ‘the action-oriented pastor’. SP clergy tend to be the most fun loving of all clergy temperaments, possessing a compulsive need to be engaged in activity. They have little need for or interest in the abstract, the theoretical, and the non-practical aspects of theology and church life. They are flexible and spontaneous people who welcome the unplanned and unpredictable aspects of church life. They can bring the church to life with activities for everyone from cradle to grave. They have a flare for grasping the moment. They are entertainers and performers at heart. They are at their best in a crisis and are good at handling conflict resolution. They are fun loving and enjoy working with children and young people. They are better at starting new initiatives than at seeing things through. SP clergy may be particularly attracted to charismatic worship, responding to the leading of the Holy Spirit, welcoming a free-flowing form that allows for impromptu testimonials, speaking in tongues, and spontaneous singing.
The Promethean Temperament (NT) is styled ‘the intellectual, competence-seeking pastor’. NT clergy are the most academically and intellectually grounded of all clergy temperaments, motivated by the search for meaning for truth and for possibilities. They are visionaries who need to excel in all they do, and they tend to push their congregations to excel as well. They enjoy the academic study and analysis of the faith, and may try to run their church as an extension of the seminary. They make great teachers, preachers, and advocates for social justice. They look for underlying principles rather than basic applications from their study of scripture. They see the value of opposing views and strive to allow alternative visions to be heard. They are more concerned with finding truth than with engineering harmony and compromise. NT clergy need to be challenged in their ministry and to be able to move from one challenge to the next.

The Apollonian Temperament (NF) is styled ‘the authenticity-seeking, relationship-oriented pastor’. NF clergy tend to be the most idealistic and romantic of all clergy temperaments, attracted to helping roles that deal with human suffering. They want to meet the needs of others and to find personal affirmation in so doing. They can be articulate and inspiring communicators, committed to influencing others by touching their hearts. They have good empathic capacity, interpersonal skills, and pastoral counselling techniques. They find themselves listening to other people’s problems in the most unlikely contexts, and really caring about them. NF clergy tend to be high on inspiration, but lower on the practical down-to-earth aspects of ministry. They are able to draw the best out of people and work well as the catalyst or facilitator in the congregation as long as others are on hand to work with and to implement their vision. They are at their best when leading in people-related projects, such as starting a project for the elderly or for youth. They are most comfortable in unstructured meetings where they are good at facilitating group decision-making processes.
In terms of empirical investigation, for example, a series of recent studies has drawn on these profiles to map and to reflect theologically on the distinctive style of ministry now fostered in the Church of England by the introduction of Ordained Local Ministry. The data revealed a much higher proportion of the Epimethean Temperament (SJ) among Ordained Local Ministers, reflecting ‘the conserving, serving pastor’ (Bowden, Francis, Jordan, & Simon, 2012; Francis & Holmes, 2011; Francis, Robbins, & Jones, 2012; Francis & Village, 2012).

Within the field of hermeneutical and homiletical studies Francis and Village (2008) extrapolated from psychological type theory to suggest that type preferences influence the way in which sacred text is read and proclaimed. Then they attempted to characterise the kind of reading and proclamation that would be associated with the two perceiving functions (sensing and intuition) and with the two judging functions (thinking and feeling). This theoretical framework has been subsequently tested empirically in a variety of ways.

Francis and Village (2008) argued that for sensing types, interpreting a text may be largely about attending to what is actually there. They will value interpretations that highlight the details in the text, especially those that draw on sensory information. Interpretations that begin with a repeat of the text and draw attention to details will appeal to sensing types, who will be reluctant to speculate too widely about hidden or metaphorical meanings. The sensing function draws attention to factual details so sensing types will be likely to interpret biblical passages literally rather than symbolically or metaphorically.

For intuitive types, interpreting a text may be largely about using the text as a springboard to imaginative ideas. They will be inspired by interpretations that fire the imagination and raise new possibilities and challenges. Interpretations that raise wider questions and that look for overarching or underlying concepts will appeal to intuitive types, who may find the plain or literal sense rather uninteresting. Intuitives find it natural to make
links between analogous ideas and concepts, and they will be likely to interpret passages symbolically or metaphorically, rather than literally.

