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Christian ethos secondary schools, parental church attendance and student attitude
toward Christianity: Exploring connections in England and Wales

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Abstract

This study employs multi-level linear statistical modelling to examine the power of school-level and individual-level factors to predict individual differences in scores recorded on the Francis Scale of Attitude toward Christianity by 6,036 students (who self-identified as either Christian or no religion) in year-seven, year-eight, year-nine, year-ten, and year-eleven classes within ten Christian ethos secondary schools. The data demonstrate the complex relationships between school admission policies, parental church attendance, and the students' age and sex. Overall parental church attendance emerges as a decisive factor in promoting a positive attitude toward Christianity among students. Christian ethos schools may wish to give greater attention to the importance of parental religiosity in maintaining the Christian ethos of these schools.

Keywords: church schools, Christian ethos, attitude toward Christianity, church attendance

Introduction

The Church of England was clearly involved in creating the foundations for the current system of state-maintained education in England and Wales through establishing the National Society in 1811, long before the Education Act 1870 (Rich, 1970) established the mechanism to build state schools independently of voluntary initiatives. The history has been well rehearsed by Cruikshank (1963), Murphy (1971), Francis (1986), and Chadwick (1997), among others. The Church of England's *Vision for education*, published in the Autumn of 2016 (Church of England, 2016), carried the subtitle, *Deeply Christian, serving the common good*, a subtitle that neatly captured and succinctly re-expressed the classic affirmation of the Anglican Church's twin objectives within the state-maintained sector of schools as voiced by the *Durham Report* (1970). This report distinguished the general aim and the domestic aim. The general aim was defined in terms of the Church of England's service to the nation by providing community schools for the local neighbourhood. The domestic aim was defined in terms of providing a service for the Church. The *Durham Report* (1970) recognised that by the late 1960s these two aims were no longer synonymous in the way that they might have been in an earlier generation and that tensions were involved in holding those two aims together in an increasingly secularised society. Individual Anglican schools continue to express their individual interpretation of these twin aims through their mission statement and through their admissions policies. Those Anglican schools that set out to fulfil what the *Durham Report* (1970) termed the domestic aim are likely to design admissions policies that prioritise the children of Anglican or churchgoing parents.

The notion of the state funding schools with a religious foundation and religious character is not without considerable controversy, motivated by educational, political, and secular considerations. At various stages since the early 1980s, serious questions have been raised against the continuation of the current system in England and Wales. For example, the

Runnymede Trust, in their study *Race and church schools* (Dummett & McNeal, 1981), argued that in some contexts church schools had the effect of preventing multiracial institutions. A few years later the Government's Committee of Enquiry into the education of children from ethnic minority groups brought the church school question into central focus in their report *Education for all* (Swann Report, 1985). After reviewing the arguments for and against separate voluntary schools for other ethnic and religious groups, the majority voice of the committee stressed 'misgivings about the implications and consequences of "separate" provision of any kind.' Having come to this view, the majority voice of the committee faced the consequence that:

Our conclusions about the desirability of denominational voluntary aided schools for Muslims or other groups, by extension seriously call into question the long established dual system of educational provision in this country and particularly the role of the Churches in the provision of education ... We believe therefore that the time has come for the DES, in consultation with religious and educational bodies, to consider the relevant provisions of the 1944 Act to see whether or not alterations are required in a society that is now radically different. (Swann Report, 1985, p. 514)

Nearly three decades after their report *Race and church schools* (Dummett & McNeal, 1981), the Runnymede Trust re-entered the debate on the role of schools with a religious character by publishing a second report *Right to divide? Faith schools and community cohesion* (Berkeley, 2008). Here was a project asking the question 'whether a school system with faith schools could also promote equality and cohesion' (p. 2). The project consulted with over a thousand people, including 'parents, students, professionals, and policy-makers from a range of faith backgrounds as well as those who do not subscribe to any religion' (p. 1). The aim of the consultation was 'to assess whether faith schools are well placed to deliver their obligations' (p. 4) in the following areas: encouraging students to share a sense of

belonging; helping students develop a positive appreciation of diversity; removing barriers to inequality; and building strong partnerships between people from different backgrounds.

The six key recommendations put forward by the Runnymede Trust were, in one sense, very supportive of schools with a religious character. Such schools are supported as affirming government policies committed to increasing choice and diversity in the education sector. In another sense, however, the types of schools with a religious character being supported by the Runnymede Trust are very different from many of those currently supported within the state-maintained system in England and Wales. The first call from the Runnymede Trust is for schools with a religious character to cease to include faith criteria within their admissions policies. The argument is pitched as follows:

Faith schools should be for the benefit of all in society rather than for just a few. If faith schools are convinced of their relevance for society, then that should apply equally for all children. With state funding comes an obligation to be relevant and open to all citizens ... All parents should be given access to what faith schools claim is a distinctive ethos. (Berkeley, 2008, p. 4)

Deeply Christian

In light of the foregoing discussion, it is helpful to examine in what senses the Church of England's recent vision for education conceptualises church schools as deeply Christian. In one sense, the notion of serving the common good can be conceptualised as 'deeply Christian'. In the language of the *Durham Report* (1970) the Church of England was in business to serve the nation (through its general aim in education) as a deeply Christian commitment to the education of all. In another sense, however, a 'deeply Christian' school may wish to share the good news of the Christian gospel in an explicit way (the domestic aim) as well as in an implicit way through service (the general aim). At points the Church of

