# Do You Need Religion to Enjoy the Benefits of Church Services? Social Bonding, Morality and Quality of Life Among Religious and Secular Congregations

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#### **Abstract**

Participation in religion has frequently been associated with high levels of wellbeing. Few studies, however, have directly compared the effect of participating in a religious versus a secular congregation. The creation of the Sunday Assembly, in effect a secular 'church', has created the opportunity to make direct comparisons between religious and non-religious congregations. We hypothesize that a coherent moral narrative and specific moral values contribute to increased wellbeing for religious relative to secular traditions. Through a survey of three traditions (conservative religious, mainstream religious, and secular) we compared quality of life (QoL), levels of social bonding, and moral thinking. Connectedness to one's congregation was positively associated with overall QoL, as was the degree to which participants believed their values matched those of others in their group. Actual within-group similarity of moral values was not related to connectedness or QoL. Religious theological traditions, compared with secular, predicted social and environmental health, but not other QoL domains. There were no differences between religious and secular participants for within-group moral similarity, although religious participants held a distinct set of moral values not found among secular participants. These results suggest believing one shares moral values with one's congregation may contribute to QoL. Religious congregations appear to promote a unique moral perspective not found in secular congregations, and to promote wellbeing in some areas of life. The cause of this difference in wellbeing is unclear, although the moral values promoted by religion may be a contributing factor, and further study in this area is warranted.

#### Introduction

There is a growing body of evidence that religious participation is related to benefits such as high levels of wellbeing (see Ellison & Levin, 1998 and Cohen & Johnson, 2017 reviews of studies on religion and wellbeing), identity (Ysseldyk et al., 2010), and promoting morality (Van Cappellen et al., 2016). It is likely that there is also some degree of interplay between these. It is generally accepted that religious participation promotes good physical and psychological health (Ellison & Levin, 1998; Helliwell & Putnam, 2004; Chen et al., 2020), and various factors have been explored as possible explanations for religion's impact on wellbeing. Helliwell and Putnam (2004) found that wellbeing was strongly linked to social capital, which they define as being social networks and the bonds of reciprocity and trust that are associated with those networks, and further suggested that church attendance is a source of such social capital. Further, there is evidence that the social bonding engendered by participation in religious worship is a key factor in the relationship between religious participation and wellbeing (Dunbar, 2021). In addition, it is often assumed that religious individuals are more moral than non-religious (e.g. atheist) individuals (Gervais, 2014; Gervais et al., 2017), and the question of whether religious and nonreligious individuals do, in fact, differ in moral thinking and behaviour has been the subject of numerous studies (e.g. Duriez, 2004; Everett et al., 2016; Piazza, 2012).

What has been lacking in most studies of the relationship between religious participation and wellbeing, and in those investigating religious involvement and morality, however, is a comparison between individuals who participate in religious church services and those attending non-religious equivalents. Such a comparison would allow for the teasing apart of the content of the religious service and the benefits of belonging to a social group, which could help to elucidate the role of specific moral teaching and a shared belief system in providing the QoL benefits associated with religious participation. Is there an additional effect of religious participation on wellbeing through the inclusion of moral content that provides a shared, coherent moral narrative

and a unique set of moral values? In this article we report on what we believe to be the first study to make a direct comparison of social bonding, moral thinking and wellbeing of religious church congregations and the secular 'church' congregations of the Sunday Assembly.

The Sunday Assembly, founded in London in 2013 (Sunday Assembly, n.d.-a) have meetings which are explicitly modelled on church services, but do not include any religious content. There are now more than twenty Sunday Assembly congregations across the UK and around forty worldwide (Hill, 2019). One of the aims of the Sunday Assembly is to provide the social benefits that are derived from attending church, but in a secular setting (Smith, 2017). Like many church services, a Sunday Assembly meeting includes singing songs, a reading, a talk, and a time for social gathering after the main meeting has ended (Sunday Assembly, n.d.-a). The members of a Sunday Assembly constitute a congregation just as those attending a church service do (Smith, 2017). Sunday Assemblies, therefore, provide a good parallel for churches, as they replicate the structure of a church service but without any theist or supernatural content. There is already some evidence that the Sunday Assembly, like a religious congregation, promotes wellbeing by enabling relationships and providing social capital (Price & Launay, 2018).

Based on this evidence, we anticipated that feelings of connectedness to one's congregation would be high in both religious and secular congregations.

Although there are similarities between church and Sunday Assembly congregations, there may, however, be some differences as well. Christian churches are communities that consciously share an identity (being a Christian) and this may be supplemented with a denomination-specific or theological (e.g. Evangelical) identity. Moreover, churches intentionally seek to shape their members' self-understanding to conform to this identity. Sunday Assemblies, on the other hand, do not appear to have an explicit or articulated shared identity,

as some members are atheists, but others may not be, since it is open to religious believers as well as non-believers (Garrison, 2013).

Moreover, in contrast to churches, which could be described as 'moral communities' (Graham & Haidt, 2010), based on their explicit moral codes and teachings, the Sunday Assembly does not appear to have a specific set of moral precepts to which members are expected to adhere. The Sunday Assembly does articulate a desire to be a "force for good" and "to make the world a better place", although what they understand to be "good" and "a better place" is not articulated, and they specifically claim to follow no doctrine (Sunday Assembly, n.d.-b). They do have a motto of, "live better, help often, wonder more," yet point 9 in the Sunday Assembly's 10-point charter states, "We won't tell you how to live, but will try to help you do it as well as you can." (Sunday Assembly, n.d.-b). While in no way implying a lack of morality among Sunday Assembly members, this lack of specificity in their stated values suggests that moral attitudes are likely to be more diverse within a Sunday Assembly congregation than in a church congregation. We therefore anticipated that religious churchgoers would show a greater withingroup similarity in importance given to a range of moral items by individuals and their congregation as a whole (moral congruity) than would Sunday Assembly members.