For feeling types, interpreting a text may be largely about applying the human dimensions to present day issues of compassion, harmony and trust. They will be drawn to empathizing with the characters in a narrative, and will want to understand their thoughts, motives and emotions. Interpretations that try to understand what it was like to be there will appeal to feeling types, who may be less interested in the abstract theological ideas that might be drawn from the text.

For thinking types interpreting a text may largely be about seeing what the text means in terms of evidence, moral principles or theology. They will be drawn to using rationality and logic to identify the ideas and truth-claims in a text. Interpretations that highlight the theological claims in a text will appeal to thinking types, who may be less interested in trying to understand the characters described by the text.

In terms of empirical investigation, for example, a series of recent studies has invited groups of lay people, clergy, and other preachers to study scripture within workshop groups structured according to type preference and careful study has been made of the different approaches taken to the same passage according to different psychological type preferences. These studies have examined the feeding of the five thousand in Mark 6: 34-44 (Francis, 2010), the resurrection narrative in Mark 16: 1-8 and Matthew 28: 1-15 (Francis & Jones, 2011), the cleansing of the temple and the incident of the fig tree in Mark 11: 11-21 (Francis, 2012a), the Johannine feeding narrative in John 6: 4-22 (Francis, 2012b), separating sheep from goats in Matthew 25: 31-46 (Francis & Smith, 2012), John the Baptist in Mark 1: 2-8 and Luke 3: 26-20 (Francis, 2013) and the birth narratives in Matthew 2: 13-26 and Luke 2: 8-16 (Francis & Smith, 2013). These empirical studies found the predicted differences in sensing, intuition, thinking and feeling readings of the same text.
Ecclesiology

While psychological type theory may carry some predictive power in respect of aspects of church life, church life as experienced by individuals is also heavily shaped by ecclesiology, church tradition, or church orientations. The Anglican Church is a global denomination occupying a unique niche within Christianity ecclesiology which has been shaped by its unusual origins during the Reformation, the complex political evolution of the ensuing centuries, and the globalising effect of empire (Douglas & Pui-Lan, 2001; Nichols, 1993; Sykes, Booty, & Knight, 1998; Ward, 2006). Within the Anglican Communion, the Church of England has produced a number of distinct groups that owe their origins to religious revivals and reforms since the early nineteenth century. The most obvious of these are the Anglo-catholic and Evangelical wings, which interact with other identities shaped by traditionalism, liberalism and charismaticism. The result is a rich mix of ecclesiologies existing within a single Church.

The nature of the main ‘church orientations’ or ecclesiologies within the Church of England is related to their origins and evolution. Anglican evangelicalism began with the revivals of the eighteenth century, especially those associated with George Whitefield and the Wesleys (Hylson-Smith, 1997). Bebbington (1993) identified the core marks of Evangelical religion in England as ‘conversionism’, the belief that lives must be changed, ‘activism’, the idea that the gospel must be expressed in action, ‘biblicism’, a particular regard for the centrality and authority of Scripture, and ‘crucicentrism’, a stress on the work of Christ on the cross. Anglican Evangelicals share these core beliefs, but also have an identity shaped by their particular struggle to keep the Church of England close to its Reformed roots. Although Evangelicals were a small minority in the Church during the early part of the twentieth century, the post-war revival means the Evangelical wing of the Church of England currently
has a central role within the Church of England (Hylson-Smith, 1989; Manwaring, 1985; Bebbington, 2009).

The Anglo-catholic movement in the Church of England can be traced to a small group of Oxford clerics, who in 1833 began publishing tracts that denounced the growing liberalism and Utilitarian politics of the time (Hylson-Smith, 1993; Nockles, 1994). They promoted church order, sacraments and dogmatics in ways that sought to move the Church back to its Roman Catholic roots. The movement clashed with Evangelicalism, because it seemed to be trying to undo the Reformation and introduce Roman Catholic ritual. The heyday of the Anglo-catholic movement was in the years after the First World War, but it remains a significant minority within the Church of England.