England's vision for education offers some aspirations that may come quite close to sharing the good news of the Christian gospel. The executive summary explains that

In Church schools the deeply Christian foundation for this vision will be seen explicitly in teaching and learning both in RE and across the curriculum and also in the authentically Christian worship and ethos of those schools. (p. 2)

The conclusion explains that

We want pupils to leave schools with a rich experience and understanding of Christianity, and we are committed to offering them an encounter with Jesus Christ and with Christian faith and practice in a way which enhances their lives. (p. 13)

It is claims of this nature that have rekindled a long-established research tradition focusing on assessing students' attitudes toward Christianity within church schools in England and Wales. This research tradition has been concerned to conceptualise student attitude toward Christianity, to propose an instrument to measure student attitude toward Christianity, and to build statistical models to explore the correlates, consequences and antecedents of individual differences in student attitude toward Christianity. Central to the research tradition is the Francis Scale of Attitude toward Christianity (Francis, 1978a, 1978b, 1986), a 24-item Likert-type scale designed to measure affective responses to five components of the Christian tradition: God, Jesus, Bible, prayer, and church. This instrument has been well-tested in over 300 studies, translated into a range of languages (see Francis, 2009), and developed to measure comparable constructs within other religious traditions, as evidenced by the Sahin-Francis Scale of Attitude toward Islam (Sahin & Francis, 2002), the Katz-Francis Scale of Attitude toward Judaism (Francis & Katz, 2007), Santosh-Francis Scale of Attitude toward Hinduism (Francis, Santosh, Robbins, & Vij, 2008), and the Astley-Francis Scale of Attitude toward Theistic Faith (Astley, Francis, & Robbins, 2012).

One strand of this research concerned with comparing students in Church of England and non-denominational state-maintained primary schools was initiated in 1974 and reported by Francis (1979). Francis (1986) compared attitude toward Christianity of year-five and year-six students attending ten Church of England voluntary-aided primary schools and fifteen non-denominational state-maintained schools in East Anglia in 1974, 1978, and again in 1982. After using multiple regression analysis to control for the influence of sex, age, parental church attendance, social class and IQ on students' attitudes toward Christianity, these data indicated that the Church of England schools exercised a small negative influence on their students' attitudes toward Christianity. The direction of the school influence on students' attitude was consistent for all three samples taken in 1974, 1978, and 1982. Then Francis (1987) set out to replicate this earlier study among year-six students attending all Church of England voluntary-aided, Church of England voluntary-controlled, and non-denominational state-maintained schools in Gloucestershire. These data attributed neither positive nor negative influence to Church of England voluntary-aided schools, but demonstrated a significant negative influence exercised by Church of England voluntary-controlled schools.

A second strand of this research was concerned with comparing students in Church of England and non-denominational state-maintained secondary schools. In the first study, Francis and Carter (1980) compared the attitude toward Christianity of year-eleven students attending Church of England voluntary-aided secondary schools and non-denominational state-maintained secondary schools. These data provided no support for the notion that Church of England secondary schools exert either a positive or a negative influence on their students' attitude toward religion. In the second study, Francis and Jewell (1992) compared the attitude toward the church of year-ten students attending the four non-denominational secondary schools and the one Church of England voluntary-controlled secondary school

servicing the area around the same town. The data demonstrated that the Church of England school recruited a higher proportion of students from churchgoing homes and that churchgoing homes tended to represent the higher social classes. After taking into account the influence of sex, social class, and parental religiosity, path analysis indicated that the Church of England school exerted neither a positive nor a negative influence on its students' religious practice, belief, or attitude.

A third strand of this research employing the Francis Scale of Attitude toward Christianity contextualised the findings of research conducted within church schools within a broader review of the literature concerning the influence of parental religiosity on the religious attendance of their children. Francis and Gibson (1993) reported on the connection between parental church attendance and both church attendance and attitude toward Christianity among their children. They draw on data provided by 3,414 11- to 12-year-old and 15- to 16-year-old students attending secondary schools in the city of Dundee, Scotland. Path analysis demonstrated clear evidence for the strong paths from parental church attendance to child church attendance and the strong paths from parental church attendance and child church attendance to student attitude toward Christianity. These findings confirmed the importance of taking parental church attendance into account in modelling the influence of Christian ethos schools on student attitude toward Christianity.

A fourth strand of this research employing the Francis Scale of Attitude toward Christianity documented the impact of two core personal factors on individual differences in attitude toward Christianity during childhood and adolescence; sex and age. Repeated studies employing the Francis Scale of Attitude toward Christianity have demonstrated that across the age range females record a more positive attitude than males to Christianity (Francis, 2009). This finding is consistent within the broader literature on sex differences in religiosity as reviewed by Francis (1997) and more recently by Francis and Penny (2014). While this

empirical finding is secure, what is less secure among social scientists is the interpretation of this sex difference. Sociologists of religion tend to prefer social and contextual theories (see, for example, Voas, McAndrew, & Storm, 2013), while some psychologists of religion tend to prefer personality-related theories (see Thompson, 1991; Penny, Francis, & Robbins, 2015). Repeated studies employing the Francis Scale of Attitude toward Christianity have also demonstrated a fairly consistent linear decline in attitude toward Christianity across the age range from 8 to 16 years (see, for example, Francis, 1978, 1987, 1989). Again, while this empirical finding is secure, what is less secure among social scientists is the interpretation of the effect of age. A study by Kay, Francis and Gibson (1996) tested the two competing theses that the decline in attitude toward Christianity within secondary school was related to the transition to formal operational thinking or to the socialisation process into a secular worldview. Their data gathered from 6,098 students provided more support for the socialisation theory than for the transition to form operational thinking thesis.

