Religion and personal happiness among young churchgoers in Australia:

The importance of the affective dimension

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Abstract

Drawing on data from 9,851 young people between the ages of 8 and 14 years who completed surveys while attending Catholic, Protestant, or Pentecostal churches as part of the 2016 Australian National Church Life Survey, the study employed multiple regression modelling to test two hypotheses regarding the linkages between religion and happiness among young churchgoers. The first hypothesis is that there is a positive association between religion and happiness. The second hypothesis is that the association between religion and happiness is routed through religious affect rather than through religious practice. The data support both hypotheses, and demonstrate the negative impact of church attendance on happiness among this age group when church attendance (external religiosity) is not supported by positive religious affect (internal religiosity).

Keywords: church attendance, young people, attitude toward Christianity, happiness, Australia

Introduction

The connections between religion and personal happiness, broadly conceived, are matters of scientific interest within the two fields of empirical theology and the empirical psychology of religion. Within the field of empirical theology there seem to be clear claims within the Christian scriptures linking religious faith and practices with human flourishing, personal happiness, and wellbeing. For example, in John's Gospel, Jesus is reported as claiming 'I came that they may have life, and have it abundantly' (John 10: 10). In Matthew's Gospel religious faith and practice are more explicitly related with happiness (as a viable translation of the Greek *makarios*). Thus, in some translations of the Matthean Beatitudes, Jesus is reported as proclaiming in the Sermon on the Mount: 'Happy are the pure in heart, for they shall see God' (Matthew 5: 8; see further Francis, Strathie, & Ross, 2019). In Luke's Gospel, Jesus is reported as saying, 'Happy are those who hear the word of God and obey it' (Luke 11: 20). In the letter to the Romans, Paul writes: 'How happy are those whose wrongs God has forgiven, whose sins God has covered over' (Romans 4: 7), which is a direct quote from Psalm 32: 1. Within the Psalms there are other clear references linking religious faith and practice with happiness. For example, according to Psalm 128 'Happy is everyone who fears the Lord, who walks in his ways' (Psalm 128: 1). The book of Proverbs is another source for such linking of religious faith and practice with happiness: 'Happy are those who keep my ways' (Proverbs 8: 32); 'Happy are those who trust in the Lord' (Proverbs 16: 20). There is good reason then, for empirical theology to examine the evidence for such clear claims within the lives of those who practise the Christian faith.

Within the field of the empirical psychology of religion, empirical studies have explored the connection between measures of religion and measures of happiness during the 1950s, 1960s, and 1970s, including work reported by O'Reilly (1957), Wilson (1965), Cutler (1976), and McNamara and St George (1978). For example, in the earliest of these studies,

drawing on a sample of 108 men and 102 women over the age of sixty-five in America, O'Reilly (1957) assessed happiness on a three-point continuum (very happy, moderately happy, and less happy) alongside reported church attendance. He found that 55% of the very happy respondents were active in the practice of their religion, compared with 47% of the moderately happy and 44% of the less happy.

Reanalysing data from the Quality of American Life survey (Campbell, Converse, & Rodgers, 1976), McNamara and St. George (1978) assessed happiness on a three-point scale (very happy, pretty happy, and not too happy) alongside two measures of religiosity: frequency of church attendance and an attitudinal index combining three items concerned with self-assessment of religious-mindedness, importance of religious faith, and satisfaction derived from religion. From these data the authors concluded that religion and happiness are positively related among the more 'fortunate' sectors of society. They remain uncorrelated, however, among the more 'deprived' sectors of society.

Assessing the empirical studies conducted to test the association between religion and happiness by the mid-1990s, Robbins and Francis (1996) and Francis, Jones, and Wilcox (2000) organised these studies into three main groups: studies that found a positive association between religion and happiness, studies that found a negative association between religion and happiness, and studies that found no association between religion and happiness. Evaluating these discrepant findings, Robbins and Francis (1996) and Francis, Jones, and Wilcox (2000) concluded that the problem, at least in part, may arise from the diversity of definitions and measures of both *happiness* and *religion* used in this literature. Their recommendation was to initiate a series of studies that could be linked by some common measures (or family of measures) used over diverse samples.