Although these two wings are very influential, the majority of worshippers belong to what they would call ‘middle of the road’ or ‘broad’ Anglican churches. Such churches share practices and theological stances with the two main parties, but also draw from other sources. These ‘Broad Church’ Anglicans, almost by definition, embrace a range of views, and it can be difficult to predict what particular individuals may believe. Nonetheless, such Anglicans are probably in the majority, and any description of the religious identity of the Church of England must allow for these sorts of worshippers.

These groupings within the Church of England are by no means uniform, and have been influenced by movements such as liberalism and charismaticism. Liberalism in the Church of England is often traced to Charles Gore (1889) and the collection of essays Lux Mundi, which tried to help the Church embrace the emerging disciplines of biblical scholarship and natural science. Although Gore was a High Churchman, his Liberal Catholic approach was in sharp contrast to the Anglo-catholics of his time, and he resented the adoption of conservative thinking and Roman practices (Hylson-Smith, 1993). Despite his views, liberalism in the Church of England has tended to be associated with Anglo-
catholicism more than any other tradition. The Charismatic Movement, on the other hand, was most enthusiastically adopted by Evangelicals during the latter part of the twentieth century (Scotland, 2003), and today it is mainly associated with those who hold more conservative views.

This brief historical review has highlighted the complexity of the notion of ecclesiology, church tradition, or church orientations within the Church of England. An empirical approach to ecclesiology within the Church of England is one that seeks to investigate beliefs, attitudes and practices of people who constitute the grassroots and who self-identify with particular church orientations. In terms of empirical investigation, for example, a series of recent studies has examined the power of church orientations to predict individual differences in the beliefs, practices and attitudes of Anglican clergy and lay people in England (Randall, 2005; Francis, Robbins, & Astley, 2005; Village & Francis, 2009; Village, Francis, & Craig, 2009; Village, 2011, 2012, 2013). These studies demonstrate the predictive power of church orientations across a range of issues to do with religious belief, with moral values and with church practice. These differences are important because they are connected, not least, to recent debates within the Church of England concerning the role of women, marriage and divorce, and sexuality.

**Research problem**

Taken together the two bodies of empirical studies referenced earlier in this paper (one concerned with the theology of individual differences and the other concerned with ecclesiology) suggest that the two factors of psychological type and church orientations are both formative in shaping ways in which individual Christians (clergy and laity) may conceive, experience and express their faith. Little attempt has so far, however, been made to integrate these two research interests within the field of empirical theology. Against this background, it is the aim of the present study to test the comparative predictive power of
psychological type and church orientation in respect of what clergy believe in three domains: matters of doctrine, matters of morality and matters of worship.

In order to translate this broad research aim into a concrete study some further definition and delimitation needs to be offered regarding the ways in which both psychological type and church orientation are operationalised. Psychological type will be operationalised by means of the Francis Psychological Type Scales (Francis, 2005). Unlike the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) and the Keirsey Temperament Sorter (Keirsey & Bates, 1978), the Francis Psychological Type Scales were expressly designed for incorporation within survey-style research. Of the range of ways in which type data can be configured, the study proposes to focus on temperament theory in order to profile the ways in which the four clergy temperaments characterised by Oswald and Kroeger (1988) may shape distinctive approaches to matters of doctrine, matters of morality, and matters of worship.

Church orientation will be operationalised by semantic differential space following the method proposed by Randall (2005). This approach assumes that the terms Anglo-Catholic and Evangelical within the Church of England are opposite poles as a continuum and that where individuals locate themselves on that continuum is an expression of at least some aspects of their religious identity. Previous studies have used a seven-point bipolar scale anchored at one end as ‘Anglo-catholic’ and the other as ‘Evangelical’, with those who answer in the middle part of the scale being taken as ‘broad church’ (e.g. Randall, 2005; Village & Francis, 2010). This scale is closely correlated with a wide range of beliefs, attitudes and practices, and can be used to create a three-fold typology of Anglo-catholic, Broad church, and Evangelical that expresses real and significant differences in theological beliefs and religious practices (Randall, 2005; Village, 2012).