Sound empirical evidence that clarifies the connection between how Christian ethos secondary schools operate (with special reference to school admission policies), parental church attendance, and student attitude toward Christianity may be relevant to two important debates. The first debate is internal to the Christian community wishing to evaluate the contribution of Christian ethos schools to shaping attitudes toward Christianity among their students. The second debate concerns the political conversation between the Christian community and the secular community regarding the very legitimacy of Christian ethos schools. Knowing precisely what these schools are or are not achieving in terms of the Christian formation of their students may begin to replace with sound research-based evidence the rhetoric that tends to fuel this conversation.

Research question

Against this background the aim of the present study is to examine the connection between Christian ethos schools and student attitude toward Christianity. By Christian ethos schools is meant the family of schools that embrace the Anglican commitment to supporting, in the language of the *Durham Report* (1970), both the domestic aim and the general aim of Christian involvement with schools, but widens the perspective to include not only Anglican schools but schools associated with Trusts that support the Christian ethos. Specifically, the present analyses were designed to address the following four sets of research questions.

1. Is there significant variation between schools in the students' average attitude toward Christianity and in the students' rating of their parents' church attendance during their first year and /or in average changes in attitude toward Christianity or in rating of their parents' church attendance during their first five years?
2. Can variations between schools in the starting levels and decline in attitudes toward Christianity be explained by their admission policies?
3. Does the average level of parental church attendance in a school account for the effect of school admission policies on student attitude toward Christianity, and does the effect of parental church attendance on their child's attitude toward Christianity vary according to the average level of parental church attendance in their school?
4. Does parental church attendance vary between schools and can such variations be accounted for by school admission policies?

Method

Procedure

Ten Christian ethos secondary schools were selected to participate in the project from among a wider range of schools on the basis of the account that they gave of their distinctive emphasis on spirituality. These ten schools included eight Church of England schools, one joint Anglican-Catholic school, and one school operated by a Christian foundation. These ten schools represented a range of school admission policies. The schools were asked to administer the questionnaire in normal class groups to all year-seven, year-eight, year-nine, year-ten, and year-eleven students throughout the school. Students were asked not to write their name on the booklet and to complete the inventory without discussing it with their peers. They were assured of confidentiality and anonymity. Although students were given the choice not to participate very few declined to do so.

Participants

Of the 6,749 students who took part in the survey and who answered the question on religious affiliation, 25% ticked no religion, 67% ticked Christian, 4% ticked Muslim, and 4% ticked some other religion. The following analyses are based on 6,036 students from the Christian or non-religious groups who completed all the required questions. Of these students, 53% were female and 47% male, 75% were ethnically White, and 71% affiliated as Christian.

Instrument

Attitude toward Christianity was assessed by the Francis Scale of Attitude toward Christianity (FSAC: Francis, Lewis, Philipchalk, Brown, & Lester, 1995). This is a 24-item Likert-type scale designed to assess affective responses to five aspects of the Christian tradition: God, Jesus, Bible, church, and prayer. Each item is assessed on a five-point scale: Agree strongly (5), Agree (4), Not certain (3), Disagree (2), and Disagree strongly (1). In this sample the FSAC had an alpha reliability of .98, a mean (*SD*) of 80.4 (25.8), and a range in value among students from 24 to 120.

Years at School (YaS). In each school, students from year seven to year eleven were sampled (Mean (*SD*) per year = 130.7 (51.8), range 19 – 216), and there were no missing groups, making 50 school-year groups across the ten schools. To make interpretation of models easier, school year was recoded into years at school, with year seven taken as year at school zero and year eleven as year at school four. This means intercept values refer to year seven, when students started secondary school.

School Admission Policies (SAP). Each school was categorised according to publically-available information of its admission policy. Schools where 90% or more of admissions were according to Christian faith-based criteria were classed as ‘selective’, those that applied no (or virtually no) faith-based admission criteria were classed as ‘open’, and schools falling between these groups were classed as ‘mixed’. For analysis of FSAC scores SAP was recoded to a dummy variable that contrasted open policy with the rest.

Church Attendance of Parents. There were two items on the questionnaire that asked about the frequency with which a student’s mother and father attended church. Responses were on a five-point scale ranging from never (1) to nearly every week (5). Mother Church Attendance (MCA) and Father Church Attendance (FCA) scores were positively correlated ($r = .59, p < .001$), but mothers generally attended more often, with 38% attending nearly every week and 25% never attending, compared with 25% and 39% respectively for fathers. Some students may have been in single-parent families, so the two responses were combined by taking whichever scored the higher to give a measure of the frequency of Parental Church Attendance (PCA). To provide a contextual level variable to compare with school admissions policies, PCA was aggregated to give a mean value per school (PCAsch).

Sex and ethnicity were included as individual-level controls when student FSAC scores were analysed. Each was coded as a dummy variable with male and non-white being the reference categories.

Analysis

The first step in the analysis was to examine the variation in student FSAC and PCA scores between schools in terms of the average levels and the change in levels between school years. Linear regressions of FSAC and PCA against YaS were fitted separately and variations in intercepts and slopes were used to assess the level of variation between schools.