Drawing on the literature shaped within positive psychology, Robbins and Francis (1996) also proposed that such a programme of research could be integrated by focusing on a

model of personal happiness proposed by Argyle and Crossland (1987) and Argyle, Martin

and Crossland (1989) and operationalised in their instrument, the Oxford Happiness

Inventory. The argument is that this model of happiness benefits from robust

conceptualisation, sound operationalisation, and a growing body of empirical studies. The

Oxford Happiness Inventory has also spawned a small family of related measures, employing

slightly different items in a different response format, including the Oxford Happiness

Questionnaire and the Oxford Happiness Questionnaire Short-form (see Hills & Argyle,

2002) and the Oxford Happiness Measure (see Elken, Francis, & Robbins, 2010).

To address the challenges of diverse measures of religion, Robbins and Francis (1996)

proposed that the new programme of research should focus on the affective dimension of

religion, rather than indicators of religious affiliation, religious belief or religious practice.

The argument is that the affective dimension gets closer to the heart of religion within

individuals' lives and was drawn from Francis' earlier work conceptualising and

operationalising religious affect (for review see Kay & Francis, 1996), Following this

recommendation, a series of studies have now employed the Francis Scale of Attitude toward

Christianity (Francis, 1978a, 1978b; Francis & Stubbs, 1987; Francis, Lewis, Philipchalk,

Brown, & Lester, 1995) alongside the Argyle measures of happiness.

In their foundation study, Robbins and Francis (1996) administered the Francis Scale

of Attitude toward Christianity and the Oxford Happiness Inventory among a sample of 360

first-year undergraduate students in Wales. This study reported a significant positive

correlation between religious affect and personal happiness. Subsequently other studies were

published on seven other samples that confirmed the finding from the original study. These

studies draw on the following samples: 212 undergraduate students in the United States of

America (Francis & Lester, 1997); 295 individuals, ranging in age from late teens to late

seventies, recruited from participants attending a variety of courses and workshops on the

psychology of religion (Francis & Robbins, 2000); 994 15- to 16-year-old secondary school students (Francis, Jones, & Wilcox, 2000); 496 members of the University of the Third Age (Francis, Jones, & Wilcox, 2000); 456 undergraduate students in Wales (Francis, Jones, & Wilcox, 2000); 89 students in Wales (Francis, Robbins, & White, 2003) and 3,848 sixth-form students (16, 17, 18, and 19 years of age) attending schools within the Republic of Ireland (Francis & Lewis, 2016).

Subsequently, working within other faith traditions, the Oxford Happiness Inventory has been administered alongside the Katz-Francis Scale of Attitude toward Judaism (Francis & Katz, 2007) in three studies in Israel reported by Francis and Katz (2002) among 298 female students, Francis, Katz, Yablon, and Robbins (2004) among 203 male students, and Francis, Yablon, and Robbins (2014) among 348 female students. The Oxford Happiness Inventory has been administered alongside the Ok Religious Attitude Scale (Islam) (Ok, 2016), by Francis, Ok, and Robbins (2017) among 348 students in Turkey, and alongside the Sahin-Francis Scale of Attitude toward Islam (Sahin & Francis, 2002) by Tekke, Francis, and Robbins (2018) among 189 students in Malaysia. The Oxford Happiness Inventory has been administered alongside the Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008), by Tiliopoulos, Francis, and Slattery (2011) among 100 Hindu affiliates from the Bunt caste in South India. All six studies reported a positive significant correlation between these measures of religious affect and scores recorded on the Oxford Happiness Inventory.

Australia is a prosperous nation with high levels of recorded wellbeing (Haller & Hadler, 2006). Within an Australian context, a series of studies of wellbeing have been conducted drawing on data from Australian National Church Life Surveys (Powell & Robbins, 2015). These five-yearly national surveys have been the result of collaboration across more than 20 Protestant and Catholic denominations. Each survey wave has collected

responses from hundreds of thousands of individual church attenders in thousands of local churches. As well as core survey items for all respondents, a series of polls were conducted on random samples of attenders. In addition, the survey of local church leaders adds a further dimension. Finally, an audit of local church programmes and activities is available for participating churches.