Method
Procedure

The *Church Times* is the main newspaper of the Church of England, with a circulation of around 25,000. In 2013 it published a four-page questionnaire in two editions of the paper, one during July and one during October. The paper is published in hard copy and online, and there was a corresponding online version of the questionnaire. The questionnaire was based on that used in a 2001 Church Times Survey, which was designed to assess a wide range of beliefs, attitudes and practices (Francis, Robbins, & Astley, 2005). The 2013 version included many of the same items, but also some new ones, and a measure of psychological type.

Participants

The total response was 4,909, of which 54% completed online and 46% completed the hardcopy. Nearly all respondents (92%) lived in England and the majority (62%) were lay people. This study is based on the results from 1418 clergy who lived in England and who completed fully all the items used in the analysis. Of these, 74% were men and 26% were women; 13% were aged under 50, 54% were 50-69, and 33% were 70 or older.

Instruments

*Attitudes and beliefs* were assessed by Likert items using a 5-point response scale (agree strongly, agree, not certain, disagree, disagree strongly). Three summated rating scales were created using items that assessed levels of traditional belief in three different domains. The *Scale of traditional moral belief* is a six-item measure including three items about same-sex relationships and three items about marriage and cohabitation. High scores represented traditional moral values, with a maximum possible score of 30 and a minimum possible score of 6. The *Scale of traditional religious belief* is a seven-item measure, including items about Christian beliefs such as bodily resurrection, the existence of heaven or hell, and miracles. High scores represented traditional religious belief, with a maximum possible score of 35 and a minimum possible score of 7. The *Index of traditional worship* is a two-item measure,
based on responses from a section of the questionnaire headed ‘I am helped in my religious life by:’ followed by a wide range of items, two of which were ‘traditional services’ and ‘traditional hymns’. Scores on these two items were correlated ($r = .60, p < .001$) and they were summed to form a scale with a maximum possible score of 10 and a minimum possible score of 2.

Church tradition was assessed using a seven-point bipolar scale anchored at one end as ‘Catholic’ and at the other as ‘Evangelical’. The scores were coded 1 (most catholic) to 7 (most evangelical). The scale was used to produce dummy variables using Randall’s (2005), classification whereby 1 and 2 are referred to as Anglo-catholic, 3, 4 and 5 as Broad Church, and 6 and 7 as Evangelical.

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. Participants were asked for each pair of characteristics to check the ‘box next to that characteristic which is closer to the real you, even if you feel both characteristics apply to you. Tick the characteristics that reflect the real you, even if other people see you differently’.

Analysis

Multiple linear regression was used to assess the independent effects of temperaments and church tradition after control for sex and age.

Results
The first step in data analysis explored the distribution of the participants across the three broad categories of church orientation. The data demonstrated that the frequency of church orientations reflected the likely clergy readership of the *Church Times*, being mainly Anglo-catholics (45%) and Broad Church (38%) with fewer Evangelicals (17%). There was no relationship between age and tradition, but the proportion of female clergy was higher among those who identified as Broad Church (31%) or Anglo-catholic (25%) compared with those who identified as Evangelical (20%).

The second step in data analysis explored the distribution of the participants in terms of psychological type. These data, presented in table 1 in the conventional form of a type table, demonstrate preferences for introversion (66%) over extraversion (34%), for sensing (55%) over intuition (45%), for feeling (55%) over thinking (45%), and for judging (86%) over perceiving (14%). The most frequently occurring of the 16 complete types are ISTJ (18%), ISFJ (17%), INFJ (12%) and INTJ (12%). The most frequently occurring dominant type is sensing (36%), followed by intuition (29%), feeling (22%) and thinking (14%). The most frequently occurring temperament is SJ (52%), followed by NF (25%), NT (20%), and SP (3%).