The second step in the analysis used multi-level modelling in order to test and explain variations in the FSAC-YaS relationship. With students grouped in schools, this problem is best addressed using hierarchical linear models, which allow for the grouping of students in schools, and the fact that FSAC scores may vary with YaS in different ways in each school (Bickel, 2007; Snijders & Bosker, 2012). This step in the analysis used data for the 6,036 students to create a random coefficients models, in which intercepts and slopes for each school were allowed to vary. The random coefficient model was first tested against a model in which intercepts and slopes were fixed, to test if there was significant variation in these parameters between schools. Individual (sex, ethnicity, YaS) and contextual (SAP) variables were then added as fixed effects to see if they accounted for the variation in the random coefficients. For this analysis school admissions policy (SAP) was coded as a binary variable, with open schools compared to selective and mixed schools.

The third step in the analysis tested the effects on student FSAC scores of PCA, PCAsch, and their cross-level interaction. In order to aid hypothesis testing, each effect was tested separately and compared with the same baseline model.

The fourth step in the analysis investigated the relation between the church attendance of parents, the YaS of their child, and the SAP. Hierarchical linear models were again used to test these two main effects and their interaction. The analysis was run separately with mother, father and parental combined attendance as the dependent variable.

Results

- insert table 1 about here -

The first set of research questions explores whether student scores on the measure of attitude toward Christianity and student rating of their parents' church attendance vary among the ten schools in terms of their values when students start secondary school and changes in subsequent years. Table 1 presents the regression of years at school on student attitude toward Christianity scores and on parental church attendance for each of the ten schools separately. The intercept values shows scores at year seven and the slope value shows the decline in scores for each successive school year.

When all ten schools are considered together, on average students recorded a score of 89.23 on the Francis Scale of Attitude toward Christianity in their first year at school (year seven) and subsequently scores declined on average by 4.60 in each successive year group. This decline is statistically significant ($r = -.25, p < .001$). The intercepts of this regression varied from 106.09 to 67.56 among the ten schools, suggesting considerable variation among schools in the average attitude of students when they were admitted to the school. The slopes of the regressions were all negative, but again varied considerably (- 6.99 to - 1.51), suggesting that some schools had a more marked decline than other schools in student attitudes between admission and graduation. These results were sufficient to suggest that there were significant differences between schools, so the use of a more sophisticated statistical model was warranted.

When all ten schools are considered together, on average parental church attendance recorded a score of 3.45 in year-seven and subsequently scores declined on average by 0.10 in each successive year group. This decline is statistically significant ($r = -.08, p < .01$). The intercepts of the regression varied from 4.26 to 1.66 among the ten schools, confirming considerable variation among schools in the average level of parental church attendance when they were admitted to the school. This difference in the intercepts is consistent with the varying levels of church attendance required by the various school admissions policies. The slopes of the regression also varied considerably (-0.28 to 0.01) suggesting that some schools experienced a more marked decline than other schools in parental church attendance between admission and graduation.

- insert table 2 about here -

The second set of research questions explores whether variation in student FSAC scores in year seven and variation in the decline in FSAC scores with year at school can be explained by school admission policies. Regressing FSAC on YaS using a random intercept model allowed for the grouping of students in schools and variation in the average level of FSAC on admission (Model 1 in table 2). The Intraclass Correlation Coefficient (ICC) for this model showed that with fixed slopes but random intercepts, around 15% of the total variance in FSAC scores between students was related to variation between, rather than within, schools.

Model 2 in table 2 is a random coefficients model in which both the intercepts and slopes for the FSAC-YaS relationship are allowed to vary between schools and to co-vary with one another. This model fitted the data significantly better than the random intercept model, suggesting there was significant variance between schools in both the intercepts and slopes of the FSAC-YaS regression. Schools varied in levels of attitude toward Christianity when students were admitted, and in how sharply attitudes deteriorated as they progressed

through the school. The covariance of intercepts and slopes was negative, suggesting that schools where students started with high FSAC scores tended to show a sharper decline as they progressed through the school than schools where FSAC scores were low to begin with. This confirmed the analysis based only on average scores for year-school cohorts, but using in this case the data for individual students.

Model 3 in table 2 included the controls of sex and ethnicity, indicating that females generally had a more positive attitude to Christianity than did males (a widely reported result; for review see Francis & Penny, 2014), and that ethnic Whites tended to have a less positive attitude than others. Neither of these variables seemed to vary systematically between schools. Although they improved the overall model fit, they accounted for only about 2% of the variation between schools in the FSAC-YaS relationship. Adding school admission policies in Model 4 reduced the ICC from 16% to 4%, indicating that a great deal of the between-schools variance in FSAC scores could be explained by whether or not they had an open admissions policy. This makes sense in that schools that deliberately select on faith grounds are likely to admit students who have a more positive attitude toward Christianity. The intercept variance reduced from 100.92 to 19.42, which indicated that around four fifths of the between-school variance in FSAC scores among students when they were first admitted was down to school admission policies. What is perhaps more interesting is the reduction in the variance of the slopes from 2.20 to 0.50 and the reduction in the covariance of intercept and slopes from -10.18 to 2.07. The fixed interaction term of school admission policies and years at school was negative (3.36) which means the negative effect of years at school was greater in selective/mixed schools than in open schools (Figure 1). Students in their first year at selective schools had the most positive attitudes towards Christianity, but in these schools attitudes declined most rapidly.