Using data from the 2011 National Church Life Survey (2011 NCLS), volunteering was found to be positively related to religious beliefs and practices as well as wellbeing in Christian churchgoers. Further, volunteering was found partially to mediate the positive relationship between religiosity and wellbeing (life satisfaction) (Mollidor, Hancock, & Pepper, 2015). Powell and Pepper (2015) explored the relative impact of personality and religiosity on wellbeing in the sample of 1,855 Australian churchgoers. The data demonstrated a positive relationship between extraversion and well-being as well as religiousness and wellbeing, although denominational affiliation made no difference. Based on 677 ordained clergy from the 2011 NCLS, Robbins and Hancock (2015) confirmed previous work finding that ordained clergy demonstrated high levels of overall general 'satisfaction with life as whole'.

While there is good theological (scriptural) and empirical evidence for linking religion and happiness, there is another strand of research that draws attention to the vulnerability of young Christians within a largely secular society. For example, Francis and Robbins (2005) demonstrated that students who self-identified as Christian recorded higher levels of anxiety about being bullied at school, compared with religiously unaffiliated students. In a more recent study Francis and McKenna (2019) focused specifically on the experience of victimisation among a sample of 3,105 13- to 15-year-old students who self-identified as Christian and who attended worship services at least six times a year apart from special occasions (like weddings). These data demonstrated that 14% reported being bullied

at school specifically because of their religion. Fear of victimisation is unlikely to be
conducive to personal happiness.

While the Oxford Happiness Inventory is not recommended for use among young
people under the age of 16 years, Francis and Penny (2016) made an initial attempt to explore
the association between the Francis Scale of Attitude toward Christianity and personal
happiness, drawing on data from the 2011 Australian National Church Life Survey (2011
NCLS), employing the NCLS Index of Global Happiness. Of the 6,194 young participants in
this study 3,258 were attending Catholic churches, 826 Anglican churches, 772 Baptist or
Churches of Christ churches, 599 Uniting Church churches, 189 Lutheran churches, 168
Pentecostal churches, and 316 other Protestant churches, with the remaining 66 attending
unspecified congregations. In terms of sex, 2,929 participants were male, 3,231 were female,
and 34 did not disclose their sex. In terms of age, 799 were 8 years old, 902 were 9 years old,
982 were 10 years old, 1,014 were 11 years old, 975 were 12 years old, 784 were 13 years
old, 665 were 14 years old, and 73 did not disclose their age. The data demonstrated a
significant positive correlation between religious affect and global happiness, after
controlling for individual differences in sex and age.

While this initial study made good use of the data from the 2011 NCLS, there were
two main limitations to the analysis. First, the four-item measure of global happiness had a
relatively narrow focus and achieved an alpha coefficient of only .62. Second, the analyses
employed only the one measure of religiosity, the Francis Scale of Attitude toward
Christianity. The present study is designed to build on the work of Francis and Penny (2016)
employing the richer measures available from the 2016 Australian National Church Life
Survey (2016 NCLS).

Research questions

Against this background, the present study plans to build on this research tradition and to extend it in three ways. The 2016 NCLS was an omnibus of surveys, including a survey for children which contained a richer and more fully nuanced measure of personal happiness. The first research question concerns testing the psychometric properties of this new instrument. The 2016 NCLS Children's Survey included the Francis Scale of Attitude toward Christianity (as a measure of religious affect). The second research question concerns testing the association between religious affect and personal happiness after controlling for the effects of sex and age. The 2016 NCLS Children's Survey included two measures of religious behaviour (frequency of church attendance and frequency of personal prayer). The third research question concerned testing the predictive power of these two behavioural measures alongside the affective measure in relation to individual differences in personal happiness recorded by young churchgoers.

