Book Chapter

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The psychological type profile of Humanists UK: Not just the mirror image of believers

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The psychological type profile of Humanists UK: Not just the mirror image of believers Abstract

A significant body of research has explored the psychological type profile of the members of religious organisations. The assumption has been made that the members of non-religious groups will present as the mirror image psychological type profile of the members of religious groups. To test such assumptions, we need to develop an understanding of the psychological type profile of communities of non-believers. The aim of this paper is to examine the psychological type profile of a sample of 1,042 members of Humanists UK (HUK). The findings demonstrate that the humanists do not present the psychological type mirror image of churchgoers nor are they representative of the broader population. An increased understanding of the psychological type profiles of communities of non-believers can enrich our understanding within the psychology of religion.

Keywords: humanism, psychological type, Humanists UK, non-religious, irreligious.

Introduction

In contrast to the numerous studies that have explored the psychological type preferences of religious communities there have been very few studies that have explored the psychological type preferences of communities of non-believers. The current growth in interest in the study of irreligion (Lee, 2013) makes the lack of research into the psychological type preferences of the members of irreligious organisations all the more inexplicable. Whilst in part this might be understood in terms of the historical lack of interest in irreligious communities it is

nonetheless surprising just how little detailed research has been conducted. Indeed, where the irreligious have been discussed with regard to their psychological profile a common assumption seems to be that they are simply the mirror image of the religious.

Illustrative of this assumption is Beit-Hallahmi's (2007) observation that 'if our findings about the correlates of religiosity make any sense, then atheists should be to some extent the psychological mirror image of highly religious people" (p.301). Galen and Beahan (2013) have argued that such a view is based upon a particular understanding of religiosity that seems to assume that low religiosity can be equated with irreligiosity. An alternative and more productive approach is that irreligiosity is a different concept that is orthogonal to religiosity and which should be studied in its own right rather than simply seen in opposition to religiosity (Campbell, 2013/1971).

This paper sets out to test Beit-Hallahmi's observation by exploring the psychological type profile of the members of HUK. In addition to providing the first detailed picture of the psychological type preferences of HUK members the paper also draws comparisons between the humanists and with the wider UK population and with a sample of English churchgoers.

Humanism and Humanists UK

The British Humanists Association (BHA) was created in 1967 when the Ethical Union (founded 1896) changed its name to the British Humanist Association. In 2017 the BHA change its' name to Humanists UK (HUK). HUK is one of three main organisations that campaigns for the interests of the secular community in Britain (Humanists in Scotland are represented by the Humanist Society Scotland), the other organisations are the Rationalist Association (formerly the Rationalist Press Association founded in 1855) and the National Secular Society (founded 1866). Today the three organisations have broadly similar aims,

namely to advocate non-religious solutions to social problems, to fight discrimination against the non-religious, and to combat religious privilege.

Humanists UK is a charity that "work[s] on behalf of non-religious people who seek to live ethical lives on the basis of reason and humanity. We promote Humanism, a secular state, and equal treatment of everyone regardless of religion or belief" (http://humanism.org.uk/). In 2011 the United Kingdom Census revealed that 15,067 individuals self-identified as humanist. This should be set against a background of 14,097,229 individuals who self-identified as having no religion, the so-called 'religious nones', this included 32,382 agnostics and 29,267 atheists. HUK currently has around 12,000 members (Engelke, 2014) and a further 30,000 supporters. HUK is affiliated with around 70 groups which include many local humanist associations as well as groups representing humanists within the LGBT community, political parties, and the military. HUK trains and authorises a network of around 300 celebrants who provide, naming, marriage, and funeral ceremonies. In 2014 HUK celebrants conducted 9,200 ceremonies in England and Wales; 7,934 funerals, 769 weddings, and 497 namings (BHA Annual Report 2015).

The most recent survey of HUK membership revealed that the typical member is middle-aged (56 years) and is 'male, well educated, tends to work in the professions, and lives in an urban area, particularly in London and the South East' (Longden, 2015, p.94). In a review of British non-believers, which includes all those who identified in the Census as 'none' in response to their religious affiliation question Voas and McAndrew have characterised the traditional typical 'non-believer' as usually male, better educated, and living in the South of England, what they describe as a 'middle class intelligentsia' (2012, p.38) although they also note that the religious 'nones' are becoming much more common and are expanding beyond that distinctive sub-population. More broadly the nonreligious have recently been characterised as disproportionately young, white, and male. They tend to be better educated and more intellectually oriented, and to think in a complex, analytical and critical manner, and they are found in disproportionately greater numbers in elite institutions and in fields requiring graduate-level education, particularly in the sciences (Zuckerman, Galen, & Pasquale, 2016, p.127).

A core aim of HUK is to promote Humanism which is an irreligious worldview that is usually understood as an optimistic philosophical orientation that is characterised by the belief that it is possible to live a good and ethically responsible life without reference to a supernatural form of authority. Schnell views Humanism as an "ethical, value-based approach to life and society" (Schnell, 2015 p.275) and Pinn (2013) sees Humanism as a secular model for exploring life's meaning and to provide a "way of thinking about and behaving" in life (p.33).

Whilst there is no agreed definition of Humanism HUK chooses to define Humanism as:

The belief that we can live good lives without religious or superstitious beliefs. Humanists make sense of life using reason, experience and shared human values. We need to make the best of the one life (we know) we have by creating meaning and purpose for ourselves. We take responsibility for our own actions and work with others for the common good (Minutes of the Executive Committee of the BHA, 20 September, 2003).

Humanism is often viewed as a life-stance, a life-stance being "an individual's or a communities relationship with what they accept as of ultimate importance; the commitments and the presuppositions of this, and the theory and the practice of this relationship working itself out in living" (Stopes-Roe, 1996 p.9). The term life-stance therefore goes some way to encapsulate and reflect the central importance that some humanists give to their lived

Humanism, in this sense the importance is analogous to the way that for religious believers their set of beliefs may be at the very core of how they choose to live their life.

Critics of Humanism have however argued that the defining characteristic of Humanism is its opposition to religion, especially organised religion. This view sees Humanism as merely a negative life-stance which exists only through its opposition to religion. However, organisations such as HUK see belief as an important private matter and as something which should be protected as a key expression of civil liberty. Dialogue with faith groups now represents an important component of HUK's work, and is included as one of the four objectives presented in the Articles of Association, the document which defines the charities purpose. Article 4.1 reads "The promotion of understanding between people holding religious and non-religious beliefs so as to advance harmonious cooperation in society" (https://humanism.org.uk/wpcontent/uploads/BHA-Articles-of-Association.pdf). For many humanists the largely negative characterisation of Humanism through its relationship to religion represents a fundamental misunderstanding of the nature of Humanism.

Schnell (2015) and others have identified a key research question to be whether the irreligious community is as homogenous or whether it is as diverse and as nuanced as is the religious community, in effect to study irreligion in its own right rather than simply in opposition to religion (Bullivant & Lee, 2012). Recent research has sought to explore the character and diversity of the irreligious community by looking first at definitions of the irreligious community (Lee, 2012; Silver, Coleman, Hood, & Holcombe, 2014) and then by beginning to look at how irreligiosity can be measured (Schnell, 2015). To date no detailed research has been undertaken with the members of HUK yet it might be expected from the preceding discussion that they would represent a distinctive population. Humanism, as a complex and nuanced life-stance, might be expected to attract certain psychological types in the same way that religion also seems to be more attractive to certain psychological types.