The third set of research questions explores whether parental church attendance

accounts for the effect of school admission policies on student attitude toward Christianity, and whether the effect of parental church attendance on their child's attitude toward Christianity varies according to average level of parental church attendance in their school.

Models 5 to 7 in table 2 examine specific effects related to parental church attendance, using Model 4 as the base to test if adding effects significantly improved model fit. Adding average school-level parental attendance (PCAsch, Model 5) slightly improved the overall model fit, and reduced the ICC from 4% to 1%. The main effect of school admission policies was more than halved, suggesting that the difference in parental church attendance levels may be a key explanation of the average difference in FSAC levels between schools with an open admission policy and others. The YaS*SAP interaction remained significant, suggesting that overall levels of parental church attendance did not necessarily influence the different rate of decline with YaS between open policy schools and others. The most marked effect of PCAsch was on the variance in intercepts, which declined from 19.42 to 6.11. Variations between schools in the starting levels of student FSAC are, as expected, related to school admission policies, but school admission policies may be important primarily because of the increase in the proportion of church-attending parents and the frequency with which they attend. The reduction in the variance of slopes (0.50 to 0.48) was less dramatic than the reduction in intercepts.

Replacing average school parental church attendance with individual student parental church attendance (PCA, Model 6) resulted in a much better-fitted model, but the school admission policies effect remained statistically significant, and there was less reduction in the variance of intercepts between schools (19.42 to 13.12). This is as might be expected: parental church attendance is heavily selected for in some schools, and this is why schools differ in the average levels of FSAC among students and particularly the levels which they

record in year seven. Individual parental levels of church attendance had more effect in accounting for variation in slopes between schools (0.50 to 0.08), so much so that the virtual absence of any residual variation made this a difficult model to fit.¹ Parents may have a crucial role to play in maintaining positive attitudes toward Christianity among their children as they progress through school, and variations between schools in levels of PCA may partly account for different rates of decline in FSAC.

Model 7 tested the cross-level interaction of school and individual levels of parental church attendance on student FSAC scores. Does the effect of particular parent's church attendance on their child's attitude toward Christianity vary according to the average level of church attendance by parents in their school? There was a slight, but statistically significant, negative effect, suggesting that in schools where most parents attend, church parental non-attendance has a slightly less detrimental effect on attitude toward Christianity of their child(ren). Conversely, in schools where parental church attendance is low, parental church attendance may be particularly important in maintaining their child's positive attitude toward Christianity. This effect disappeared when the main effect of PCA was in the model, so more work would be needed to confirm if this trend is robust.

The final set of research questions related to whether or not church attendance of parents was related to school admission policies and the years at school of their child. The foregoing analyses suggested that PCA, and its variation between schools, accounted substantially for variation between students in their FSAC scores, so the obvious question to ask is whether parental church attendance varies with school admission policies. For these analyses school admission policies were coded as selective, mixed, and open to examine in more detail the effects on parental church attendance. Results for combined parental

¹ Attempts to fit Model 5 led to some uncertainty because iterations failed to converge, even though parameters were estimated. This was probably because adding the new variable reduced slope variance to virtually zero. Fitting a random intercepts model (which fixed slopes between schools) allowed convergence and gave model fit indices and parameter values that were virtually identical to the random coefficient model, so the latter have been presented in Table 2.

attendance were compared with those when either maternal or paternal attendance was the dependent variable. In the models in table 3, open-policy schools are the baseline for hypothesis testing.

Joint parental church attendance (PCA) varied significantly with SAP (table 3), with selective and mixed schools having significantly higher average scores than open schools (table 3). The effects showed, as might be expected, that PCA at mixed schools lay between that in the other two types of school. The effect of year at school refers to open schools, and here there was no significant change with year at school: PCA started low in year seven and remained low. The interaction terms compared PCA at mixed and selective schools with this trend and showed that whereas mixed schools were similar to open schools, selective schools showed a decline with year at school. These trends were present when both maternal and paternal church attendance were the dependent variable, but the trends were generally stronger for maternal church attendance, and are illustrated in Figure 2.

Discussion

As part of a wider mixed-method project designed to illuminate the nature and effectiveness of Christian ethos schools (see Casson, Cooling, & Francis, 2017) this paper employed data from 6,036 students attending ten Christian ethos schools (selected because of their distinctive emphasis on spirituality) in order to explore the trajectory of attitude toward Christianity scores among the students attending these schools. The following four main issues emerged from the data.

First, the data confirmed earlier well-established patterns connecting the trajectory of attitude toward Christianity among 11- to 16-year-old students with both personal and parental factors. In terms of sex differences, female students attending Christian ethos secondary schools recorded a more positive attitude toward Christianity compared with male students. This finding is consistent with many studies employing the Francis Scale of Attitude

toward Christianity among various age groups, including Francis and Stubbs (1987), Francis and Pearson (1987), and Kay and Francis (1996). In terms of the age differences, overall there was a consistent decline in attitude toward Christianity among students attending Christian ethos secondary schools from year seven to year eleven. This finding is also consistent with earlier studies employing the Francis Scale of Attitude toward Christianity, including Greer (1981), Gibson (1989), and Kay and Francis (1996). In terms of parental factors, overall there was a strong correlation between attitude toward Christianity scores among students attending Christian ethos secondary schools and levels of parental church attendance. This finding is also consistent with earlier studies employing the Francis Scale of Attitude toward Christianity, including Francis (1986, 1987) and Francis and Gibson (1993). The established associations between attitude toward Christianity and the factors of sex, age, and parental church attendance mean that these factors need to be taken into account when exploring the impact of school-related or contextual factors on student attitudes toward Christianity.