A social identity perspective of the influence a group has on the behaviour of its members suggests that the more strongly one identifies with a group, the more one's behaviour conforms to the group norm (Hogg & Reid, 2006). We therefore expected that feelings of connectedness to one's congregation, religious or secular, would be positively related to high levels of moral congruity, that is, the similarity in moral values within a congregation. One recent study has found correlations between feelings of connectedness to one's church congregation and perceived moral similarity (the degree to which individuals believe their moral values are shared by the congregation as a whole; Brown, et al., under review). We therefore expected that high levels of felt connectedness within a congregation would also be associated with high levels of

perceived moral similarity. The social identity understanding of group behavior also suggests that the moral values of congregation members would be aligned with what they understood those of the group to be. We therefore expected that perceived moral similarity would be positively related to actual moral congruity within a congregation. We further anticipated that high levels of connectedness to the congregation would be associated with a better quality of life.

Research has found that understandings of morality differ between individuals with liberal views and those with conservative views (Haidt & Graham, 2007). More recently, Woodhead (2016) has suggested that one reason church attendance is in decline in the UK is a growing divergence between what the institutional church perceives as morality versus a more liberal ethic in society. It is, therefore, likely that those who are members of a religious church congregation will have a different set of moral concerns than secular individuals and that differences may also exist between conservative and liberal congregations; thus, we predicted that such differences would be reflected in the importance given to moral items by religious and secular congregations and in scores on the Schwartz's values domains, in line with previous research (Saroglou et al., 2004).

It has been suggested that the moral/ethical dimension of religion contributes to the religion—wellbeing relationship, in particular through conformity to religious moral teachings against such things as sexual promiscuity and recreational drug use, resulting in a healthier lifestyle than one might otherwise have (Ellison & Levin, 1998). At least one study has found that religious individuals engaged in less alcohol and recreational drug use than either those who described themselves as spiritual but not religious, or those who said they were neither spiritual nor religious (King et al., 2013). It may be that such benefits might increase the longer one belongs to a congregation, as a sense of accountability may develop as relationships deepen, leading to greater adherence to prohibitions against risky behaviours (Park et al., 2019). If such prohibitions do contribute to religion's influence on wellbeing, a secular congregation that lacks

strong moral prohibitions against practices that lead to poor mental and physical health may not confer the same benefits as a religious congregation which does. It is possible, however, that those benefits of religious participation, at least as they pertain to psychological wellbeing, may be minimised among our study population as a result of the increasing secularization and percentage of the population identifying as non-religious in the United Kingdom (Woodhead, 2016), where our study was conducted. The positive relationship between religiosity and psychological adjustment has been found to be stronger in countries in which religious practice is common and held in high esteem than in more secularized countries (Gebauer et al., 2012) and it could be argued that religious practice is no longer the norm in the United Kingdom.

There is also some evidence to suggest that feelings of moral self-worth and upholding moral principles contribute to wellbeing (Hofmann et al., 2018). This suggests that one of the ways in which religion may contribute to wellbeing is through providing a community of shared moral values and purpose, a possibility also proposed by Graham and Haidt (2010), and something that may be absent from a secular congregation that refrains from explicit moral teaching. We expected, therefore, that high levels of moral congruity, an indicator of shared moral values, would be positively associated with QoL.

#### **Methods and measures**

# **Participants**

A total of 13 churches in Coventry, London, and Oxfordshire in the United Kingdom took part in the study, as did four Sunday Assembly congregations; two in London, one in Reading and one in Bristol, UK. Churches included one Methodist, one independent Pentecostal, and two Roman Catholic congregations. The remainder were from the Church of England and represented the breadth of theological traditions within that denomination. All churches were

categorised by theological tradition: fundamentalist, Evangelical, traditional or liberal. Sunday Assembly congregations were considered to be one secular tradition. Key characteristics of the different traditions are shown in Table 1.

#### Insert Table 1 about here

Recruitment involved providing church or Sunday Assembly leaders (i.e. clergy, volunteer Sunday Assembly organisers), respectively, with information about the study and what would be asked of individual participants from each congregation. Church/Sunday Assembly leaders provided verbal or written confirmation that their congregation would participate in the study. Dates for data collection were agreed with each participating congregation through their leaders.

One-hundred and sixty-six individuals completed questionnaires (67.3% female;  $M_{\text{age}} = 52.7$  years, SD = 18.8). Of these, 116 were from religious (church) congregations and 50 were from secular (Sunday Assembly) congregations. Given the similarities in their respective theological beliefs and values, the fundamentalist and evangelical theological traditions were combined into a single group (conservative religious, n = 57), as were the traditional and liberal theological traditions (mainstream religious, n = 59). Demographic characteristics for the three theological traditions are shown in Table 2.

### Insert Table 2 about here

There were no significant differences in gender representation between religious and secular participants ( $X^2 = 2.35$ , df = 2, p = .31), but an independent samples t-test showed that the age profile of religious participants ( $M_{age} = 58.6$  years, SD = 17.9) was significantly higher than that of secular participants ( $M_{age} = 38.6$  years, SD = 12.3; t = 7.08, p < .001). A subsequent ANOVA confirmed that this difference in age existed between secular participants and each of the two religious traditions and that there was no difference in age profile between the two religious (conservative,  $M_{age} = 56.7$  years, SD = 17.0; mainstream,  $M_{age} = 60.5$  years, SD = 18.7) traditions, F(2, 158) = 25.92, p < .001. Age was entered as a covariate in analyses comparing religious with secular participants on connectedness and QoL measures. Secular participants had also attended their congregation for a significantly lower number of years (M = 1.76, SD = 1.62) than had either conservative religious (M = 15.08, SD = 15.82) or mainstream religious (M = 15.08) or 16.43, SD = 18.03) participants; F(2, 156) = 17.07, p < .001,  $\eta_p^2 = .180$ ). Attendance was recorded by asking participants how often they attended church (religious participants) or secular meetings (secular participants). Responses were recorded as 'never to rarely' (once per year or less), 'occasionally' (a few times per year to once per month), 'regularly' (more than once per month to once per week), and 'frequently' (more than once per week to daily). Secular participants attended their congregations less frequently than did religious participants ( $X^2$  = 129.90, df = 8, p < .001). Years attending and frequency of attendance were therefore also included as covariates in comparative analyses of connectedness and QoL measures.