Psychological Type

The modern formulisation of psychological type theory is associated with the work of Carl Jung (1971). Jung theorised that personality could be understood in terms of three dichotomous preferences, *orientation* (extraversion and introversion), the *perceiving function* (sensing and intuition), and the *judging function* (thinking and feeling). Jung's conceptualisation of personality as being composed of polar opposites enables individuals to be placed within discrete types, i.e. a person is either an extravert or they are an introvert. Since Jung's pioneering work others have refined and developed his model. The most influential revisions to the model are to be found in the work of Katharine Briggs and Isabel Briggs Myers and in the work of David Kiersey. They have developed Jung's original thesis in distinctive ways and have placed particular emphases on how type preferences interact with one another.

Psychological Type Preferences

Jung understood *orientation* as whether individuals would feel psychically energised or drained by certain types of interaction, specifically he suggested that some people would feel energised by interaction with the outer world, these people he called extraverts. However other people would feel drained by that same interaction and would instead only feel reenergised through time spent in their own inner world, these people he called introverts. Jung understood the *perceiving function* to describe how individuals prefer to understand the world around them, specifically he suggested that some people would prefer to perceive the world around them by relying on their five senses, a process he called sensing. However other people he thought preferred to understand the world through an intuitive understanding, this process he called intuition. Finally Jung understood the *judging function* to relate to how individuals differed in how they prefer to make decisions and form opinions. Specifically he proposed that some people would prefer to make decisions based on objective logic and would prioritise facts, this process he called thinking. However other people he thought preferred to make decisions based upon reference to their value system and how those decisions may affect others, this process he called feeling. In Jung's model everyone could therefore be described by reference to their dichotomous preference for introversion (I) over extraversion (E); for sensing (S) over intuition (N); and for thinking (T) over feeling (F).

Katherine Briggs and Isabel Briggs Myers (Briggs Myers, McCaulley, Quenk, & Hammer, 1998) developed Jung's model through their identification of a fourth pair of preferences relating to an individual's *attitude to the outer world*. The distinction was between Perceiving types (P) who preferred to organise their outer world by using their perceiving function (either S or N) and Judging types (J) who preferred to organise their outer world by using their judging function (either T or F). Judging types demonstrate a structured and orderly approach to the world, typically reaching decisions quickly and confidently whilst those who preferred to use their perceiving function demonstrate flexibility in decision making, often keeping possibilities open.

Psychological type theory, as understood by Briggs and Briggs Myers enabled an individual to be described as being one of the sixteen discrete psychological types, each complete type could be described as the sum of their preferences e.g. ESFJ or INTP.

The work of Keirsey and Bates (1984) developed a different perspective on psychological type theory preferring instead to emphasise what they termed psychological temperaments. In using the term temperament Keirsey and Bates were deliberately referencing the original Galenic system of balanced humours and explicitly suggesting that their work reflected a fundamental truth about human personality that had been identified in the classical world first by Aristotle and subsequently by numerous scholars including Briggs Myers (Keirsey & Bates, 1984). Keirsey observed that Briggs Myers16 types could be usefully grouped into four pairs which each possessed a considerable commonality, "I soon found it convenient and useful to partition Myer's sixteen types into four groups, which she herself suggested in saying that all four of what she referred to as the 'NFs' were alike in many ways" (Keirsey, 1998, p.18). Keirsey gave each of these groupings a title which encapsulated something of the commonality, the Guardian was SJ, the Idealist NF, the Artisan SP, and the Rational NT.

Measurement and type theory

Psychological type theory has been operationalised through a number of different instruments which serve different research or commercial contexts. For example, the Myers-Briggs Type Indicator was created with the aim of being used in one-to-one counselling. Although as the originators acknowledge it is now employed in many different settings including '... team building, organization development, business management, education, training, and career counselling' (Briggs Myers & Myers, 1995. p xiv). The Keirsey Temperament Sorter was originally devised to serve as a self-assessment tool and although based on preferences has a fundamentally different understanding of the most effective way in which to practically apply the theory with a focus on temperaments rather than whole types as noted above. The creators argue that a focus on temperaments enables the theory to be more easily applied to everyday life including work and relationships (Keirsey, 1998). The Francis Psychological Type Scales (Francis, 2005) were developed as a purely research tool, designed to be a quick and easy to complete pencil and paper test which was not intended to be utilised as a self-development or management tool.

Type and population norms

Much of the research conducted in the UK that employs psychological type theory has employed the population norms established by Kendall as a baseline sample against which to compare new samples. Kendall's (1998) population norms demonstrate that men have a preference for introversion (53%) over extraversion (47%), sensing (73%) over intuition (27%), thinking (65%) over feeling (35%), and judging (55%) over perceiving (45%). Like the male population the females also have a preference for sensing (79%) over intuition (21%) and judging (62%) over perceiving (39%). However, unlike the male population the females have a preference for extraversion (57%) over introversion (43%) and feeling (70%) over thinking (30%). The most common whole types for women are ESFJ (19%) and ISFJ (18%); whereas for men it is ISTJ (20%) and ESTJ (12%). In terms of the four temperaments for both men and women the most frequently reported is the SJ guardian with 44% of men and 54% of women reporting this temperament.

Psychological type and the religious community

In 1993 Goldsmith and Wharton speculated on the likely type profiles of members of Christian congregations whilst acknowledging that there was insufficient data then available to support their assertions. From their observation of congregations, they predicted that congregations would predominantly consist of I_FJs and also that SPs would be significantly underrepresented. The research that was available at that time was based on samples from Canada (Delis-Bulhoes, 1990) and the USA (Rehak, 1998). A significant body of research is now available that explores the psychological type profiles of Catholic and Protestant congregations within the UK and Australia that supports Goldsmith and Wharton's hypothesis. For example, in Australia a study by Robbins and Francis (2012) among 1,474 churchgoing Roman Catholics found that the most frequent of the 16 types was ISFJ. With regard to the temperaments they found that 76% of the men and 77% of the women recorded an SJ temperament compared with 11% of women and 6% of men who were NF, 5% of men

and 10% of men who were NT and 8% women and 7% of men who were SP. Robbins and Francis (2011) among a sample of 1,527 Australian churchgoers found a preference for ISFJ among women (23%) and ISTJ (29%) among men. With regard to the dichotomous pairs both men and women expressed a preference for introversion, sensing, and judging; while the women preferred feeling (62%) and the men preferred thinking (60%). In respect of the temperaments for both men and women the majority were SJ (71% and 73% respectively). This is in contrast to the percentage of NFs (11% for both men and women), NTs (11% of men and 8% of women) and SPs (7% of men and 8% of women).

Within the UK Francis, Robbins, and Craig (2011) brought together a sample of 2,133 women and 1,169 men from 140 Anglican congregations. They found among the women a preference for SFJ with an almost equal distribution between E and I. Among the men they found a preference for ISTJ, although the preference for T was significantly lower than the male population norms. With regard to the temperaments 73% of the women and 71% of the men recorded an SJ temperament, 13% of the men and 10% of the women were NF, 6% of the men and 13% of the women were NT, and 9% of the women and 7% of the men were SP. Francis and Robbins (2012) explored the psychological type of 1,867 churchgoing Anglicans and found a preference for ISFJ. The pattern for temperaments in this English sample reflects that for the Australian samples with 71% SJ, 12% NF, 9%NT and 8% SP. This research demonstrates that within Christian congregations the predominant type tends to be ISFJ. Goldsmith and Wharton's hypothesis is therefore supported by research among churchgoers. Not only did they correctly predict that I-FJs would be overrepresented they also correctly predicted that SPs would be significantly underrepresented.