The third step in data analysis explores the distribution of the four temperaments across the three church orientations. The data presented in table 2 indicates that the association is not strong although there is a suggestion that Anglo-Catholic adherents may be differentiated from Broad Church adherents by a slightly higher level of SJ temperament and a slightly lower level of NF temperament.
The third step in data analysis explores the psychometric properties of the two multi-item indices of traditional religious belief and traditional moral belief. Table 3 demonstrates that the six items of traditional moral belief cohere to from a homogenous index with an alpha coefficient of .88 (Cronbach, 1951). Each item correlates with the sum of the other five items between .57 and .78. The item endorsement suggests some liberalisation of moral beliefs, with only 30% of clergy agreeing that it is wrong for men and women to have sex before marriage, and only 29% agreeing that it is wrong for people of the same gender to have sex together. The proportions rise to 36% who are against homosexual couples being married in church and 56% who are against the ordination of practising homosexuals as priests.

Table 4 demonstrates that the seven items of traditional religious belief cohere to form a homogenous index with an alpha coefficient of .87. Six of the seven items correlate with the sum of the other six items between .61 and .81. The seventh item has a lower correlation with the other six items (.38) but is retained to broaden the width of the assessed construct. The item endorsement suggest high commitment to two core beliefs: 84% believe that heaven really exists and 81% believe that Jesus physically rose from the dead. There is lower commitment to the virgin birth than to the physical resurrection, with 63% of the clergy believing that Jesus’ birth was a virgin birth. A similar proportion of the clergy also believe that Jesus really turned water into wine (64%). There is a lower level of belief that hell really exists (43%) than belief that heaven really exists (84%). More than two out of every five clergy believe that Christianity is the only true religion (46%) and just over one in ten believe that God made the world in six days and rested on the seventh (11%).

The two items that combined to form the index of traditional worship show that around three-quarters of the clergy enjoy the traditional style, with 71% reporting that they
are helped in their religious life by traditional services and 75% reporting that they are helped in their religious life by traditional hymns.

- insert table 5 about here -

The fourth step in data analysis explores the bivariate correlations between the three indices of traditional moral belief, traditional religious belief and traditional worship, the four continuous scale scores underpinning psychological type categorisation (with the high scoring poles identified as extraversion, sensing, thinking and judging) and two of the church orientations entered as dummy variables (Anglo-Catholic and Evangelical). Five main points emerge from this correlation matrix.

First, the correlations with sex indicate that female clergy are overall younger than male clergy, which is consistent with women having been admitted to priesthood as recently as 1994 in the Church of England. Clergywomen are less likely to identify with the Evangelical wing of the Church of England and tend to hold more liberal moral beliefs. In terms of psychological type clergywomen are more likely than clergymen to report as feeling types.

Second, the correlations with age show Anglo-Catholic clergy tend to be slightly older than Evangelical clergy. The age trend works differently in respect of moral belief and religious belief: older clergy hold more traditional moral belief but less traditional religious belief. Older clergy are also more positive towards traditional worship. In terms of psychological type older clergy are more likely to report both a judging preference and a sensing preference.

Third, the psychological type variables showed some correlations with church orientation, with Evangelicals being more extravert and Anglo-Catholics being more introverted than clergy generally. Evangelicals also showed greater preference for thinking over feeling compared with other traditions.
Fourth, the psychological type variables hold significant predictive power in respect of positions on the scale of traditional moral belief, the scale of traditional religious belief and the index of traditional worship. Higher scores on all these measures are associated with judging types (rather than perceiving types) and with sensing types (rather than intuitive types). Traditional moral belief is associated more with thinking types than with feeling types. Traditional religious belief is associated more with extravert types than with introvert types.

Fifth, church orientation holds significant predictive power in respect of positions on the scale of traditional moral belief, traditional religious belief and traditional worship. Moreover, Evangelical orientation and Anglo-Catholic orientation diverge from Broad Church orientation in opposite directions. Evangelicals record higher scores of traditional moral beliefs, and higher scores of traditional religious beliefs, but lower scores of traditional worship. Anglo-Catholics record lower scores of traditional moral beliefs, lower scores of traditional religious beliefs, and higher scores of traditional worship.