## Measures

On agreed dates, researchers attended a service at participating churches/Sunday Assemblies. Members of the church congregations and Sunday Assembly who were present on

the day of the research team's visit were invited to take part in the study by completing a questionnaire before and after the service.

After reading a participant information sheet and providing informed consent, participants were given the questionnaire to complete. This included demographic questions, one item on how long the participant had been a member of their current congregation, and one item about how frequently participants attended church (religious participants) or secular meetings (secular participants).

#### **Connectedness**

Feelings of connectedness to congregation were measured by the question, "At this moment how connected do you feel to [your church congregation / the people in the Sunday Assembly]?" Responses were on a 7-point Likert scale: 1, 'not at all'; 2, 'very slightly'; 3, 'a little'; 4, 'moderately'; 5, 'quite a bit'; 6, 'very much; 7, 'extremely'. Participants also completed the Inclusion of Others in Self Scale (Aron et al., 1992) adapted to target either the church or Sunday Assembly. Responses to these two measures were averaged to create an overall connectedness score (Cronbach's  $\alpha = .88$ ).

# Quality of Life

QoL was measured using the WHOQOL-BREF (WHOQOL Group, 1996). This measure includes 26 questions that are divided into five domains: overall QoL, physical health, psychological health, social relationships, and environment.

Due to a technical error, one question from the psychological domain, "How often do you have negative feelings, such as blue mood, despair, anxiety, depression" was inadvertently omitted from the questionnaires given to participants from Sunday Assembly congregations. The instructions for scoring the WHOQOL-BREF indicate that when a question from this domain is

not answered, a domain score for the relevant participant should not be calculated. As this would in our case mean omitting this domain from analysis for an entire group of participants and preclude comparisons on this domain between religious and non-religious participants, we decided to calculate the domain omitting this item for all participants.

# Morality and values

Importance of moral items. A modified version of the moral items inventory (Brown et al., under review) was included in the post-service questionnaire. The version of the inventory used in the current study included twelve moral items, namely: 'a close relationship with God', 'a strong sense of community', 'animal welfare and animal rights' 'being a good neighbour', 'being welcoming and inclusive', 'care for the environment', fair and equal treatment of all people', helping the poor', 'honesty', 'interventions in human reproduction', 'sexual morality' and 'telling others about your beliefs'. The item 'interventions in human reproduction' was an addition to the inventory because of the importance of the elements captured in this item for some religious individuals, particularly those from more conservative traditions. As the original version of the moral items inventory had been used for churchgoers only, the final moral item was reworded from "sharing the faith" to "telling others about my beliefs" for this study to make this item relevant to Sunday Assembly members as well as churchgoers. Participants were asked how important each of the moral items was to them using a 5-point Likert scale with responses of 1, 'not at all important'; 2, 'slightly important'; 3, 'moderately important'; 4, 'very important'; 5, 'extremely important'.

Perceived moral similarity was defined as how similar participants believed their moral values were to those of others in their congregation, and was measured with responses to the question, "How similar do you think that your moral values are to the values of others in [your church congregation/Sunday Assembly]?" given on a 5-poing Likert scale with responses of 1,

'very dissimilar'; 2, 'somewhat dissimilar'; 3, 'neither dissimilar nor similar'; 4, 'somewhat similar'; 5, 'very similar'.

Moral congruity was defined as the similarity within a congregation of the importance given to individual moral items. This was determined by calculating the absolute difference between the congregational mean and individual participant response for the importance of each moral item and for each participant within a congregation; this was then averaged into a single score of moral congruity, meaning that the lower the average difference, the greater the congruity.

A short (10-item) measure of Schwartz's values developed by Lindeman and Verkasalo (2005) was also used. This measure asks participants how important each presented value is to them as a 'life-guiding' principle on a scale from -1, 'opposed to my principles', 0, 'not important' to 5, 'of supreme importance'. The individual values in the Schwartz values list can be combined into four groupings, self-transcendence (benevolence, universalism; Cronbach's α = .61), self-enhancement (power, achievement), openness to change (self-direction, stimulation; Cronbach's  $\alpha = .66$ ) and conservation (conformity, tradition, security; Cronbach's  $\alpha = .83$ ) (Schwartz, 1992). Although hedonism can stand alone in the model, it can also be considered an element of self-enhancement and, as Schwartz (1992) has noted, values are on a continuum and boundaries between categories can be fluid. For simplification, for the purposes of this study, we included hedonism with power and achievement as part of the selfenhancement grouping (Cronbach's  $\alpha = .65$ ). Although the Cronbach's  $\alpha$  for three of the four Schwartz's values groupings were below .70, this does not necessarily indicate a lack of reliability within these scales. A Cronbach's α of .65–.80 is generally considered to indicate sufficient or adequate scale reliability (Vaske et al., 2017). In addition, Cronbach's α tends to underestimate the reliability of 2-item scales (Vaske et al., 2017), which the categories selftranscendence and openness to change are. That the self-enhancement category has a Cronbach's  $\alpha$  of only .65 is potentially more problematic, but as noted previously, one of the items within this category, hedonism, can stand alone and its inclusion may account for this, and .65 is within, if at the low end of, the acceptable range for Cronbach's  $\alpha$ .

Ethical approval for the study was obtained from the relevant university.

#### **Results**

## Quality of Life and social connectedness

Mean scores on the WHOQOL-BREF (WHOQOL Group, 1996) were above the midpoint of possible scores for both religious traditions and the secular tradition across all QoL domains (see Table 3).

## Insert Table 3 about here

We investigated levels of connectedness by running a regression analysis testing the effects of age, gender, years attending the congregation, and frequency of attendance on levels of connectedness. The analysis showed that the number of years attending the congregation and greater frequency of attendance positively predicted feelings of connectedness. Theological tradition did not predict levels of connectedness. (see Table 4).