Within this picture of churchgoers there are, however, some subtle differences. One difference of note is in respect of Keirsey's temperaments is that the SJ Guardian tends to be overrepresented as is the case with the samples cited above among Anglican congregations.

The guardian is concerned with maintaining the status quo and within the church context it has been suggested that this temperament is particularly concerned with maintaining the traditions and may find it difficult to deal with change. When a sample is more widely distributed among the Christian denominations, for example in the study by Village, Baker and Howat (2012) the respondents still demonstrate a preference, albeit reduced, for the SJ temperament (52% men and 55% women).

Alongside profiling congregations, the research has also considered the ways in which they differ from the established population norms. For example Francis, Robbins, and Craig (2011) compared their sample of 3,304 Anglican churchgoers against the UK population norms established by Kendall (1998) and found that the women were significantly more introverted and judging than the population norms and the men were significantly more introverted, sensing, feeling and judging.

The research supports Goldsmith and Wharton (1993) speculation over twenty years ago that among Christian churchgoers' introversion and judging would be over-represented and that the temperament SP would be underrepresented. What research to date has also demonstrated is that sensing is also over-represented as is the SJ temperament. One finding that is not as clear is a preference for feeling. On balance churches are weighted more towards feeling but within that there are some sex differences with male churchgoers in some samples expressing a preference for thinking. However, this preference for thinking among male churchgoers is significantly less than that reported among the general population.

Psychological type and the irreligious community

If Beit-Hallahmi's (2007) prediction that atheists should be the psychological mirror of highly religious people were correct then we might imagine from the preceding discussion that the irreligious would present mainly as opposite to ISFJs or ESFJs, what are often

considered to be the 'religious types'. Atheists, in terms of complete types, should therefore be more likely to be ENTPs or INTPs.

The psychological type preferences of two samples of UK non-believers were reported by Kendall (1998). As part of the larger survey which is used for the UK population norms Kendall extracted a sample of self-identified agnostics (N=83) and a sample of selfidentified atheists (N=90). Kendall reports that there are more intuitives amongst atheists and agnostics than there are amongst the religious. She also reports that there is a particularly high ratio of NTPs amongst the atheists and of NPs amongst the agnostics, 'possibly reflecting the NP's desire to keep their options open; they neither commit to a religion or to atheism' (Kendall, 1998, p.51). Overall, Kendall concludes that both the atheists and the agnostics in the sample show an over-representation of intuitive and perceiving types, and atheists also show an over-representation of thinking types. Kendall's research, and it is important to remember that it is based on small samples, suggests that NP might be seen as indicative of both atheism and agnosticism and that NTP might be suggestive of atheism. These findings therefore lend support to Beit-Hallahmi's prediction.

Two papers which have explored the psychological type of irreligious communities are those by Baker and Robbins (2012) and by Baker (2015), these papers are important as they rely on a much larger database than that which was available to Kendall (1998) although that usefulness is qualified for the present study by the focus being upon American atheists. In their 2012 paper Baker and Robbins explored the psychological type of 10,627 American atheists who completed the Francis Psychological Type Scales as part of the *Personality and Belief in God Survey*. The *Personality and Belief in God Survey* was an online survey distributed to American adults through social media in 2011 and 2012. The respondents' atheism was established through their selection of the answer 'I do not believe in any sort of God, Gods, or Higher Power' in response to a question about their current view of God. The

main finding was that although Beit-Hallahmi's prediction was correct with regard to _NT_ it was not sustained with regard to the Perceiving (P) process. Baker and Robbins (2012) also found that there were significant overrepresentations of INTJ, ISTJ, and INTP whole types among both male and female atheists compared with the general population. Baker and Robbins found that the atheists displayed preferences for introversion over extraversion, for sensing over intuition, for thinking over feeling, and for judging over perceiving. The most frequently occurring types were ISTJ and INTJ which together accounted for 53% of female atheists and for 56% of male atheists. Baker and Robbins in respect of the four temperaments found that more than half (54%) of the male atheists were SJ, more than a quarter (29%) were NT, and around an eighth (13%) were SP and 5% were NF. The female atheists reported temperament preferences for SJ (60%), NT (21%), NF (10%), and SP (9%).

In the second paper Baker (2015) used data from the same survey to compare the psychological types of those who had prior to the age of 18 regularly attended a Christian place of worship and who now either continue to attend regularly; now describe themselves as an atheist or an agnostic; or who now describe themselves as holding a belief in a God or Higher Power but who longer regularly attended a Christian place of worship. Baker found that the atheist sample, which is largely the same individuals reported in the Baker and Robbins (2012) paper, differed more in psychological type terms from the churchgoing population than it did from the 'believing but not belonging' population. Baker concluded that ISTP 'was by far the most over-represented type for both male and female atheist/agnostic church leavers'.

In summary research to date has suggested that churchgoing populations are different from the general UK population and in particular that they more likely to be ISFJ and in terms of temperament that they are more likely to be SJ and less likely to be SP. Conversely studies of irreligious communities have suggested that among American atheists ISTJs and INTJs (Baker & Robbins, 2012) are overrepresented whereas Kendall's data suggested that NTPs and NPs are overrepresented amongst UK atheists and agnostics. Whilst neither of these samples of the irreligious community allows for a robust comparison with UK norms and churchgoers to be made, they suggest that in psychological type terms irreligious communities are distinct from churchgoing populations. Further, Humanism, as a complex and nuanced life-stance, might also be expected to attract certain types and temperaments, in particular the NT (Rationalist) temperament.

Method

Procedure

In 2014 2,000 members of HUK were invited to complete an online questionnaire called *Humanism Today* that explored their attitudes, beliefs, and worldviews; the survey was also advertised on the HUK Facebook page and HUK Twitter feed. The invitation resulted in 1,097 completed responses, this figure represents approximately 10% of the total membership of HUK (Engelke, 2014). The survey explored a wide range of topics through 205 items including demographics, personal history of humanism, attitude toward key life events, the role of religion in public life, political orientation, as well as personality and well-being scales. The following analysis is based on the data returned by those participants (N=1,042) who completed the Francis Psychological Type Scales.

Participants

Humanists

The 1,042 members whose data were analysed in the present study composed 362 females (35%) and 680 males (65%); 54 were in their twenties, 132 in their thirties, 167 in their

forties, 191 in their fifties, 267 in their sixties, 158 in their seventies, 48 in their eighties, and 25 did not provide their age. The average age of the males was 56.8 and the average age of the females was 54.2 (the age difference between the males and the females was not significant).

English churchgoers

The sample of 4,458 English churchgoers are composed of 1,169 males and 2,133 females reported by Francis, Robbins, and Craig (2011) derived from a survey of 140 Anglican congregations in England and the 1156 churchgoers (651 females and 505 males) from a range of Christian congregations reported by Village, Baker, and Howat (2012).

Population norms

The population norms for this study are taken from Kendall (1998). This sample is widely accepted in the literature as the best population norm for studies within the UK. The total sample is 1,613 which is composed of 748 males and 865 females.