Method

Procedure

The Australian National Church Life Survey is now a well-established instrument for assessing congregational opinions and attitudes across a wide range of Christian denominations. Surveys have been conducted in 1991, 1996, 2001, 2006, 2011 and 2016, and the findings have been widely disseminated (Kaldor, Bellamy, Correy, & Powell, 1992; Kaldor, Bellamy, Moore, Powell, Castle, & Correy, 1995; Kaldor, Bellamy, Powell, Hughes, & Castle, 1997; Kaldor, Bellamy, Powell, Castle, & Hughes, 1999; Kaldor, Dixon, Powell, Bellamy, Hughes, Moore, & Dalziel, 1999; Bellamy, Cussen, Sterland, Castle, Powell, & Kaldor, 2006; Kaldor & McLean, 2009; Powell, Bellamy, Sterland, Jacka, Pepper, & Brady, 2012; Pepper, Sterland, & Powell, 2015; Pepper, Powell, Sterland, & Hancock, 2018). The 2016 National Church Life Survey included a special questionnaire styled 'Children's survey for 8 to 14 year olds'. Participating congregations were invited to distribute these

questionnaires among young people within the target age group attending either 'church

groups for children and youth' or 'church worship services or mass'. Young participants were

assured of privacy, confidentiality and anonymity. All told 9,851 thoroughly completed

surveys were returned by young people between the ages of 8 and 14 years.

Participants

Of the 9,851 participants, 4,847 were male and 5,004 were female. In terms of age,

1,251 were aged 8 years, 1,459 were 9 years, 1,637 were 10 years, 1,576 were 11 years, 1,506

were 12 years, 1,296 were 13 years, and 1,126 were 14 years. In terms of church tradition, the

surveys were completed by 1,977 young people attending Catholic churches, 3,884 attending

mainstream Protestant churches, 3,542 attending other Protestant churches, and 448 attending

Pentecostal churches.

Measures

In addition to sex and age, the following data from the survey are used in the analyses.

Frequency of church services or mass attendance was assessed on a four-point scale:

hardly ever or never (1), some weeks (2), most weeks (3), and every week (4).

Frequency of personal prayer was assessed on a three-point scale: never (1),

sometimes (2), and often (3).

Religious affect was assessed by a modified form of the short Francis Scale of

Attitude toward Christianity, originality developed and tested by Francis (1992) among

primary school students, by Francis, Greer, and Gibson (1991) among secondary school

students, and by Francis (1993) among adults. This is a seven-item instrument concerned

with effective responses toward God (e.g. God means a lot to me), toward Jesus (e.g. I know

that Jesus helps me), toward prayer (e.g. Prayer helps me a lot), toward the Bible (e.g. The

Bible is helpful to my life), and toward church (e.g. Going to church is a waste of time).

Responses to each item are assessed on a five-point scale: disagree strongly (1), disagree (2),

not certain (3), agree (4), and agree strongly (5). The psychometric properties of this

modified form of the short Francis Scale of Attitude toward Christianity have been fully

explored by Francis, McKenna, and Powell (2020).

Happiness was assessed by the NCLS Personal Happiness Scale, newly constructed

for the present study. This is a ten-item instrument concerned with self-perceived happiness

across the following areas of life: your life as a whole; yourself; your health; the things you

want to be good at; getting on with the people you know; the things you have; how safe you

feel; your school; doing things away from home; and what may happen to you later on in life.

Responses to each item are assessed on a five-point scale: very sad (1), sad (2), not happy or

sad (3), happy (4), and very happy (5).

Data analysis

The data were analysed by the SPSS package, using the frequency, reliability,

correlation, and regression routines.

Results and discussion

- insert tables 1 and 2 about here -

The first step in data analysis explored the overall level of religious practice reported

by the 9,851 young participants in the survey. Table 1 demonstrates that half of the young

participants attended church every week (50%), with a further third attending most weeks

(33%), leaving 13% who say that they attended some weeks, and 5% who say that they

hardly ever attended. Clearly there is variation in the level of church attendance within the

sample. Table 2 demonstrates that more than two fifths of the young participants prayed often

(44%), with a further 48% who prayed sometimes, and 8% who never prayed. Clearly there is

variation in the level of personal prayer within the sample.