## Insert Table 4 about here

Overall QoL scores were positively correlated with feelings of connectedness (r = .23, p = .003) suggesting a relationship between the degree to which one feels integrated into a congregation and QoL. We therefore ran sets of two regressions to test how participation in religious and secular congregations might predict QoL (see tables S1 to S5 in supplementary materials). We first ran a regression to evaluate the effects of age, gender, length of time attending one's congregation, and frequency of attendance on QoL scores. We then added the theological tradition variables to this regression to test for additive effects of theological tradition (See figure 1). We also report the change in model fit.

The regression models were not significant in predicting overall QoL or physical health and these domains will not be discussed further here. We found that the models significantly predicted psychological health, but there was no single variable which accounted for variance in outcome. For social health, both regression models were significant, with frequency of attendance being the predictor in the basic model. The change in fit when theological tradition was added to the model was also significant, indicating that religious theological traditions significantly predicted social health in comparison with the secular tradition, even when frequency of attendance and length of time attending one's congregation were accounted for. Both regression models were also significant in predicting environmental health, with age being the significant predictor in the basic model. When theological tradition was added to the model, religious theological traditions were also seen to be significant predictors of environmental health in comparison with the secular tradition, although the change in fit between the models was not significant. The effects of age were not seen once theological tradition was added to the model.

# Religious participation and moral congruity

A one-way ANOVA revealed no differences between either the conservative religious (M = .32, SD = .24) or mainstream religious (M = .41, SD = .30) and secular (M = .34, SD = .22) traditions in levels of moral congruity (range = 0-1.29), that is, the within-congregation similarity in average importance scores given to moral items, F(2, 156) = 2.13, p = .12. No significant correlation was found between overall moral congruity and perceived moral similarity, the degree to which participants believed other members of their congregation shared their moral values (r = .05, p = .53), suggesting that people assume they share moral values with their cocongregationists even when this may not be the case in fact.

No significant associations were found between average moral congruity and scores in any of the QoL domains, but there was a positive correlation between overall QoL and perceived moral similarity (r = .29, p < .001). Perceived moral similarity was also positively correlated with feelings of connectedness (r = .30, p < .001), while there was no significant correlation between overall moral congruity and connectedness (r = .04, p = .66), although connectedness was related to moral congruity for some individual items, namely, a close relationship with God (conservative religious), honesty (conservative religious and mainstream religious), and helping the poor (secular).

# Religious participation and moral values

When examining individual moral items, a one-way MANOVA revealed significant differences between the different traditions in the importance given to the items of 'a close relationship with God' (F = 162.02, p < .001,  $\eta_p^2 = .685$ ), 'honesty' (F = 4.24, p = .02,  $\eta_p^2 = .02$ 

.054), 'sexual morality' (F = 27.07, p < .001,  $\eta_p^2 = .267$ ), and 'sharing beliefs with others' (F = 29.48, p < .001,  $\eta_p^2 = .284$ ), see Figure 2. All other F-tests were non-significant, p-values  $\geq .22$ ,  $\eta_p^2 \leq .02$ .

# Insert Figure 2 about here

Subsequent pair-wise comparisons revealed that participants from conservative religious congregations and those from mainstream religious congregations assigned significantly higher importance to the moral items of 'a close relationship with God' (p < .001), 'sexual morality' (p < .001) and 'sharing beliefs with others' (p < .001) than did those from secular congregations. In addition, those from mainstream religious congregations assigned significantly higher importance to the moral item 'honesty' than did those from secular congregations (p = .02), although there was no significant difference between the two religious traditions (p > .99). Conservative religious participants also assigned higher importance to the moral item of 'honesty' than did secular participants, although this difference did not reach significance (p = .06). Among religious participants, higher importance was assigned to the item 'sharing beliefs with others' by those from conservative religious congregations compared with mainstream religious congregations (p < .001).

The ten individual Schwartz's values items were combined into four dimensions: self-transcendence, self-enhancement, openness to change, and conservation. When compared across theological traditions, significant differences were identified for all of the four Schwartz values dimensions, with secular congregations having higher scores than religious congregations for self-enhancement, self-transcendence (compared with conservative religious only), and openness to change, and religious congregations having higher scores than secular congregations

for conservation (see Figure 3). Within-congregation moral congruity for the Schwartz's values was calculated as for importance of moral items (see Methods). There were no differences between traditions, however, for within-congregation congruity on the Schwartz's values, except for the individual item of self-direction, F(2, 155) = 6.09, p = .003,  $\eta_p^2 = .073$ , with greater levels of within-congregation variation on this item seen in both religious traditions than in the secular tradition.

# Insert Figure 3 about here

## **Discussion**

The relationship between religious participation and other areas of life, including moral thinking and wellbeing, continues to be of interest to psychologists, sociologists, theologians, and pastors. The ways in which participation in religion affects morality and wellbeing are not yet fully understood, however. The creation and growth of Sunday Assembly, a secular 'church', over the past decade has created the opportunity to make comparisons between religious and secular congregations. Our study aimed to evaluate to what extent the effects of being part of a congregation on wellbeing and moral thinking are specific to religious, as compared to secular, congregations, the role that shared moral values within a group might play in promoting wellbeing, and how both wellbeing and moral thinking are influenced by feelings of connection to one's congregation.

The Quality of Life measure provided a means by which we could explore whether attending secular 'church' provides similar benefits to wellbeing as have been shown to be related to

religious affiliation. Comparison of scores on Quality of Life with moral congruity within a congregation allowed us to investigate the relationship between belonging to a group with similar moral values and wellbeing.