The fifth step in data analysis focuses on the primary research question, employing linear multiple regression to explore the concurrent predictive power of psychological temperaments and church orientation on traditional moral belief, traditional religious belief and traditional worship. The combined power of sensing and judging in respect of the three measures of traditional preference identified by the correlation matrix supports the decision to employ the four temperaments in this regression model. In the regression model the Apollonian Temperament (NF) is taken as the reference point and the other three temperaments are individually entered as dummy variables. Broad Church is also taken as the reference point and Anglo-Catholic and Evangelical are individually entered as dummy variables. The regression model employs fixed form entry to allow personal factors to be
entered first (sex and age), church orientation next (Anglo-Catholic and Evangelical) and finally psychological temperament (SJ, SP and NT).

There are three core findings from the three regression models. First, the personal factors of age and sex have small but significant effect on both traditional moral belief and traditional religious belief, but the direction of the effects are different in respect of the two areas. Clergywomen tend to hold more liberal moral belief but more traditional religious belief. Older clergy tend to hold more liberal religious belief but more traditional moral belief. Neither sex nor age are significant predictors of traditional worship.

Second, church orientation has a significant effect on traditional moral belief, traditional religious belief and traditional worship, but the effects are different in respect of the three areas. Compared with Broad Church adherents, Evangelicals hold more traditional moral beliefs and more traditional religious beliefs, but less attachment to traditional worship. Anglo-Catholics hold more liberal moral beliefs and more liberal religious beliefs, but more attachment to traditional.

Third, psychological temperament has a significant effect on traditional moral belief, traditional religious belief and traditional worship. The Epimethean Temperament (SJ) holds more traditional positions across all three areas. Additionally the Dionysian Temperament (SP) holds slightly less traditional position in respect of religious beliefs.

Conclusion

This paper began by suggesting that empirical theologians were mandated to follow the dominical command to go and to observe the sower, and to do so to learn about what life is like when God Reigns. In this sense observation leads to disclosure, observation leads to revelation, observation leads to new theological information about God and about God’s relationship with the world. Today we have gone out to observe the sower.
Having observed we need to reflect on what we went to observe and why we bothered to do so. We need to reflect on what we actually saw and what it means. We need to reflect on the lenses through which we observed and the implications of seeing things through those specific lenses.

So what did we go to observe? We went to observe the belief patterns of Church of England clergy. We took three specific groups of beliefs, concerning morality, religion and worship. The more interesting of these three groups were to do with religion and morality. In both areas, concerning belief and morality, claims can be made regarding the historic Christian position. For example, in terms of religious beliefs, the claim of the historic creeds may be clear that Jesus’ birth was a virgin birth. In terms of moral beliefs, the claim of the historic Christian teachings may be clear that marriage is between men and women not between two people of the same sex. Now clergy might be expected to act as guardians of the historic tradition. That is why we went out to observe clergy.

So what did we find? We found two things. First, we found that Church of England clergy do not all proclaim the inherited truth. There is no surprise there. Belief in the virgin birth is quite high, and yet still is not affirmed by two in every five clergy. There is still opposition to homosexual couples being married in church, but this opposition is only voiced by two in every five clergy. Some would ask for the licences of such clergy to be withdrawn, but others would discern here the ongoing revelation of God as the People of God come to see old truths in a new light. Empirical theologians are well equipped to keep a finger on the pulse of change.

Second, we found that Church of England clergy do not all speak as if with one voice. These is no surprise there. For some the truth is plain that Jesus was born of a virgin and that homosexuality is a sin. For others the truth is plain that claims about the virgin birth rest on a mistranslation of ancient prophecy from Hebrew into Greek and that the condemnation of
homosexuality misinterprets cultural preferences for divine proscription. Now what insights can the empirical theologian bring to bear on this clash of perspectives? It is here that the lenses we bring to bear on our subject matter have a part to play. When we went out to observe the sower we observed through the lenses of the theology of individual difference and ecclesiology.