- insert table 3 about here -

The second step in data analysis explored the scale properties of the two measures employed in the study. Table 3 explores the scale properties of the modified form of the short Francis Scale of Attitude toward Christianity in terms of the alpha coefficient index of internal consistency reliability (Cronbach, 1951), the correlations between the individual items and the sum of the other six items, and the item endorsement as the sum of the agree strongly and agree responses. The alpha coefficient of .90 demonstrates a high level of internal consistency reliability. The correlations between the individual items and the sum of the other six items demonstrate that each item is contributing to a homogeneous scale (ranging from .52 to .79). The item with the highest correlation (.79) captures the affective essence of the measure (God means a lot to me). The item with the lowest correlation (.52) is the one reverse-coded item in the measure (Going to church is a waste of my time). This is consistent with the recognised poorer performance of reverse-coded items among younger participants (see Francis, McKenna, & Powell, 2020). The item endorsements demonstrate an overall high positive level of religious affect among the young participants: 92% agreed that God means a lot to them; 91% agreed that Jesus helps them; 89% agreed that God helps them lead a better life; and 86% agreed that Jesus is very close to them. Bible and prayer receive only a slightly lower endorsement, with 79% agreeing that prayer helps them a lot, and 79% agreeing that the Bible is helpful to their life. Only 4% of the young participants agreed that going to church is a waste of their time.

- insert table 4 about here -

Table 4 explores the scale properties of the NCLS Personal Happiness Scale in terms of the alpha coefficient of internal consistency reliability (Cronbach, 1951), the correlations between the individual items and the sum of the other nine items, and the item endorsement as the sum of the very happy and happy responses. The alpha coefficient of .84 demonstrates quite a high level of internal consistency reliability. The correlations between the individual

items and the sum of the other nine items demonstrate that each item is contributing to a

homogeneous scale (ranging from .44 to .63). The two items with the highest correlation (.63)

capture the essence of the measure (happy with life as a whole, and happy with yourself). The

item with the lowest correlation (.44) is the item about doing things away from home. The

experience of doing things away from home may not be a consistent experience among young

people. The item endorsements demonstrate an overall high level of personal happiness with

at least four out of five of the young participants reporting happiness with getting on with

people (88%), with feeling safe (87%), with the things they have (86%), with things they

want to be good at (84%), with life as a whole (83%), and with their health (80%). The

proportions only fall slightly to 79% who were happy with themselves, to 77% who were

happy with their school, to 76% who were happy doing things away from home, and to 75%

who were happy about what may happen later in life.

- insert table 5 about here -

The third step in data analysis explored the bivariate correlations among the core

variables: sex, age, church attendance, personal prayer, religious affect, and personal

happiness. These data are presented in table 5. Four main features of these data merit

comment. First, in terms of sex differences, females recorded higher scores on religious affect

and on frequency of prayer. This is consistent with the well established finding that females

tend to be more religious than males in Christian and post-Christian societies (see Argyle,

1958; Francis & Penny, 2014). That this association does not apply to church attendance may

suggest that frequency of attendance among these young participants was more constrained

by family and social factors. In this sample females also recorded a slightly higher score on

the scale of personal happiness, significant at the five percent level. Second, in terms of age,

older participants were more frequent in church attendance and personal prayer. This

association needs to be read alongside the way in which the number of young people

participating in the survey began to decline after the age of 12 years. In other words, it seems that those who were less frequent attenders had begun to drop away completely after the age of 12 years (see Francis, McKenna, & Powell, 2020). On the other hand, older participants were recording a less positive attitude toward Christianity, although they were continuing in church attendance. This decline in attitude toward Christianity during childhood into adolescence has been well reported in earlier research (see Kay & Francis, 1996). The data also demonstrates a decline in happiness with increasing age.