Mean scores were above the midpoint of possible scores for all theological traditions across all Quality of Life domains, as would be expected for participants living in a wealthy, developed nation. Regression analysis revealed that none of the independent variables predicted overall Quality of Life or physical health. While the regression model as a whole was significant in predicting psychological health, no single variable could be identified that accounted for the variance in outcome. Regression analysis showed that for social Quality of Life, the inclusion of theological tradition improved model fit, and that both frequency of attendance and theological tradition predict Quality of Life score. This suggests that there may be an interaction between theological tradition and frequency of attendance driving this effect, though this is difficult to interpret because of a lack of variation in frequency of attendance among secular participants. Attending a religious congregation positively predicted environmental Quality of Life in comparison with the secular tradition, even with all other variables controlled for. It is unclear why this might be. Interestingly, although age was a predictor for this domain in the basic regression model, this effect disappeared when theological tradition was added to the model.

The existing literature suggests that wellbeing is higher for individuals who participate in religious communities than for those who do not (Ellison & Levin, 1998; Helliwell & Putnam, 2004; Park et al., 2019; Chen et al., 2020). Previous research has highlighted the importance of the social benefits of church membership in wellbeing (Ellison & Levin, 1998; Helliwell & Putnam, 2004; Lim & Putnam, 2010; Park et al., 2019). As social networks are likely to be built and strengthened over time, we had hypothesised that the relationship between religious participation and wellbeing was likely to be related to regular participation in services over time. Here we compared individuals attending religious services with those attending secular services

and found that frequency of attendance was, as expected, a key factor in the relationship between belonging to a congregation and Quality of Life.

We further found that Quality of Life scores were positively associated with feelings of connectedness, suggesting that the degree to which one is integrated into a congregation and feels a part of that community may substantially contribute to wellbeing, although it is also possible that high levels of wellbeing could lead to greater feelings of connection with a social group. The possibility that greater social integration contributes to wellbeing is in line with other studies that have found a positive relationship between feelings of connectedness with different groups, measured in various ways, and wellbeing (Ermer & Proulx 2019; Jose et al., 2012). We used feelings of connectedness rather than an objective measure of the number of social contacts participants had within their congregation, as previous research has shown that individuals tend to be inaccurate in their recall of the number of people they know within a social network (Brewer, 2000). In addition, feelings of connectedness are more likely to reflect how integrated into the group a person is than are the number of others who they know or can identify by name. Feelings about the quality of relationships within an organization have been found to correlate with commitment to the organization as a whole (Nielsen et al., 2000), providing evidence that feeling connected to others within a group can indicate one's sense of belonging to the group. Our findings suggest that belonging to and attending a congregation do not on their own promote wellbeing; rather, the level of commitment, both in terms of frequency of attendance and connectedness, plays a key role.

The degree to which churches are integrated into the wider community may help to facilitate feelings of connectedness within religious congregations. In the UK, a Church of England parish church can be found in most communities, and in towns and cities, and some larger villages, churches from other denominations are also present. In communities where those who attend the church also live in the local community, opportunities exist for social ties between

individuals to be reinforced and strengthened both when the church congregation meets for worship and in day-to-day interactions in the community. Sunday Assembly members have reported that only 16% of their close relationships originated from their congregation (Price & Launay 2018). It is possible that for Christian churchgoers, particularly those who have been members of their congregations for many years, the church provides a higher percentage of social relationships than that reported for the Sunday Assembly. The Sunday Assembly is not yet a decade old, so it may be that in time its congregations will reach the same level of established stability that churches enjoy, and at that point the differences observed in this study may well diminish.

Feelings of connectedness were predicted by both length of time attending one's congregation and frequency of attendance, though not by theological tradition. It is unsurprising that participants would be more connected to their group the longer they have been attending and the more frequently they attend, and Sunday Assembly congregations meet only once per month, whereas many churchgoers will attend their church congregation weekly, providing more opportunities for social bonding among religious churchgoers than Sunday Assembly members. Our results suggest that this may be sufficient to account for feelings of connectedness among those who belong to religious congregations. Further research making a direct comparison between members of secular and religious congregations matched for frequency of attendance could explore whether this alone accounts for levels of connectedness within a congregation or if there is something unique to religious worship that creates high levels of lasting social bonding.

Although we had anticipated that overall moral congruity would be positively related to wellbeing, this was not the case. It has been suggested that feelings of moral self-worth can contribute to wellbeing (Hofmann et al., 2018), and we had speculated that being part of a group that shared a set of moral values might enhance feelings of moral self-worth, thus leading to increased wellbeing. We were not able to demonstrate in this study that this effect exists for

actual shared moral values within a congregation. We were, however, able to show that there is a relationship between overall Quality of Life and the belief that one shares the moral values of one's group. This suggests that, in contrast to Graham and Haidt's (2010) assertion that shared moral values underlie the greater levels wellbeing seen in religious individuals compared with the non-religious, just believing that one is part of a morally homogenous group may be enough to have a positive impact on wellbeing.

We investigated whether participation in services results in within-congregation moral congruity via feelings of connectedness and if so, whether this differed between religious and secular congregations. As expected, significant correlations were found between how similar participants believed their own moral values were to those of others in the congregation and levels of felt connectedness to the congregation. This is in line with the findings of a previous study (Brown et al., under review) that showed that the more connected people reported feeling to their congregation, the greater the similarity between the importance they assigned to various moral items and the importance they believed their church congregation assigned to those items. We did not, however, find any significant association between perceived moral similarity and actual overall moral congruity within a congregation. These findings suggest that people who feel connected to their group assume that other members of the group share their moral values, regardless of actual levels of similarity. This mismatch may be an expression of the false consensus effect, in which people overestimate the number of people who share their views or attitude towards an object or issue (Ross et al, 1977; Marks & Miller, 1987). In their study of FCE, Fabrigar and Krosnick (1995) suggested that one possible cause of FCE is an individual's assumption the situational factors that shaped his or her attitude will be the same for others and will also shape their attitudes. This could apply in our study, especially if congregational membership influences moral values. In that case, congregation members could make the

assumption that the same situational factors, e.g. belonging to that congregation, would result in others in the congregation adopting the same values or attitudes towards moral items.