The theology of individual differences suggested that the divine image embraces diversity and that such diversity is properly reflected in human beings. Men and women are both created in the image of God. Feminist theologians have reminded a male-led church that women and men may be granted different insights into the nature of God. A full appreciation of God’s revelation to the People of God may need to respect such differences. Black and white are both created in the image of God. Black theologians have reminded a white-led church that different ethnic groups may be granted different insights into the nature of God. A full appreciation of God’s revelation to the People of God may need to respect such differences. Now what the theology of individual differences has added to this rich tapestry is the view that different psychological temperaments are created in the image of God. The data from the present study (together with other studies) demonstrate that different psychological temperaments may be granted different insights into the nature of God. A Church that accepts the view that God creates diversity may also need to be comfortable with embracing diverse insights into the nature of God. Empirical theologians are well equipped to monitor the range and breadth of such diversity.

Ecclesiology suggested that the Church of England embraces diverse roots, both Catholic and Reformed. These different roots are reflected not only in different preferences for worship but in different perspectives on religious beliefs and on moral beliefs. The data from the present study (taken with other studies) confirms the extent of this influence. In an ecumenical environment, Churches that accept the validity of each other’s ecclesiology may
need equally to embrace acceptance of diversity in beliefs about the nature of God and the
close enough to Godly human living. Acceptance of a theology of individual difference may well go
hand in hand with the acceptance of diversity of church life, religious belief and moral
practice. Once again empirical theologians are well equipped to monitor the range and
breadth of such diversity.
References


Table 1

Type distribution for ordained Church of England Church Times readers

<table>
<thead>
<tr>
<th>The Sixteen Complete Types</th>
<th>Dichotomous Preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>E</td>
</tr>
<tr>
<td>ISFJ</td>
<td>I</td>
</tr>
<tr>
<td>INFJ</td>
<td>S</td>
</tr>
<tr>
<td>INTJ</td>
<td>N</td>
</tr>
<tr>
<td>ISTP</td>
<td>T</td>
</tr>
<tr>
<td>ISFP</td>
<td>F</td>
</tr>
<tr>
<td>INFP</td>
<td>J</td>
</tr>
<tr>
<td>INTP</td>
<td>P</td>
</tr>
<tr>
<td>n = 7</td>
<td>n = 830</td>
</tr>
<tr>
<td>(0.5%)</td>
<td>(58.5%)</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>ESTP</td>
<td>ST</td>
</tr>
<tr>
<td>ESFP</td>
<td>SF</td>
</tr>
<tr>
<td>ENFP</td>
<td>NF</td>
</tr>
<tr>
<td>ENTP</td>
<td>NT</td>
</tr>
<tr>
<td>n = 3</td>
<td>n = 354</td>
</tr>
<tr>
<td>(0.2%)</td>
<td>(25.0%)</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>ESTJ</td>
<td>SJ</td>
</tr>
<tr>
<td>ESFJ</td>
<td>SP</td>
</tr>
<tr>
<td>ENFJ</td>
<td>NP</td>
</tr>
<tr>
<td>ENTJ</td>
<td>NJ</td>
</tr>
<tr>
<td>n = 89</td>
<td>n = 737</td>
</tr>
<tr>
<td>(6.3%)</td>
<td>(52.0%)</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Jungian Types (E)</td>
<td>Jungian Types (I)</td>
</tr>
<tr>
<td>Dominant Types</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-TJ</td>
<td>152</td>
<td>10.7%</td>
<td>E-FJ</td>
<td>243</td>
<td>17.1%</td>
</tr>
<tr>
<td>E-FJ</td>
<td>243</td>
<td>17.1%</td>
<td>E-TP</td>
<td>40</td>
<td>2.8%</td>
</tr>
<tr>
<td>E-ST</td>
<td>16</td>
<td>1.1%</td>
<td>E-TP</td>
<td>40</td>
<td>2.8%</td>
</tr>
<tr>
<td>E-EN</td>
<td>74</td>
<td>5.2%</td>
<td>E-TP</td>
<td>40</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

N = 1,418 (NB: + = 1% of N)
Table 2

Temperament by church orientation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>SJ %</th>
<th>SP %</th>
<th>NT %</th>
<th>NF %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo-Catholic</td>
<td>636</td>
<td>55</td>
<td>3</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Broad Church</td>
<td>537</td>
<td>49</td>
<td>3</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Evangelical</td>
<td>245</td>
<td>51</td>
<td>2</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>All</td>
<td>1418</td>
<td>52</td>
<td>3</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 3