Second, the data demonstrated that the ten Christian ethos schools selected for the study illustrated two important differences in the profile and trajectory of attitude toward Christianity among their students. The mean attitude scores of students in year seven ranged widely from 106.09 to 67.56. Several recent studies have argued that the corporate attitudes and values of students are core to shaping and to defining school ethos, irrespective of the claims made by school mission statements or policy statements (Francis & Penny, 2013; Francis, Casson, & McKenna, under review). On these grounds, it could be said that the ten schools may differ widely in the kind of Christian ethos experienced by students entering in year seven. The slope of decline in student attitude year-on-year also ranged widely from a decline of 1.51 points on the scale per year to a decline of 6.99 points on the scale per year. This finding makes it clear that not all Christian ethos schools experience the trajectory of

attitude toward Christianity from year seven to year eleven in the same way. The data suggest that in those schools with a low attitude score in year seven there is less scope for further decline as students progress through the school. In schools where the opening attitude score is higher the rate of decline varies considerably. For example, in one school with an opening score of 90.00 there is a decline of 6.69 points per year; in another school with an opening score of 90.41 there is a decline of 3.24 points per year. Within the system there is variation that deserves further investigation.

Third, the data demonstrated that the school admission policies implemented by individual Christian ethos schools helped to account for some of the observed differences among the ten schools. Schools that exercised a selective admission policy (wholly or in part) were admitting a group of students in year seven who held a more positive attitude toward Christianity. This indeed makes sense if these schools were admitting students from a churchgoing background. A number of earlier studies have demonstrated the positive correlation between church attendance and attitude toward Christianity during childhood and adolescence, including work reported by Francis (1986, 1987) and Francis and Gibson (1993). At the same time, Christian ethos schools that exercised a selective admissions policy (wholly or in part) also experienced a greater decline in student attitude toward Christianity from year seven to year eleven. The rate of decline was related to a similar decline in parental church attendance. As with child attitude toward Christianity, church attendance of year seven parents was highest within schools with a selective policy, and in these schools it declined among parents of older children. There was no equivalent decline within schools with mixed or open admission policies.

Fourth, the most crucial finding from these data concerns the impact of both individual parental church attendance and the average level of parental church attendance within each school on student attitude toward Christianity. This finding may be of interest to

the Churches that sponsor Christian ethos schools for two reasons: one scientific and the other practical. The scientific reason concerns the way in which this finding regarding the centrality of parental influence on shaping religious development during childhood and adolescence is consistent with findings from two groups of recent studies conducted in Britain and Australia. The first group of studies, conducted among young people who attend church, focused on the factors that sustain young people's church attendance, drawing on 10,101 young churchgoers in Australia (Bellamy, Mou, & Castle, 2005), 10,153 young churchgoers in England (Francis & Craig, 2006), and 6,256 young churchgoers in Australia (Francis, Penny, & Powell, 2018). The second group of studies, conducted within schools, focused on the factors that predicted church attendance among young people who identify as affiliated with a Christian denomination, drawing on 645 13- to 15-year-old students in England and Wales who identified themselves as Anglicans (Francis, under review), and on 2,146 13- to 15-year-old students in England, Scotland and Wales who identified themselves as Catholics (Francis & Casson, under review). All five studies identified parental influences as the decisive factor.

The theoretical reason concerns the well-established discussion within the Christian Churches concerning the role of three primary agencies in religious formation: the family, the church, and the school. This trinity of agencies is particularly well delineated within the catechetical literature of the Catholic Church (for review see Francis & Casson, under review). The primary agency among these three agencies may vary according to the sociological context in which they operate. At times when the Christian narrative is strong in society Christian parents may feel comfortable in delegating primacy to church or to school. At times when the Christian narrative is weak in society parents may need to be able to take greater responsibility for this primacy themselves.

Conclusion

This study set out to explore the role of Christian ethos secondary schools in shaping or supporting a positive attitude toward Christianity among the students attending these schools. Three core conclusions emerge from the foregoing analyses contextualised within a wider body of empirical studies and a wider literature concerning the theoretical underpinning of Christian ethos secondary schools within the contemporary culture of England and Wales.

The first conclusion is that there remains more than one rationale for the mission and character of Christian ethos secondary schools as operated by the Anglican Church and by some independent Christian Trusts. The clear distinction formulated by the *Durham Report* (1970) characterising the general aim of church schools as serving the nation and the domestic aim of church schools as serving the children of Anglican or churchgoing parents continues to be visible in the mission statements and admission policies of Christian ethos secondary schools. The new data generated by the present study employing the Francis Scale of Attitude toward Christianity demonstrate that, if the overall attitudes and values of the students are regarded as shaping the ethos of Christian ethos schools, the experience for students entering schools supporting the general aim is quite different from the experience of students entering schools supporting the domestic aim. The overall attitude toward Christianity is much more positive among students attending schools supporting the domestic aim.

The second conclusion is that there is considerable variation within Christian ethos schools within the two categories of those who support the general aim and those who support the domestic aim. This variation is seen most clearly within those supporting the domestic aim in terms of the rate of decline in attitude toward Christianity throughout the five school years from year seven to year eleven. The factors leading to this variation may be complex and worthy of further close investigation. If some Christian ethos schools were to

consider it part of their mission to maintain a positive attitude toward Christianity among their students then it may be worth learning from these schools that achieve this outcome.