Connectedness to one's congregation was not related to average moral congruity across all moral items within congregations, although it was related to moral congruity within congregations for some individual items, namely a close relationship with God and honesty (conservative religious), honesty (mainstream religious), and helping the poor (secular). Social identity theorists, such as Hogg and Reid (2006), have suggested that the more closely one identifies with a group, the more likely one is to adopt the group's norms and values as one's own. We expected, therefore, that strong feelings of connectedness would be related to high levels of similarity in moral values within a congregation. The fact that this was not true overall but did hold for some individual items, and that these differed by theological tradition, could indicate that these items may be those that are highlighted in moral teaching or in social interaction within the congregations and conformity to which is understood to be a marker of the group's identity.

We had expected to find differences in moral congruity between religious and secular traditions, having anticipated that intentional moral teaching within religious congregations would lead to higher levels of shared values within the congregation than in secular congregations. We found, however, no difference in overall moral congruity relating to moral items between the theological traditions, including secular. We cannot currently say if direct teaching on moral issues within the context of the church service or Sunday Assembly meeting had any effect on the moral congruity found within congregations, but are planning a follow-up study whereby we will analyse the content of the services.

It has previously been demonstrated that people will adopt the moral values of a group based on their anticipation that sharing the group's morals will increase the level of respect they receive from other group members (Paglioro et al., 2011). As this can apply in any group setting, and may not rely on explicit moral instruction, this could explain our findings of a lack of variety in moral congruity between religious and secular congregations. It could also be the case that for both secular and religious congregations, individuals have chosen to be a part of that community because it expresses values they already hold.

We had expected that the importance given to different moral items would vary between participants from religious and secular traditions and this was the case for about one-third of moral items. Unsurprisingly, the significant differences were mostly seen in items associated with religious piety, such as close relationship with God, sexual morality and sharing one's beliefs with others. In addition to the significant difference between secular participants and those from both religious traditions for sharing one's beliefs with others, participants from conservative religious congregations gave this item significantly more importance than did those from mainstream religious congregations. Given the importance of evangelism and proselytising in the conservative religious traditions, this is unsurprising.

Previous research has shown that the non-religious or those who identify as atheist are assumed to be less moral than religious believers (Gervais, 2014; Gervais et al., 2017; Cheruvallil-Contractor et al., In Press). The fact that we found no significant difference between religious and non-religious participants in mean importance scores for two-thirds of the moral items listed in our questionnaire suggests that this assumption is untrue. Our results indicate that it would be more accurate to say that religious individuals appear to have a distinct set of moral values and priorities which differ from those of secular individuals and in which items relating to religious piety and adherence to rules play an important role. These findings are in line with previous UK and cross-cultural findings of moral and life priorities contrasting atheist/agnostic and religious individuals (Farias & Lalljee, 2008; Bullivant et al., 2019). Our findings are equally supported by the qualitative work of Cheruvallil-Contractor and colleagues (In press), in which

non-religious individuals spoke of having moral principles and being guided by a sense of right and wrong that was not dependent on a religious faith. Although the one non-religious moral item on which a difference was seen between religious and secular participants was 'honesty', the mean score for this item for all three traditions was above 4 on a 5-point Likert scale, suggesting that while it may be of greater importance to some religious believers than it is to the secular participants in our study, it is nevertheless deemed to be of high moral importance by participants from both religious and secular traditions.

Similar to the findings relating to individual moral items, we found no difference in withincongregation congruity of values on the measure of the Schwartz's values used, which included a single item for each of the values power, achievement, hedonism, benevolence, universalism, self-direction, stimulation, conformity, tradition, and security, with the exception of selfdirection, in which there was a lower within-congregation congruity in religious congregations than secular congregations. This suggests that the items associated with this value ('creativity', 'freedom', 'curiosity', 'independence', and 'choosing one's own goals') may conflict with what some religious individuals perceive of as the values or tenets of their faith, such as obedience to God's will, while for other religious believers, these values may be seen as compatible with the teachings of the faith. In line with Saroglou and colleagues' (2004) meta-analysis we found that religious people scored higher on conservation and lower on self-enhancement and openness to change compared with secular participants. Secular participants scored higher on selftranscendence than those from conservative religious congregations, as expected. We found no difference between mainstream religious participants and secular participants for selftranscendence, which may suggest that more liberal Christian groups embrace an inclusive approach to others that does not differ greatly from secular approaches. The differences seen across the Schwartz's values groupings, together with the moral importance results, provide

evidence that religious congregations differ from secular congregations in their attitudes to moral issues and values.

In summary, members of religious congregations appear to assign greater importance to those things which relate more to following rules and norms, such as conformity and tradition from Schwartz's values and the moral items of honesty and sexual morality, as well as giving high importance to specifically religious items, than do members of secular congregations.

There are limitations to the current study that should be noted. Data collection in each congregation was limited to a single service. An additional limitation is the fact that religious participants outnumbered secular participants two to one, so comparisons may not be representative at the overall level. This limitation was addressed in part by dividing religious participants by theological tradition for the purpose of most of our analyses. This resulted in three participant groups with roughly equal numbers of participants. The distribution of religious participants across traditions meant that traditions were combined to achieve comparable numbers between participant groups. This may have introduced an additional limitation, in that combining the religious traditions may have obscured differences between them. As our main aim was to compare members of religious and secular congregations, this is a minor limitation.

A further possible limitation was the inclusion of the moral item 'interventions in human reproduction', which may not have been well understood by participants. The low importance given to this item by participants may, therefore, have been a reflection of their misinterpretation of the item rather than an accurate representation of how important they believe such interventions (e.g. IVF, abortion) are as moral issues. This limitation was somewhat mitigated by the fact that the researchers were on hand while participants completed the questionnaire and were able to answer questions when participants were unsure about an item or what was being

asked. The relatively low Cronbach's alpha for some of the Schwartz's value dimensions, while within the acceptable range, suggest that these should be interpreted cautiously.