Measure

Personality was assessed through the Francis Psychological Type Scales (FPTS: Francis, 2005). The FPTS consists of 40 forced choice questions with 10 of the questions related to each the four dimensions of psychological type, extraversion (E) – introversion (I), sensing (S) – intuition (N), feeling (F) – thinking (T), and judging (J) – perceiving (P). Each forced choice question requires respondents to select which of the two answers most accurately reflects how they perceive themselves. Depending upon which answer was selected the dimension that is measured by that answer is given a score of 1, the other dimension receives a score of zero. The maximum score for each scale is 10 and the minimum score is zero. The

internal consistency reliabilities (Cronbach, 1951) of the scales were satisfactory, extraversion – introversion 0.81; sensing – intuition 0.68; feeling - thinking 0.71; judging – perceiving 0.76 and are in line with those reported elsewhere (Village, Baker & Howat, 2012).

Results

It has become accepted practice to present psychological type information in the form of type tables. This enables comparison with existing research, and also provides the opportunity for secondary analysis. This convention is followed here.

Psychological types of the male and female humanists

Table 1 presents the type distribution for the 680 male humanists who participated in the survey (the table also presents a comparison with the male population norms which is discussed below). These data demonstrate that the male humanists displayed preferences for introversion (75%) over extraversion (25%), sensing (63%) over intuition (37%), thinking (83%) over feeling (17%), and judging (87%) over perceiving (13%).

[INSERT TABLE 1 HERE]

Table 2 presents the type distribution for the 362 female humanists who participated in the survey (the table also presents a comparison with the female populations norms which is discussed below). These data demonstrate that the female humanists displayed preferences for introversion (60%) over extraversion (40%), sensing (67%) over intuition (33%), thinking (63%) over feeling (37%), and judging (85%) over perceiving (15%).

[INSERT TABLE 2]

Chi-square tests of the male and female humanists' preferences demonstrated a significant preference for introversion over extraversion (75% vs 60%, $\chi^2 = 25.19$, df = 1, p < .001) and a significant preference for thinking over feeling (83% vs 63%, $\chi^2 = 52.12$, df = 1, p < .001), the male humanists did not demonstrate any significant differences with the female humanists for sensing over intuition (63% vs 67%, $\chi^2 = 1.58$, df = 1, p < NS), or judging over perceiving (87% vs 85%, $\chi^2 = 0.38$, df = 1, p < NS).

Among men the three most frequent types represented within the sample (see table 1) were ISTJ (40%), INTJ (17%), and ESTJ (11%) which together account for more than two-thirds of the sample (68%). Among women the three most frequent types represented within the sample (see table 2) were ISTJ (27%), ESTJ (14%), and ISFJ (12%) which together account for more than half of the sample (53%).

Table 3 compares the type distribution for the male and female humanists. There are significant differences with regard to the whole type preferences between the males and the females for ISTJ, INTJ, and ISFJ. The males are significantly more likely to be ISTJ (p< .001) and INTJ (p< .001) than are the females, and they are significantly less likely to be ISFJ (p< .01) than are the females.

[INSERT TABLE 3 HERE]

In respect of the four temperaments the men report a preference for SJ (59%), NT (29%), NF (8%) and SP (3%). The women report a preference for SJ (61%), NT (19%), NF (14%) and SP (5%). There are significant differences between the males and the females with regard to the NT temperament (p<.001) and the NF temperament (p<.01). The males are significantly more likely to be NT than the women and the females are significantly more likely to be NT than the males. There are no significant differences between males and females with regard to the SJ and SP temperaments.

Comparison with UK norms

Both the males and the females in the humanist sample demonstrated significant differences in all the dichotomous preferences compared with the normative values reported by Kendall (1998) (see tables 1 and 2). The humanists showed significantly greater preferences for introversion, intuition, thinking, and judging (INTJ).

In terms of whole types the male humanists reported significantly greater preferences for some of the introverted judging types (ISTJ, INFJ, and INTJ) and significantly lower preferences for some perceiving types (ISTP, ISFP, INFP, ESTP, ESFP, and ENFP) and for one of the extraverted judging types (ESFJ). In terms of whole types the female humanists reported significantly greater preference for two introverted thinking types (ISTJ, INTJ) and two extraverted thinking types (ESTJ, ENTJ), and for one of the introverted feeling types (INFJ) and significantly lower preferences for some of the feeling types (ISFJ, ISFP, ESFP, ENFP, ESFJ).

The male humanists report a significant difference with the male population norms for all four temperaments, SJ (p<.001), NT (p<.001), SP (p<.001), and NF (p<.01). The male humanists are significantly more likely to be SJ, NT and significantly less likely to be SP and NF. The female humanists report a significant difference with the female population norms for three of the four temperaments, NT (p<.001), SP (p<.001), and SJ (p<.05). The female humanists are significantly more likely to be NT and SJ, and significantly less likely to be SP.

Comparison with English churchgoers

Both males and the females in the humanist sample demonstrated significant differences in three of the dichotomous preferences compared with the English churchgoers. The humanists showed significantly greater preferences for introversion, intuition, and thinking, (see tables 4 and 5). There were no significant differences between the humanists and the churchgoers in respect of judging and perceiving.

[INSERT TABLES 4 and 5 HERE]

In terms of whole types the male humanists (see table 4) reported significantly greater preferences for four of the thinking types (ISTJ, INTJ, INTP and ENTP) and significantly lower preferences for four of the feeling types (ISFJ, ESFJ, ISFP, and ESFP). In terms of whole types the female humanists (see table 5) reported significantly greater preference for six of the thinking types (ISTJ, INTJ, ENTJ, INTP, ESTP, and ENTP) and significantly lower preferences for four of the feeling types (ISFJ, ESFJ, ISFP, ESFP).

The male humanists report a significant difference with the male English churchgoers for three of the four temperaments, NT (p<.001), SP (p<.001), SJ (p<.001), there was no significant difference with regard to the NF temperament. The male humanists are significantly more likely to be NT and significantly less likely to be SP and SJ. The female humanists similarly report a significant difference with the churchgoers for the three same temperaments, NT (p<.001), SJ (p<.001), and SP (p<.05), and again there was no significant difference with regard to the NF temperament, The female humanists are also significantly more likely to be NT and significantly less likely to be SP and SJ.

Discussion

The Francis Psychological Type Scales demonstrate good internal reliability among members of Humanists UK and can be recommended for use among this population.

Research has consistently shown that men join secular organisations in much greater numbers than women (Voas & McAndrew, 2012) and that women are more religious than men however religiosity is measured (Trzebiatowsa & Bruce, 2012; Furseth, 2010, Miller &

Stark, 2002) and it is not surprising therefore that men constitute the majority of this sample of members of Humanists UK.

The analyses of the results show that the humanist sample presents a distinctive psychological type profile. In particular, the humanists are predominantly ISTJ and INTJ. According to Briggs Myers, McCaulley, Quenk, and Hammer (1998) ISTJs are characterised as being,

Quiet, serious, earn success by thoroughness and dependability. Practical, matter-offact, realistic, and responsible. Decide logically what should be done and work toward it steadily, regardless of distractions. Take pleasure in making everything orderly and organized-their work, their home, their life. Values traditions and loyalty. p. 64.

INTJs are characterised as,

Have[ing] original minds and great drive for implementing their ideas and achieving their goals. Quickly see patterns in external events and develop long-range explanatory perspectives. When committed, organize a job and carry it through. Sceptical and independent, have high standards of competence and performance for themselves and others. (Briggs Myers, McCaulley, Quenk, & Hammer, 1998, p.64).