The third conclusion is that within the current social context, parents seem to play a crucial role in promoting and in maintaining a positive attitude toward Christianity among their children, whether they are attending schools supporting the domestic aim or schools supporting the general aim. Churches and Trusts that are investing in Christian ethos secondary schools may wish to consider carefully the implications of this particular finding for the future direction of Christian ethos secondary schools. As well as properly investing in the school staff and curriculum, there may be extra value in looking beyond the school to ways of resourcing parents and of consolidating linkages between parents and school, between parents and church, and between church and school. Such linkages, however, may need to recognise the priority of parents within this trinity of relationships. Although the majority of parents may not wish to devote time and commitment to becoming involved in this way, those parents who are particularly concerned to transmit their Christian faith in a critical way to their children may well be willing to invest in such a vision.

These conclusions, however, need to be set within the three limitations of the present study. The first limitation is that this cross-sectional study of over 6,000 students was able to compare only a small number of ten schools. Within these ten schools, six represented the domestic policy, two represented the general policy, and two represented the mixed policy. The conclusions would have been more securely grounded with a larger number of schools. There is, as a consequence, clear benefit in replicating the present study among a wider sample of schools.

The second limitation is that, while causal models can be tested with some sophistication on cross-sectional data, longitudinal studies are needed to provide clearer evidence of the hypothesised causal pathways. A longitudinal five-year (or seven-year) study

building on the present study would illuminate more clearly the various trajectories in both parental church attendance and student attitude toward Christianity among schools operating different admissions policies.

The third potential limitation is that the present study was dealing with student perceptions of parental church attendance rather than with parental self-report. This limitation may not be easy to address. Any direct linkage between student-perceived data and parent-provided data may threaten the anonymity of the student responses and downgrade the quality of student-provided data, since students who are not confident of anonymity may provide less truthful responses. Moreover, this potential limitation with the present project may not be as serious as it may seem. Given the sensitive nature of data on parental church attendance within the context of schools that include church attendance within admissions policies, the students may be providing a more accurate account than may be the case among parents.

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Table 1

Regressions of pupil attitude toward Christianity and parental church attendance on years at school for individual schools

School		Attitude towards Christianity				Parental Church Attendance			
#	SAP	<i>n</i>	Intercept (<i>SE</i>)	Slope (<i>SE</i>)	Intercept (<i>SE</i>)	Slope (<i>SE</i>)	Intercept (<i>SE</i>)	Slope (<i>SE</i>)	
1	Selective	740	90.00 (0.96)	-6.69 (0.39)	4.17 (0.07)	-0.28 (0.03)			
2	Selective	978	86.63 (1.02)	-5.52 (0.42)	4.13 (0.10)	-0.25 (0.04)			
3	Selective	844	100.34 (0.98)	-5.27 (0.40)	4.23 (0.16)	-0.01 (0.06)			
4	Selective	569	92.93 (3.71)	-4.21 (1.51)	3.04 (0.20)	-0.08 (0.08)			
5	Selective	894	93.52 (1.69)	-6.06 (0.69)	3.50 (0.05)	-0.13 (0.02)			
6	Selective	412	106.09 (2.78)	-3.55 (1.14)	4.26 (0.18)	-0.02 (0.07)			
7	Mixed	288	80.70 (1.85)	-3.68 (0.76)	2.31 (0.23)	-0.02 (0.09)			
8	Mixed	446	90.41 (3.18)	-3.24 (1.30)	3.23 (0.21)	-0.02 (0.09)			
9	Open	543	67.56 (2.26)	-1.97 (0.92)	1.66 (0.15)	0.01 (0.06)			
10	Open	322	71.39 (3.68)	-1.51 (1.50)	1.86 (0.10)	0.01 (0.04)			

Table 2

Multilevel linear regression models for the Francis Scale of Attitude toward Christianity

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Fixed effects							
Intercept	88.90 (3.16) ^{***}	88.15 (3.62) ^{***}	96.33 (3.28) ^{***}	101.06 (1.75) ^{***}	99.73 (1.24) ^{***}	96.57 (1.48) ^{***}	101.37 (1.80) ^{***}
Female			3.60 (0.59) ^{***}	3.62 (0.59) ^{***}	3.64 (0.59) ^{***}	3.54 (0.54) ^{***}	3.61 (0.59) ^{***}
White			-14.27 (0.73) ^{***}	-14.24 (0.73) ^{***}	-14.19 (0.73) ^{***}	-11.18 (0.68) ^{***}	-14.00 (0.73) ^{***}
Years at school (YaS)	-4.67 (0.22) ^{***}	-4.27 (0.53) ^{***}	-4.12 (0.52) ^{***}	-4.94 (0.34) ^{***}	-4.88 (0.34) ^{***}	-4.23 (0.23) ^{***}	-4.97 (0.35) ^{***}
Open admission policy (SAP)				-22.43 (3.78) ^{***}	-10.41 (3.87) [*]	-11.11 (3.18) ^{**}	-20.43 (3.91) ^{***}
YaS [*] SAP				3.36 (0.83) ^{**}	3.30 (0.82) ^{**}	2.57 (0.60) ^{***}	3.37 (0.85) ^{**}
Test effect:					PCAsch	PCA	PCAsch [*] PCA
					7.20 (1.78) ^{**}	6.11 (0.18) ^{***}	-1.10 (0.27) ^{***}
Random effects							
Residual	563.14 (10.26) ^{***}	559.22 (10.20) ^{***}	523.73 (9.55) ^{***}	523.93 (9.56) ^{***}	523.81 (9.55) ^{***}	440.39 (8.02) ^{***}	522.45 (9.53) ^{***}
Intercept (School)	96.760 (43.836) [*]	128.04 (58.91) [*]	100.92 (46.69) [*]	19.42 (10.46)	6.108 (3.943)	13.12 (6.73)	20.67 (10.93)
Covariance (School [*] YaS)		-10.23 (7.12)	-10.18 (6.48)	2.07 (1.72)	1.718 (0.968)	0.99 (0.78)	2.16 (1.78)
Slope (YaS)		2.24 (1.25)	2.20 (1.22)	0.50 (0.44)	0.484 (0.446)	0.08 (0.20)	0.56 (0.46)
Model fit							
-2 log likelihood	55404	55378	54979	54961	54950	53908	54945
Parameters in model	4	6	8	10	11	11	11
Deviance		27 ^{***}	399 ^{***}	18 ^{***}	11 ^{***}	1053 ^{***}	16 ^{***}
ICC	15%	18%	16%	4%	1%	3%	4%