In conclusion, our findings provide evidence that there are genuine differences in some areas of wellbeing and in moral values between religious and secular individuals, although we did not find evidence that moral teaching within religious congregations was specifically related to Quality of Life. We were able to demonstrate, however, that believing oneself to belong to a morally homogenous group may contribute to wellbeing, even if such moral homogeneity within the group does not actually exist. We were also able to show that the degree to which moral values are shared within a congregation does not differ between religious and secular groups. Although our study population was limited, the differences seen here between religious and secular congregations adds to the existing body of literature on the effects of religion on wellbeing, moral thinking, and social bonding and how these are interrelated.

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Table 1

Key characteristics of religious traditions (derived from Cross & Livingstone, 2005) as applied to congregations in the current study.

Theological	Characteristics			
Tradition				
Evangelical	Emphasises the authority of the Bible;			
	Tends to be socially conservative;			
	Feels an imperative to tell others about Jesus / the Christian faith;			
	Emphasises need for conversion and personal piety			
Fundamentalist	Shares many traits with Evangelicals; Believes in the inerrancy of			
	scripture – that is, the Bible is literally true and without error;			
	Rejects scientific and social views that conflict with the Bible			
Traditional	Looks to the Bible and Church tradition as source of knowledge and			
	moral instruction;			
	Uses inherited or authorised forms of worship			
Liberal	Accepts new ideas and proposals for reform within the faith;			
	Accepts findings of biblical criticism and tends to interpret scripture			
	in terms of socio-historical context;			
	May embrace liberation theology and related views			
Secular	No religious teaching or belief as basis for life principles or morality;			
	Ignores or denies existence of God or the supernatural			

Table 2

Demographic characteristics for conservative religious, mainstream religious, and secular congregations

Theological	Age in	Gender	Years	Average frequency of attendance		
tradition	years	%	attending			
	Mean	Female	congregation			
	(SD)		Mean (SD)			
Conservative	56.7	67.9	15.1 (15.8)	regularly (several times per month to		
Religious	(17.0)			once per week)		
Mainstream	60.5	68.4	16.4 (18.0)	regularly (several times per month to		
Religious	(18.7)			once per week)		
Secular	38.6	65.3	1.8 (1.6)	occasionally (a few times per year to		
	(12.3)			once per month)		

Table 3

Differences in raw QoL scores by theological tradition

QoL domain	Conservative	Mainstream	Secular	Statistics		
	religious	religious				
Overall	8.22 (1.53)	8.46 (1.35)	7.56 (1.50)	$F(2,132)=4.52, p=.01, \eta_p^2=.064$		
(range)	(3–10)	(5–10)	(3–10)			
Physical	27.69 (4.34)	28.16 (4.56)	26.22 (4.51)	$F(2,132)=2.32, p=.10, \eta_p^2=.034$		
(range)	(18–35)	(15–34)	(14–33)			
Psychological	19.02 (2.64)	20.05 (2.95)	17.02 (2.76)	$F(2,132)=13.70, p<.001, \eta_p^2=.172$		
(range)	(13–25)	(13–25)	(11–21)			
Social	11.67 (1.90)	12.07 (2.00)	9.52 (2.16)	$F(2,132)=21.00, p<.001, \eta_p^2=.241$		
(range)	(7–15)	(8–15)	(4–13)			
Environment	33.06 (3.51)	33.38 (3.94)	30.41 (4.91)	$F(2,132)=6.95, p=.001, \eta_p^2=.095$		
(range)	(24–40)	(25–40)	(17–39)			

 Table 4

 Regression predicting baseline levels of connectedness

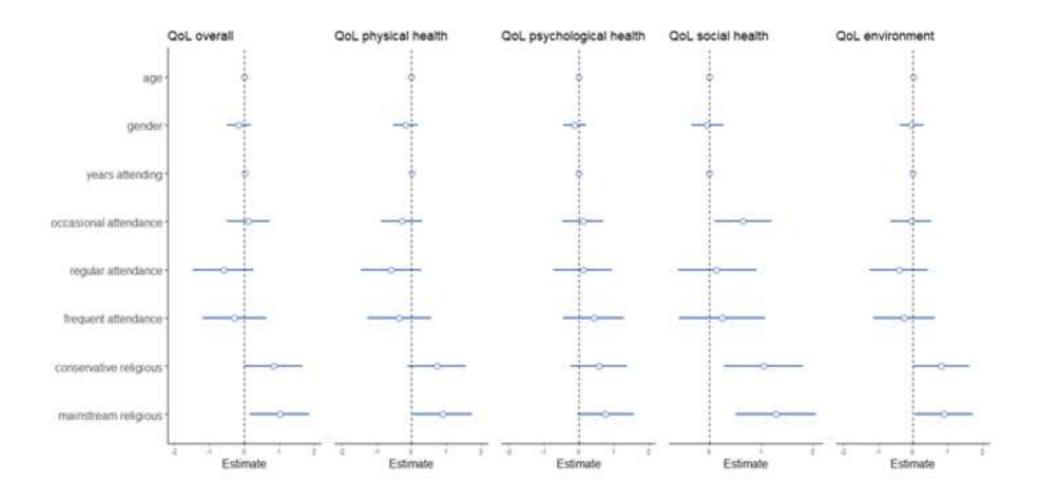
	Basic regi	ression		Regression with theological tradition			
	β	95% CI	p	β	95% CI	p	
(Intercept)	-1.51***	[-2.01, -1.02]	<.001	-1.51***	[-2.01, -1.01]	<.001	
age	0.01	[-0.00, 0.01]	0.18	0.01	[-0.00, 0.01]	0.21	
gender	-0.14	[-0.40, 0.12]	0.29	-0.14	[-0.40, 0.12]	0.30	
years attending	0.01**	[0.01, 0.02]	0.002	0.01**	[0.01, 0.02]	0.002	
occasional attendance§	1.19***	[0.73, 1.65]	<.001	1.19***	[0.72, 1.65]	<.001	
regular attendance§	0.91***	[0.47, 1.35]	<.001	0.88*	[0.21, 1.54]	.01	
frequent attendance§	1.77***	[1.32, 2.21]	<.001	1.72***	[1.02, 2.42]	<.001	
conservative religious				0.07	[-0.57, 0.72]	0.82	
congregation <sup>†</sup>							
mainstream religious				0.02	[-0.64, 0.68]	0.95	
congregation <sup>†</sup>							
Statistics	F(6,149)=	F(6,149)=20.48, p < 0.001			F(8,147)=15.19, p < 0.001		
Fit	$R^2 = .452**, 95\% \text{ CI}[.32,.53]$			$R^2 = .452**, 95\% \text{ CI}[.31,.52]$			
Change in fit				F(2,147)=0.07, p=.93			