There are approximately twice as many ISTJs among the male humanists compared with the male population norms and nearly seven times more INTJs among the male humanists compared with the male population norms. With regard to the female humanists the difference is even more striking, there are more than three times as many ISTJ humanists and more than sixteen times as many INTJ humanists compared with the female population norms. This preferences for ISTJ/INTJ is a significant overrepresentation and is the defining distinctiveness of both humanist samples. The obvious issue that this raises is what it is about

Humanism that attracts such a large overrepresentation of the ISTJ/INTJ psychological types and specifically the large numbers of TJs?

The TJ seems to be an important selector for humanism, type theory suggests that TJs are likely to prefer the order and structure that results from joining an organisation. In particular it is the TJs commitment to intellectualism which may mean that humanism, with its emphasis upon ideas and rationalism is particularly appealing. Unlike the FJ who may similarly be attracted to joining organisations but for reasons of social support, the TJ is likely to do so because of the desire to publicly identify themselves with an institution's agenda and to associate themselves with it, one is reminded here of Stephen Fry's comment 'it is essential to nail one's colours to the mast as a humanist'.

(https://humanism.org.uk/2010/02/04/news-447/). By joining HUK a humanist is publicly committing themselves to the organisation because of the values they share with the organisation. TJs in particular are likely to join organisations in order to effect change according to their own strongly held ideals whereas FJs are likely to join organisations in order to affiliate with others.

In terms of temperaments the distinctive feature of the humanist sample is the prevalence of the NT temperament (The Rational) amongst both males (29%) and females (19%). This means that there are approximately twice as many NTs amongst the males compared with the general population (14%) and approximately four times as many amongst the females compared with the general population (5%). NTs are generally considered to be pragmatic, sceptical, self-contained, and focused on problem-solving and they prefer abstract ideas and to possess a high level of intellectual curiosity and independence of thought. NTs are comfortable with an intellectual distance from conventional wisdom which results in the belief that ideas are emotionally important and could be summed up as 'I care but I don't believe', or as 'values without belief'. Their preference for intuitive thinking is more likely to

lead to the questioning of the ontological claims of religions. Thus, their intellectual curiosity might be thought to fuel their enquiry which ultimately results in the commitment to humanism and its' ideals.

In the population in general the preference for thinking is more frequently found amongst males and this is also true of this sample of humanists. However, in the general population females predominantly prefer feeling, yet the female humanists prefer thinking. This suggests that as well as membership of HUK being particularly attractive to men it also seems to be particularly attractive to thinking types irrespective of gender. The men are significantly more introverted and thinking than the women in the sample but both introvert and thinking men and women are disproportionately attracted to the HUK when compared with the expected levels of introversion and thinking in the general population.

Research discussed above has suggested that it may be helpful to think in terms of a religious type, typically this is understood to be ISFJ. The study of the humanist sample has shown that whilst there are important differences between the religious and irreligious communities, they also have much in common, particularly their IS_J profile. The difference between the two communities primarily is reflected in their judging function (thinking or feeling). The judging functions work in very different ways, thinking types make their decisions based on impersonal logic whereas feeling types make their decisions based on how it will impact others (Francis, 2005). This is an important distinction between the two groups. Thinking types constitute a smaller proportion of the total number of churchgoers, whereas among the humanists thinking types make up 83% of the men and 63% of the women compared with just 58% of the males and 30% of the women among churchgoers.

As discussed in the introduction HUK is a campaigning organisation that seeks dialogue between the religious and the irreligious communities. The difference between the humanists thinking preferences and the churchgoers feeling preferences may, in part, offer an

explanation of why these two groups struggle to communicate effectively in debates that take place in the public arena. Churchgoers may feel hurt and threatened by the apparently cold and impersonal way HUK members address issues which the churchgoers feel are important in their value system. Alternatively, HUK members may become exasperated by churchgoers apparently making decisions on the basis of how people will respond rather than on the logic or merit of an argument. It is not surprising therefore that misunderstanding can arise, despite the similarities in psychological type between the two groups. The difference between thinking and feeling, and in particular in how they make decisions, may disproportionately impact the way in which they are able to communicate with each other.

Conclusions

This paper challenges the assumption that irreligious groups will be a mirror image, in psychological type terms, of religious groups. It has clearly been established that although in many ways the humanists are distinctive from both the population norms and churchgoers, they are not simply their opposite in terms of psychological type; it is more nuanced than that. Further research in this area is necessary in order to establish how the psychological type preferences of different irreligious groups may vary. Work among the Christian community has established differences between denominations and it would seem reasonable that differences are also likely to be found among irreligious groups.

Whilst it is clear that HUK has raised its' profile in Britain and has been able to make important contributions to national debates it is also clear that it has struggled to extend its' membership beyond a relative minority of the overall psychological type profile of the population. Put another way it is clear that certain psychological types are disproportionately attracted to HUK just as certain psychological types are disproportionately attracted to the church. In part it might be that joining organisations such as HUK is something that those

with an SJ temperament are more likely to do as it appeals to their preferences for ensuring that ideas held to be important to them endure. So, joining HUK may be considered a natural outworking of that process for them and would also provide a rationale for why SJ are also overrepresented in the church congregations.

Psychological type theory has demonstrated that it is a useful tool with which to explore the different profiles of one group of non-believers (humanists) in relationship to the population norms and to a religious group. It seems that holding a complex irreligious worldview is associated with a distinctive psychological type in the same way that holding a complex religious worldview is associated with a distinctive psychological type.

Further research

It is not necessarily helpful to compare British humanists with American online atheists, although the data published by Baker and Robbins (2012) implies some similarities and some differences and hints at complexity within the irreligious community. The challenge now is to collect comparative data from a UK atheist sample so that an appropriate comparison can be carried out. It does raise the question however, of the extent to which homogeneity should be expected within the irreligious community. It is clear that one cannot assume that all irreligious groups are the same (Schnell, 2015). Indeed, this has been demonstrated to be the case in the USA by Silver, Coleman, Hood, and Holcombe (2014) where their research has led them to identify six different types of atheists. It is interesting to speculate where, and if, humanists would fit within this categorisation.

One intriguing avenue for future research is the potential difference between the members of HUK and its' supporters who outnumber the members by a ratio of three to one. Given that the members present such a restricted range of types it would be of value to explore whether the supporters represent a broader psychological type profile. Finally, further research could usefully explore the implications of the restricted psychological type preferences of HUK members on the organisation's ability to effectively communicate both with its broader support base and with the wider population, including religious communities.

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Type distribution for male humanists and a comparison with male population norms