Note. Reference categories for dummy variables: female: male; White: non-White; open admissions policy: selective or mixed admissions policy. Deviance is the difference between -2 log likelihood for nested models, tested by chi-squared with df = difference in number of parameters between models. Models 3-4 are nested in Model 2; Models 5-7 are nested in Model 4. PCA= Parental Church Attendance, PCAsch = School average PCA. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3

Multilevel linear regression models parental, maternal and paternal church attendance

	Model 1	Model 2	Model 3
	Both Parents Attendance	Mother Attendance	Father Attendance
Fixed effects			
Intercept	1.76 (0.30) ^{***}	1.72 (0.33) ^{***}	1.59 (0.31) ^{***}
SAP			
Selective	2.15 (0.35) ^{***}	2.17 (0.38) ^{***}	1.49 (0.36) ^{**}
Mixed	1.02 (0.43) [*]	1.01 (0.47)	0.70 (0.44)
Years at school (YaS)	0.01 (0.06)	0.00 (0.05)	0.00 (0.05)
SAP*YaS			
Selective*YaS	-0.14 (0.07)	-0.18 (0.05) ^{**}	-0.13 (0.06) [*]
Mixed*YaS	-0.01 (0.09)	-0.01 (0.07)	0.00 (0.07)
Random effects			
Residual	2.27 (0.04) ^{***}	2.27 (0.04) ^{***}	2.36 (0.04) ^{***}
Intercept (School)	0.16 (0.08) [*]	0.21 (0.10) [*]	0.18 (0.09) [*]
Covariance (School*YaS) x 10	-0.03 (0.12)	-0.04 (0.09)	0.06 (0.09)
Slope (YaS) x 10	0.05 (0.03)	0.01 (0.01)	0.02 (0.02)
Model fit			
-2 log likelihood	22134	21422	21034
Parameters in model	10	10	10
ICC	7%	8%	7%

Note. Reference category for School Admissions Policy (SAP) = Open. ^{*} $p < .05$; ^{**} $p < .01$; ^{***} $p < .001$.

Figure 1

Francis attitude toward Christianity in relation to years at school for schools with selective/mixed (solid line) or open (broken line) admission policies. Fitted from Model 4 Table 2.

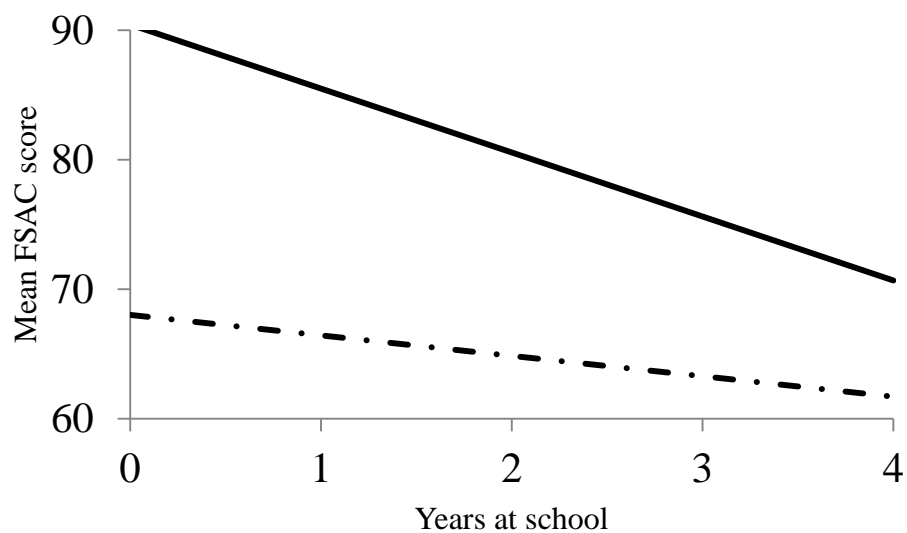


Figure 2

Maternal Church Attendance (MCA) in relation to years at school for schools with selective (solid line), mixed (broken line) or open (dotted line) admission policies. Fitted from Model 2, table 3.