Third the correlation matrix demonstrates a clear positive association between each pair of the religious variables (religious affect, personal prayer, and church attendance). Of particular interest is that religious affect correlates more highly with personal prayer ($r = .47$) than with church attendance ($r = .22$). This is consistent with the broader theory that religious affect is more strongly related to interior or intrinsic religious practice than to exterior or extrinsic religious practice (Francis, 2009). Fourth, the correlation matrix demonstrates that personal happiness is associated with all three religious variables (religious affect, personal prayer, and church attendance), but that personal happiness is more strongly associated with religious affect ($r = .32$) than either with personal prayer ($r = .13$) or with church attendance ($r = .03$).

- insert table 6 about here -

The fourth step in data analysis employed multiple regression in order to explore the incremental effects of personal factors (sex and age), religious behaviour (church attendance and personal prayer), and religious affect on individual differences in happiness as recorded on the NCLS Personal Happiness Scale. Table 6 presents the way in which these three sets of factors have been entered sequentially into the regression model. The table also draws together the bivariate correlations from table 5 to be read alongside the beta weights. The increase in the proportion of variance accounted for by each of the three steps in this model

indicate that by far the most significant predictor of individual differences in personal happiness is religious affect. Close examination of the beta weights in the third step of the regression model generates the following three observations. First, religious affect is the core predictor of the effect of religion on happiness. Second, when religious affect is taken into the model, the role of personal prayer and church attendance is further clarified. While the bivariate correlations suggest that personal prayer serves as a significant positive predictor of happiness, when religious affect is in the model the apparent affect of personal prayer is entirely routed through religious affect and conveys no additional predictive power. While the bivariate correlations suggest that church attendance serves as a small but significant positive predictor of happiness, when religious affect is in the model, church attendance becomes a significant negative predictor of happiness. This finding suggests that young people who engage in external religiosity by attending church (perhaps at parental request) without also experiencing intrinsic positive religious affect experience church attendance as eroding their personal sense of happiness. Third, when religious affect is taken into the model, the role of personal factors is further clarified. While the bivariate correlations suggest that being female is a small but significant positive predictor of happiness, when religious affect is in the model, sex loses its predictive significance. This suggests that the effect of being female on happiness is routed through religious affect, with females holding a more positive attitude toward Christianity. While the bivariate correlations suggest that happiness declines significantly with age, when religious affect is in the mode, age loses its predictive significance. This suggests that the effect of age on happiness is also routed through religious affect, with older participants holding a less positive attitude toward Christianity.

Conclusion

The present study set out to explore the association between religion and personal happiness among young churchgoers in Australia by drawing on the survey conducted among

8- to 14-year-old participants in the 2016 National Church Life Survey. All told 9,851

thoroughly completed surveys were returned by young people who had fully completed both

the 7-item Francis Scale of Attitude toward Christianity (as a measure of religious affect) and

the 10-item Powell Personal Happiness Scale (as a measure of happiness). These data were

interrogated to address three research questions.

The first research question concerned testing the psychometric properties of the newly

proposed NCLS Personal Happiness Scale. The data demonstrated a good level of internal

consistency reliability (α = .84) and good item homogeneity. The item endorsements

indicated overall a high level of personal happiness among the young churchgoers with at

least four out of every five participants expressing happiness with six of the ten domains

itemised in the instrument: 88% were happy about how they were getting on with the people

they know, and 83% were happy with their life as a whole. The fact that the proportion

dropped to 77% who were happy with their school may indicate the potential tensions

between faith and schooling (see Francis & McKenna, 2019). These data suggest that the new

10-item instrument introduced into the 2016 NCLS Children's Survey is an improvement

over the 4-item measure employed in the 2011 NCLS Children's Survey (α = .62).

The second research question concerned testing the association between the NCLS

Powell Personal Happiness Scale and Francis Scale of Attitude toward Christianity. The

bivariate correlation between these two measures suggested a strong positive association (r =

.32). The association remained strong after controlling for sex and for age. This strong

association between religious affect and personal happiness is consistent with the

accumulative body of knowledge generated by the studies that have employed the Francis

Scale of Attitude toward Christianity alongside the Oxford Happiness Inventory among a

diverse range of participants (Robbins & Francis, 1996; Francis & Lester, 1997; Francis &

Robbins, 2000; Francis, Jones, & Wilcox, 2000; Francis, Robbins, & White, 2003; Francis &

Lewis, 2016). Together these studies offer secure evidence regarding the stability of the association between religious affect and personal happiness.