		The Six	teen Com	olete Types					Dichotomous Preferences					
ISTJ <i>n</i> = 274 (40.3%)		ISFJ n = 41 (6.0%)		INFJ <i>n</i> = 26 (3.8%)		INTJ <i>n</i> = 113 (16.6%)		E I	n = 172 n = 508		(25.3%) (74.7%)	*** <i>I</i> =0.54 *** <i>I</i> =1.41		
<i>I</i> =2.05**	**	<i>I</i> =0.87		<i>I</i> =2.38*	*	<i>I</i> =6.54**	**	S	<i>n</i> = 426		(62.6%)	***/=0.86		
+++++		+++++		+++		+++++		Ν	n = 254		(37.4%)	*** <i>1</i> =1.39		
+++++		+				+++++		т	5(((02 20/)	***1 1 20		
+++++						+++++		I E	n = 566		(83.2%)	*** <i>I</i> =1.28		
+++++						+		F	n = 114		(16.8%)	*** <i>1</i> =0.48		
+++++								т			(96.50/)	*** <i>I</i> _1 50		
+++++								J D	n = 02		(80.570) (12.504)	***1-1.38		
+++++								P	n - 92		(13.3%)	1-0.30		
ISTP		ISFP		INFP		INTP			Pai	irs an	d Temper	aments		
<i>n</i> = 12		<i>n</i> = 3		<i>n</i> = 6		<i>n</i> = 33								
(1.8%)		(0.4%)		(0.9%)		(4.9%)		IJ	<i>n</i> = 454		(66.8%)	*** <i>I</i> =2.17		
<i>I</i> =0.16**	**	<i>I</i> =0.12*	**	<i>I</i> =0.24*	**	<i>I</i> =1.17		IP	n = 54		(7.9%)	*** <i>I</i> =0.36		
+						++++		EP	n = 38		(5.6%)	*** <i>I</i> =0.24		
								EJ	<i>n</i> = 134		(19.7%)	<i>I</i> =0.82		
								ST	<i>n</i> = 367		(54.0%)	<i>I</i> =1.07		
								SF	n = 59		(8.7%)	*** <i>I</i> =0.38		
-		-							n = 55		(8.1%)	** <i>I</i> =0.66		
ESTP $n = 6$		ESFP $n = 2$		ENFP n = 9		ENTP n = 21		NT	<i>n</i> = 199		(29.3%)	*** <i>1</i> =2.01		
(0.9%)		(0.3%)		(1.3%)		(3.1%)		SJ	<i>n</i> = 403		(59.3%)	*** <i>I</i> =1.34		
<i>I</i> =0.11**	**	I=0.05*	**	I=0.26*	**	I=0.86		SP	<i>n</i> = 23		(3.4%)	*** <i>I</i> =0.12		
				+		+++		NP	<i>n</i> = 69		(10.1%)	*** <i>I</i> =0.62		
								NJ	<i>n</i> = 185		(27.2%)	*** <i>I</i> =2.61		
								TJ	<i>n</i> = 494		(72.6%)	*** <i>I</i> =1.91		
								TP	n = 72		(10.6%)	*** <i>I</i> =0.40		
								FP	n = 20		(2.9%)	*** <i>I</i> =0.16		
ESTJ $n = 75$		ESFJ $n = 13$	ESFJ $n = 13$		ENFJ $n = 14$		ENTJ $n = 32$		<i>n</i> = 94		(13.8%)	<i>I</i> =0.83		
(11.0%)		(1.9%)		(2.1%)		(4.7%)		IN	<i>n</i> = 178		(26.2%)	*** <i>I</i> =2.20		
Ì=0.95		I=0.32*	**	Ì=1.03		Ì=1.10		EN	<i>n</i> = 76		(11.2%)	* <i>I</i> =0.75		
+++++		+		++		++++		IS	<i>n</i> = 330		(48.5%)	** <i>I</i> =1.18		
+++++								ES	<i>n</i> = 96		(14.1%)	*** <i>I</i> =0.44		
т								ET	<i>n</i> = 134		(19.7%)	*** <i>I</i> =0.71		
								EF	<i>n</i> = 38		(5.6%)	*** <i>I</i> =0.29		
								IF	<i>n</i> = 76		(11.2%)	** <i>I</i> =0.70		
								IT	<i>n</i> = 432		(63.5%)	*** <i>I</i> =1.71		
Jungian	n Types (E)		Jungia	n Types (I	[)		Dor	ninant T	ypes			-	
	n	%	Index		n	%	Index		D =	n	%	Index		
E-TJ	107	15.7	0.99	I-TP	45	6.6	0.44***		Dt. T	152	22.4	0.72***		
E-FJ	27	4.0	0.50***	I-FP	9	1.3	0.18***		Dt. F	36	5.3	0.34***		
ES-P	8	1.2	0.08***	IS-J	315	46.3	1.74***		Dt. S	323	47.5	1.16*		
EN-P	30	4.4	0.51***	IN-J	139	20.4	4.93***		Dt. N	169	20.4	1.94***		
Note: N=680		+=1% of N		*=p<.05		**=p=<.	**=p=<.01		<i>p</i> <=.001				-	

Type distribution for female humanists and a comparison with female population norms

		The Sixt	een Com	plete Types					Dichotomous Preferences					
ISTJ <i>n</i> = 98 (27.1%) <i>I</i> =3.16*** ++++++ ++++++		ISFJ n = 43 (11.9%) I=0.67* ++++++ ++++++		INFJ n = 19 (5.2%) <i>I</i> =3.03*** +++++		INTJ n = 30 (8.3%) <i>I</i> =17.92* +++++ +++	***	E I S N T	n = 146 n = 216 n = 241 n = 121 n = 229		(40.3%) (59.7%) (66.6%) (33.4%) (63.3%)	*** <i>I</i> =0.70 *** <i>I</i> =1.40 *** <i>I</i> =0.84 *** <i>I</i> =1.62 *** <i>I</i> =2.14		
+++++								F	<i>n</i> = 133		(36.7%)	*** <i>I</i> =0.52		
+++++ ++								T	n = 308		(85.1%)	*** <i>I</i> =1 38		
								P	n = 54		(14.9%)	*** <i>I</i> =0.39		
ISTP		ISFP		INFP		INTP	INTP Pa			irs and Temperaments				
n = 6		n = 0		n = 11		n = 9		ττ	n = 100		(52 50/)	*** <i>I</i> _1 05		
(0.05%) I=1.77		(0.0%) I=0.00**	*	(5.0%) I=1.10		(2.5%) I=2.39		IJ ID	n = 190 n = 26		(52.5%)	*** <i>I</i> =1.85		
1-1.77 +		1-0.00		<i>I</i> =1.10 +++		1-2.39 ++		EP	n = 20 n = 28		(7.270)	*** <i>I</i> =0.31		
								EJ	n = 118		(32.6%)	I=0.99		
								ST	n = 159		(43.9%)	*** <i>I</i> =1 81		
								SF	n = 82		(22.7%)	*** <i>I</i> =0.41		
								NF	n = 51		(14.1%)	<i>I</i> =0.92		
ESTP		ESFP		ENFP		ENTP		NT	<i>n</i> = 70		(19.3%)	*** <i>I</i> =3.64		
n = 6		n = /		n = 6 (1.7%)		n = 9 (2.5%)		S I	m – 222		(61 20/)	* <i>I</i> _1 12		
(1.7%) I=0.45		(1.9%) I = 0.18**		(1.7%) I = 0.22*	**	(2.5%) I = 1.10		SD 21	n = 222 n = 10		(01.5%)	* <i>1</i> =1.13 *** <i>1</i> =0.21		
1-0.45 +		+		+		1-1.19 ++		SF NP	n = 19 n = 35		(3.270) (9.7%)	I=0.21		
1		I		I				NJ	n = 35 n = 86		(23.8%)	*** <i>I</i> =3.26		
								ті	n = 199		(55.0%)	*** <i>I</i> =2 72		
								TP	n = 30		(8.3%)	I = 0.89		
								FP	n = 24		(6.6%)	*** <i>I</i> =0.23		
ESTJ		ESFJ		ENFJ		ENTJ		FJ	<i>n</i> = 109		(30.1%)	*** <i>I</i> =0.73		
n = 49 (13.5%)		(8.8%)		n = 13 (4.1%)		n = 22 (6.1%)		IN	n = 69		(19.1%)	*** <i>I</i> =3.17		
I=1.43*		<i>I=</i> 0.48**	*	I=1.24		I=3.50**	*	EN	n = 52		(14.4%)	<i>I</i> =0.98		
+++++		+++++		++++		+++++		IS	n = 147		(40.6%)	<i>I</i> =1.11		
+++++		+++				+		ES	n = 94		(26.0%)	*** <i>I</i> =0.61		
+++								ET	<i>n</i> = 86		(23.8%)	** <i>I</i> =1.40		
								EF	n = 60		(16.6%)	*** <i>I</i> =0.41		
								IF	n = 73		(20.2%)	*** <i>I</i> =0.67		
								IT	<i>n</i> = 143		(39.5%)	*** <i>I</i> =3.13		
Jungian '	Types (F	E)		Jungia	n Types (I))		Don	ninant Ty	pes				
	n	%	Index		n	%	Index			n	%	Index		
E-TJ	71	19.6	1.75***	I-TP	15	4.1	1.16		Dt. T	86	23.8	1.61***		
E-FJ	47	13.0	0.59***	I-FP	11	3.0	0.29***		Dt. F	58	16.0	0.49***		
ES-P EN-P	13 15	3.6 4.1	0.24*** 0.43***	IS-J IN-J	141 49	39.0 13.5	1.48*** 6.16***		Dt. S Dt. N	154 64	42.5 17.7	1.04 1.50**		
Note: N=362		+=1% of N		*=p<.05		**=p=<.01		***	<i>p</i> <=.001					