*Scale of traditional moral belief*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am against the ordination of practising homosexual as priests</td>
<td>.78</td>
<td>56</td>
</tr>
<tr>
<td>I am against homosexual couples being married in church</td>
<td>.70</td>
<td>36</td>
</tr>
<tr>
<td>It is wrong for people of the same gender to have sex</td>
<td>.78</td>
<td>29</td>
</tr>
<tr>
<td>It is wrong for men and women to have sex before marriage</td>
<td>.71</td>
<td>30</td>
</tr>
<tr>
<td>It is all right for a couple to live together without intending to get married†</td>
<td>.57</td>
<td>36</td>
</tr>
<tr>
<td>It is a good idea for couples who intend to get married to live together first†</td>
<td>.61</td>
<td>26</td>
</tr>
<tr>
<td>alpha</td>
<td>.88</td>
<td></td>
</tr>
</tbody>
</table>

Note:  
- $r$ = correlation between individual item and sum of the other items
- yes % = sum of agree and agree strongly responses
- † = these items were reverse coded to calculate the scale score
Table 4

*Scale of traditional religious belief*

<table>
<thead>
<tr>
<th>Item</th>
<th>r</th>
<th>yes %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jesus rose physically from the dead</td>
<td>.70</td>
<td>81</td>
</tr>
<tr>
<td>Jesus birth was a virgin birth</td>
<td>.81</td>
<td>63</td>
</tr>
<tr>
<td>Heaven really exists</td>
<td>.67</td>
<td>84</td>
</tr>
<tr>
<td>Hell really exists</td>
<td>.65</td>
<td>43</td>
</tr>
<tr>
<td>Christianity is the only true religion</td>
<td>.61</td>
<td>46</td>
</tr>
<tr>
<td>Jesus really turned water into wine</td>
<td>.73</td>
<td>64</td>
</tr>
<tr>
<td>God made the world in six days and rested on the seventh</td>
<td>.38</td>
<td>11</td>
</tr>
<tr>
<td>alpha</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:  

- $r =$ correlation between individual item and sum of the other items
- yes % = sum of agree and agree strongly responses
### Table 5

**Correlation matrix**

<table>
<thead>
<tr>
<th></th>
<th>J</th>
<th>T</th>
<th>S</th>
<th>E</th>
<th>Eva</th>
<th>Ang</th>
<th>W</th>
<th>R</th>
<th>M</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-.02</td>
<td>-.07***</td>
<td>-.04</td>
<td>.01</td>
<td>-.07***</td>
<td>-.03</td>
<td>-.01</td>
<td>.04</td>
<td>-.16***</td>
<td>-.17***</td>
</tr>
<tr>
<td>Age group</td>
<td>.09***</td>
<td>.00</td>
<td>.22***</td>
<td>-.02</td>
<td>-.07*</td>
<td>.07*</td>
<td>.06*</td>
<td>-.12**</td>
<td>.13***</td>
<td></td>
</tr>
<tr>
<td>Traditional moral belief (M)</td>
<td>.15***</td>
<td>.12**</td>
<td>.19***</td>
<td>.04</td>
<td>.46***</td>
<td>-.26***</td>
<td>.02</td>
<td>.59***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional religious belief (R)</td>
<td>.12***</td>
<td>-.01</td>
<td>.16***</td>
<td>.15***</td>
<td>.41***</td>
<td>-.21***</td>
<td>.09**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional worship (W)</td>
<td>.16***</td>
<td>.00</td>
<td>.13***</td>
<td>-.04</td>
<td>-.23***</td>
<td>.27***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anglo-catholic (Ang)</td>
<td>.03</td>
<td>.01</td>
<td>.04</td>
<td>-.06*</td>
<td>-.41***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evangelical (Eva)</td>
<td>.03</td>
<td>.06*</td>
<td>-.00</td>
<td>.10***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion (E)</td>
<td>-.22***</td>
<td>-.19***</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Table 6

*Linear regression on traditional moral belief, traditional religious belief and traditional worship*

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