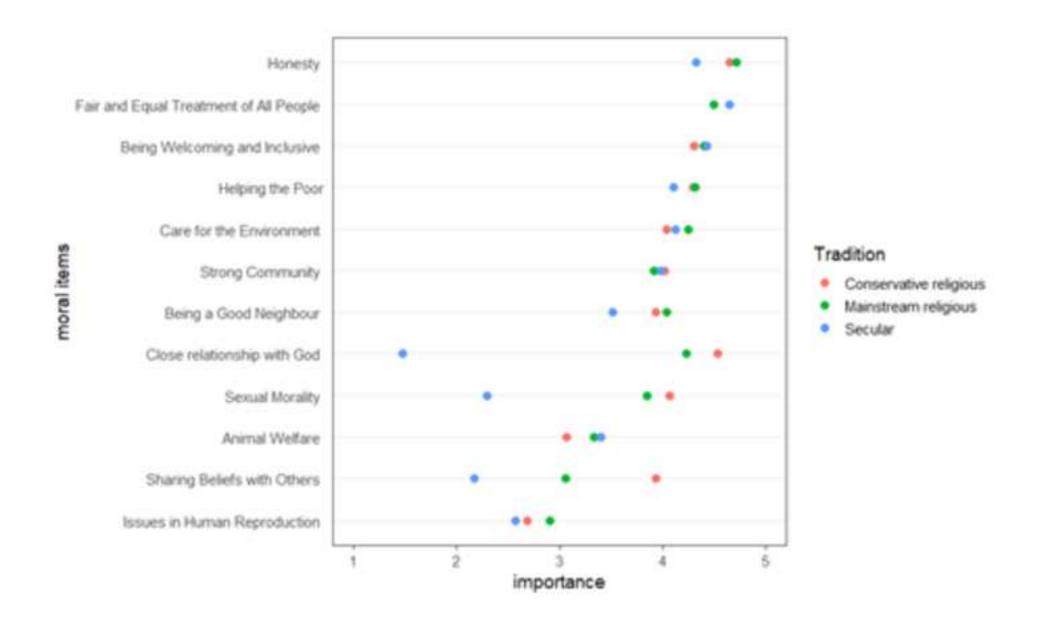
Note. All non-demographic continuous variables were standardized before they were added to the regression. Significant  $\beta$ -values are in bold. \*p < .05, \*\*p < .01, \*\*\*p < .001.

Connectedness for the three theological traditions (scale 1-7, without corrections for intergroup differences): Conservative religious (M = 5.11, SD = 1.17), Mainstream religious (M = 4.86, SD = 1.39), and Secular (M = 3.75, SD = 1.46).

<sup>§</sup> Base variable these categories are compared against: never to rarely attend

<sup>&</sup>lt;sup>†</sup>Base variable these categories are compared against: secular congregation.





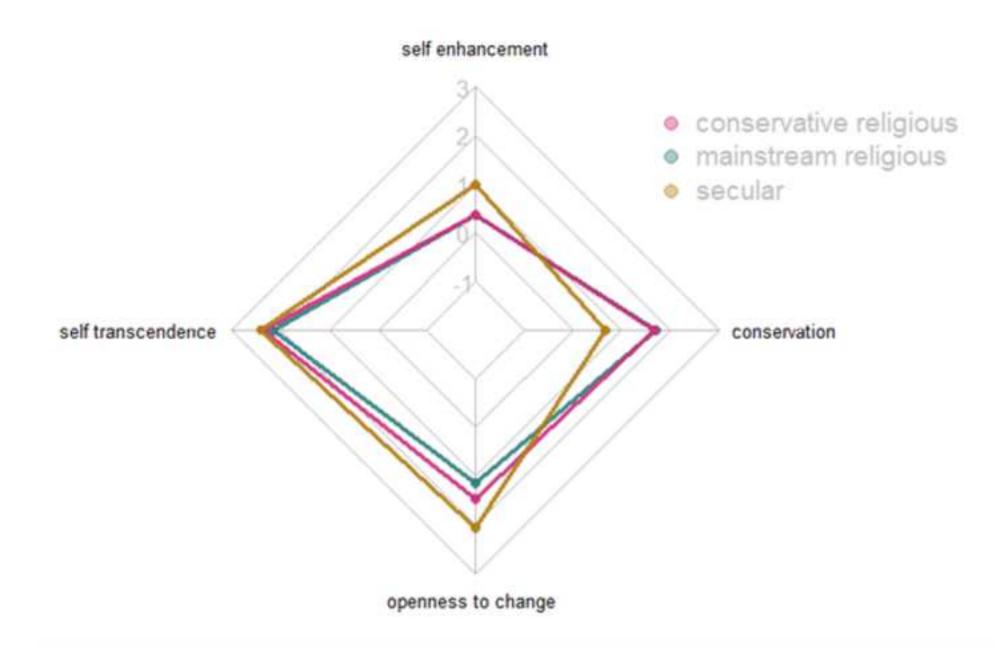


Figure Captions

Figure 1. Regressions predicting QoL outcomes from age, gender, years attending, frequency of attendance, and theological tradition.

Figure 2. Difference in average scores between theological traditions for importance assigned to moral items (1, 'not at all important' – 5, 'extremely important')

Figure 3. Average values for Schwartz values groupings scores by theological tradition (-1, 'opposed to my principles'; 0, 'not important'; 5, 'of supreme importance'). Note that as these are average values, none exceeded 3, 'important'.