Type distribution for male Humanists compared with female Humanists

		The Sixt	een Comj	plete Types					Dichotomous Preferences					
ISTJ <i>n</i> = 274 (40.3%) <i>I</i> =1.49*** ++++++ ++++++ ++++++ ++++++ ++++++	*	ISFJ <i>n</i> = 41 (6.0%) <i>I</i> =0.51** ++++++ +	*	INFJ n = 26 (3.8%) I=0.73 +++		INTJ <i>n</i> = 113 (16.6%) <i>I</i> =2.01** +++++ +++++ +	*	E I S N T F J P	$n = 172 \\ n = 508$ $n = 426 \\ n = 254$ $n = 566 \\ n = 114$ $n = 588 \\ n = 92$		(25.3%) (74.7%) (62.6%) (37.4%) (83.2%) (16.8%) (86.5%) (13.5%)	***/=0.63 ***/=1.25 I=0.94 I=1.12 ***/I=1.32 ***/I=0.46 I=1.02 I=0.91		
+++++		ICED		INFD		INITO			D.:		I T			
n = 12		n = 3		n = 6		n = 33			Pai	rs and	1 Temper	aments		
n = 12 n = 3 (1.8%) (0.4%) I = 1.06 I = +		= 3 n = 6 0.4% (0.9%) = I=0.29**					IJ IP EP EJ	n = 454 n = 54 n = 38 n = 134		(66.8%) (7.9%) (5.6%) (19.7%)	*** <i>I</i> =1.27 <i>I</i> =1.11 <i>I</i> =0.72 *** <i>I</i> =0.60			
								ST SF NF	n = 367 n = 59 n = 55		(54.0%) (8.7%) (8.1%)	** <i>I</i> =1.23 *** <i>I</i> =0.38 ** <i>I</i> =0.57		
ESTP		ESFP		ENFP		ENTP		NT	<i>n</i> = 199		(29.3%)	*** <i>I</i> =1.51		
n = 6 (0.9%) I=0.53		n = 2 (0.3%) I=0.15**		n = 9 (1.3%) I=0.80 +		n - 21 (3.1%) I=1.24 +++		SJ SP NP NJ	n = 403 n = 23 n = 69 n = 185		(59.3%) (3.4%) (10.1%) (27.2%)	I=0.97 I=0.64 I=1.05 I=1.15		
								TJ TP FP	n = 494 n = 72 n = 20		(72.6%) (10.6%) (2.9%)	*** <i>I</i> =1.32 <i>I</i> =1.28 ** <i>I</i> =0.44		
ESTJ		ESFJ		ENFJ		ENTJ		FJ	n = 94		(13.8%)	*** <i>I</i> =0.46		
n = 75 (11.0%) I=0.81 ++++++ ++++++		n = 13 (1.9%) I=0.22**+	*	n = 14 (2.1%) I=0.50 ++		n = 32 (4.7%) I=0.77 ++++		IN EN IS ES	n = 178 n = 76 n = 330 n = 96		(26.2%) (11.2%) (48.5%) (14.1%)	** <i>I</i> =1.37 <i>I</i> =0.78 * <i>I</i> =1.20 *** <i>I</i> =0.54		
+								ET EF IF IT	n = 134 n = 38 n = 76 n = 432		(19.7%) (5.6%) (11.2%) (63.5%)	<i>I</i> =0.83 *** <i>I</i> =0.34 *** <i>I</i> =0.55 *** <i>I</i> =1.61		
Jungian	Types (E	<u>(</u>)		Jungia	n Types (I)			Dor	ninant Ty	ypes				
-	n	%	Index		n	%	Index			n	%	Index		
E-TJ e ei	107	15.7	0.80	I-TP	45	6.6	1.60		Dt. T	152 26	22.4	0.94		
E-FJ FS-P	27	4.0 1.2	0.31***	1-FP IS_1	9 315	1.5	0.44 1 10*		Dt S	30 323	5.5 47.5	0.33***		
EN-P	30	4.4	1.06	IN-J	139	20.4	1.51**		Dt. N	169	20.4	1.41**		
Note: N=680 +=1% of N		N	*=p<.05		**=p=<.01		***	<i>p</i> <=.001						