The third research question concerns testing the predictive power of two behavioural measures of religiosity (church attendance and personal prayer) alongside the affective measure in relation to the individual differences in personal happiness. The bivariate correlations demonstrated a positive significant correlation between personal happiness and all three measures of religiosity (church attendance, personal prayer, and religious affect), although the correlation with religious affect was much stronger than the correlations with church attendance and personal prayer. Regression analysis indicated that when religious affect was in the model the influence of personal prayer on personal happiness disappeared, suggesting that the effect of personal prayer was routed entirely through religious affect. Moreover, when religious affect was in the model, the effect of church attendance was reversed suggesting that young people who attend church frequently without having developed positive religious affect are less happy than their peers who attend less frequently.

The responses to these three research questions demonstrate how the children's survey within the 2016 NCLS enabled greater precision to be added to the findings from the 2011 NCLS. A limitation with the analyses available for the 2016 survey concerns the absence of a personality measure. Since both religiosity and happiness are related to personality (e.g. Francis, Jones, & Wilcox, 2000; Powell & Pepper, 2015) there may be value in future studies being able to control for personality factors (extraversion, neuroticism, and psychoticism) as well as being able to control for personal factors (age and sex).

The findings from this study carry practical implications for churches and for parents who are interested in promoting the psychological wellbeing and personal happiness of young people through religious engagement. The data demonstrate that religious practice (church attendance and personal prayer) are by themselves inadequate tools. What is more important

is the development of positive religious affect. Wise churches and families may wish to concentrate on the skill of promoting affective learning in order to realise more fully the proclamation of Jesus in John's Gospel, 'I came that they may have life, and have it abundantly (John 10: 10).

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Table 1

Frequency of church mass attendance

	%
Hardly ever / never	5
Some weeks	13
Most weeks	33
Every week	50

Table 2

Frequency of personal prayer

	%
Never	8
Sometimes	48
Often	44

Table 3

Francis Scale of Attitude toward Christianity: Scale properties

	r	%
I know that Jesus helps me	.75	91
Going to church is a waste of time[*]	.52	4
God helps me lead a better life	.74	89
God means a lot to me	.79	92
Prayer helps me a lot	.73	79
I know Jesus is very close to me	.70	86
The Bible is helpful to my life	.73	79
Alpha	.90	

Note: % = sum of agree and agree strongly responses

r = correlation between individual item and sum of other six items

* = this negative item was reverse coded to calculate *r*

N = 9,851

Table 4

Powell Personal Happiness Scale: Scale properties

	r	%
How happy are you		
with your life as a whole	.63	83
with yourself	.63	79
with your health	.52	80
with things you want to be good at	.53	84
with getting on with people you know	.53	88
with things you have (like the things you own)	.49	86
about how safe you feel	.59	87
with your school	.48	77
about doing things away from your home	.44	76
about what may happen later on in your life	.53	75
Alpha	.84	

Note: % = sum of happy and very happy responses

r = correlation between individual item and sum of other nine items

N = 9,851

Table 5

Correlation matrix

	PPHS	FSAC	Prayer	Church	Age
Sex	.02*	.07***	.12***	.01	.01
Age	-.07**	-.13***	.12***	.10***	
Church	.03**	.22***	.18***		
Prayer	.13***	.47***			
FSAC	.32***				

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

FSAC, Francis Scale of Attitude toward Christianity; PPHS, Powell Personal

Happiness Scale

N = 9,851

Table 6

Multiple regression

	r	Model 1	Model 2	Model 3
Personal factors				
Sex	.02*	.03*	.01	.00
Age	-.07***	-.06***	-.08**	-.01
Religious behavior				
Church	.03**		.01	-.04***
Prayer	.13***		.14***	-.02
Religious affect				
Attitude	.32***			.33***
R^2		.005	.024	.101
Δ		.005***	.019***	.078***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

      N = 9,851