Type distribution for male churchgoers compared with male humanists

		The Sixt	een Com	plete Types					Dichotomous Preferences					
ISTJ n = 455 (27.2%)		ISFJ <i>n</i> = 274 (16.4%)		INFJ n = 55 (3.3%)		INTJ <i>n</i> = 113 (6.8%)		E I	n = 611 n = 1063		(36.5%) (63.5%)	*** <i>I</i> =1.44 *** <i>I</i> =0.85		
<i>I</i> =0.67**	**	<i>I</i> =2.71**	*	<i>I</i> =0.86		<i>I</i> =0.41**	*	S	n = 1233		(73.7%)	*** <i>I</i> =1.18		
+++++		+++++		+++		+++++		Ν	n = 441		(26.3%)	*** <i>I</i> =0.71		
+++++		+++++				+		-			(= < 0.0 ()			
+++++		+++++						Т	n = 943		(56.3%)	***/=0.68		
+++++		+						F	n = 7/31		(43.7%)	*** <i>1</i> =2.60		
+++++								т	n = 1271		(91.00/)	**1-0.05		
ττ								J D	n = 15/1 n = 202		(81.970) (18.104)	**1-0.95		
								Г	n - 303	1	(10.170)	1-1.54		
ISTP		ISFP		INFP		INTP			Pai	irs an	d Temper	aments		
<i>n</i> = 41		<i>n</i> = 45		<i>n</i> = 54		<i>n</i> = 26								
(2.4%)		(2.7%)		(3.2%)		(1.6%)		IJ	<i>n</i> = 897		(53.6%)	***1=0.80		
<i>I</i> =1.39		<i>I</i> =6.09**	*	<i>I=</i> 3.66*	**	<i>I</i> =0.32**	*	IP	n = 166		(9.9%)	<i>I</i> =1.25		
++		++		+++		+		EP	n = 13/		(8.2%)	* <i>I</i> =1.46		
								EJ	n = 4/4		(28.3%)	*** <i>1</i> =1.44		
								ST	<i>n</i> = 716		(42.8%)	*** <i>I</i> =0.79		
								SF	n = 517		(30.9%)	<i>I</i> =3.56		
								NF	n = 214		(12.8%)	*** <i>I</i> =1.58		
ESTP		ESFP		ENFP		ENTP		NT	n = 227		(13.6%)	*** <i>I</i> =0.46		
<i>n</i> = 23		<i>n</i> = 35		<i>n</i> = 53		<i>n</i> = 26								
(1.4%)		(2.1%)		(3.2%)		(1.36%)		SJ	<i>n</i> =1089		(65.1%)	** <i>I</i> =1.10		
<i>I</i> =1.56		<i>I</i> =7.11**	*	<i>I</i> =2.39*		<i>I</i> =0.50*		SP	n = 144		(8.6%)	***1=2.54		
+		++		++		+		NP	n = 159		(9.5%)	<i>I</i> =0.94		
								NJ	n = 282		(16.8%)	***1=0.62		
								TJ	<i>n</i> = 827		(49.4%)	*** <i>I</i> =0.68		
								TP	n = 116		(6.9%)	** <i>I</i> =0.65		
								FP	n = 187		(11.2%)	*** <i>I</i> =3.80		
ESTJ		ESFJ		ENFJ		ENTJ		FJ	<i>n</i> = 544		(32.5%)	*** <i>I</i> =2.35		
n = 197		n = 163		n = 52		n = 62		D.I.	240		(1.4.00/)	****		
(11.8%)		(9.7%)	· •	(3.1%)		(3.7%)		IN	n = 248		(14.8%)	***1=0.57		
<i>I</i> =1.0/		<i>I</i> =5.09**	• ক	<i>I</i> =1.51		<i>I</i> =0./9		EN	n = 193		(11.5%)	I=1.03		
+++++		+++++		+++		+++		15	n = 815		(48.7%)	I=1.00		
++++++		++++						ЕS	n - 410		(23.0%)			
								ΕT	<i>n</i> = 308		(18.4%)	<i>I</i> =0.93		
								EF	<i>n</i> = 303		(18.1%)	*** <i>I</i> =3.24		
								IF	n = 428		(25.6%)	*** <i>I</i> =2.29		
								IT	<i>n</i> = 635		(37.9%)	*** <i>I</i> =0.60		
Jungian	Types (H	E)		Jungia	n Types (I))		Dor	ninant T	ypes	·····			
	n	%	Index		n	%	Index			n	%	Index		
E-TJ	259	15.5	0.98	I-TP	67	40.0	0.60**		Dt. T	326	19.5	0.87		
E-FJ	215	12.8	3.23***	I-FP	99	5.9	4.47***		Dt. F	314	18.8	3.54***		
ES-P	58	3.5	2.95**	IS-J	729	43.5	0.94		Dt. S	787	47.0	0.99		
EN-P	79	4.7	1.04	IN-J	168	10.0	0.49***		Dt. N	247	14.8	0.59***		
Note: N=	=1,674	+=1% of N		*=p<.05		**=p=<.01		***	<i>p</i> <=.001					

Type distribution for female churchgoers compared with female humanists

		The Sixt	een Com	plete Types					Dichotomous Preferences					
ISTJ <i>n</i> = 340 (12.2%) <i>I</i> =0.45*** +++++ +++++ +++++ +++++ ++++		ISFJ n = 671 (24.1%) <i>I</i> =2.03*** +++++ +++++ +		INFJ <i>n</i> = 112 (4.0%) <i>I</i> =0.77 +++++		INTJ n = 86 (3.1%) I=0.37*** +++++ +++		E / I / / S / / N / / F / / J / / J	$n = 1341 \\ n = 1443 \\ n = 2192 \\ n = 592 \\ n = 833 \\ n = 1951 \\ n = 2295 \\ n = 480 \\ n = 1000 \\ n$		(48.2%) (59.7%) (21.3%) (29.9%) (70.1%) (82.4%)	** <i>I</i> =1.19 ** <i>I</i> =0.87 *** <i>I</i> =1.18 *** <i>I</i> =0.64 *** <i>I</i> =0.47 *** <i>I</i> =1.91 <i>I</i> =0.97 <i>I</i> =1.18		
								P	n = 489		(17.0%)	<i>I</i> =1.18		
ISTP $n = 26$		ISFP $n = 114$		INFP $n = 70$		INTP n = 24			Pair	rs and	Temper	aments		
n = 26 (0.9%) <i>I</i> =0.56		n = 114 (4.1%) <i>I</i> =0.00*** +++++		n = 70 (2.5%) I=0.83 ++		n = 24 (0.9%) I=0.35**		IJ IP EP EJ	n = 1209 n = 234 n = 255 n = 1086	((43.4%) (8.4%) (9.2%) (39.0%)	*** <i>I</i> =0.83 <i>I</i> =1.17 * <i>I</i> =1.18 *** <i>I</i> =1.20		
ESTP		ESFP		ENFP		ENTP		ST SF NF NT	n = 645 n = 1547 n = 404 n = 188		(23.2%) (55.6%) (14.5%) (6.8%)	*** <i>I</i> =0.53 *** <i>I</i> =2.45 <i>I</i> =1.03 *** <i>I</i> =0.35		
n = 11 (0.4%) I=0.24**		n = 129 (4.6%) I=2.40* +++		n = 96 (3.4%) <i>I</i> =2.08 +++		n = 19 (0.7%) I=0.27**	*	SJ SP NP NJ	n = 1912 n = 280 n = 209 n = 383		(68.7%) (10.1%) (7.5) (13.8%)	** <i>I</i> =1.12 ** <i>I</i> =1.92 <i>I</i> =0.78 *** <i>I</i> =0.58		
ESTJ		ESFJ		ENFJ		ENTJ		TJ TP FP FJ	n = 753 n = 80 n = 409 n = 1542		(27.0%) (2.9%) (14.7%) (55.4%)	*** <i>I</i> =0.49 *** <i>I</i> =0.35 *** <i>I</i> =2.22 *** <i>I</i> =1.84		
n = 268 (9.6%) I=0.71* +++++ ++++		n = 633 (22.7%) I=2.57*** ++++++ ++++++		n = 126 (4.5%) I=1.09 ++++		n = 59 (2.1%) I=0.35** ++	*	IN EN IS ES	n = 292 n = 300 n = 1151 n = 1041		(10.5%) (10.8%) (41.3%) (37.4%)	***I=0.55 *I=0.75 I=1.02 ***I=1.44		
		+++++ +++++ ++						ET 7 EF 7 IF 7 IT 7	n = 357 n = 984 n = 967 n = 476		(12.8%) (35.3%) (34.7%) (17.1%)	*** <i>I</i> =0.54 *** <i>I</i> =2.13 *** <i>I</i> =1.72 *** <i>I</i> =0.43		
Jungian	Types (I	E)		Jungia	n Types (I))		Dom	inant Ty	pes				
E-TJ E-FJ ES-P EN-P	n 327 759 140 115	% 11.7 27.3 5.0 4.1	Index 0.60*** 2.10*** 1.40 1.00	I-TP I-FP IS-J IN-J	n 50 184 1011 198	% 1.8 6.6 36.3 7.1	Index 0.43** 2.18** 0.93 0.53***]]]]	Dt. T Dt. F Dt. S Dt. N	n 377 943 1151 313	% 13.5 33.9 41.3 11.2	Index 0.57*** 2.11*** 0.97 0.64***		
Note: N=2,784		+=1% of N		*=p<.05		**=p=<.01		***p	<=.001					