# Measuring the contribution of independent Christian secondary schools to students' religious, personal, and social values

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**Abstract**

From the late 1960s independent Christian schools have emerged in England and Wales, initiated either by churches or by parents. Many of these new independent schools are linked through the Christian Schools Trust. The impact that these schools are exerting on their students may be of interest for the churches with which they are associated and of concern for wider society. The political debate concerning these schools has so far been informed by only a small number of empirical studies conducted in England and Wales. The present study extends previous research in three ways. It offers a comparative study by examining the responses of 271 year-nine and year-ten students (13- to 15-years of age) from 11 independent Christian schools with 20,348 students from 93 schools without a religious foundation. It examines a range of religious, social and personal values. It employs multilevel models to identify the contribution made by independent Christian schools after taking into account personal, psychological and contextual differences within the students themselves. We hypothesised that Christian schools were committed to developing distinctly Christian values among their students. The data supported this hypothesis. Even after allowing for differences in the religiosity of the students themselves, attendance at an independent Christian school was associated with higher self-esteem, greater rejection of drug use, lower endorsing of illegal behaviours, lower racism, higher levels of conservative Christian belief, and more conservative views on sexual morality (abortion, contraception, divorce, homosexuality, and sex outside marriage).

*Keywords:* Independent Christian schools, student values, school effectiveness, multi-level analyses.

## Introduction

Church schools have been central to educational provision in England and Wales. Long before the Education Act 1870 (Rich, 1970) established the machinery for creating Board Schools, the Christian Churches had been actively involved in building and resourcing schools for the education of the nation's children. Landmarks in the development of church schools were provided by the establishment of the National Society (Church of England) in 1811, the British and Foreign School Society (largely Free Churches) in 1814, and the Catholic Poor Schools Committee in 1847. The history of such voluntary initiatives has been well rehearsed by Cruickshank (1963), Murphy (1971), and Chadwick (1997). The partnership between schools built by the Churches and by School Boards was consolidated by the Education Act 1902, strengthened by the Education Act 1944 (Dent, 1947) and left unchanged by the Education Reform Act 1988 (Cox and Cairns, 1989).

During the second half of the twentieth century the theological rationale for church schools was developed along quite different lines in England and Wales by the Free Churches, the Roman Catholic Church and the Anglican Church (Church of England and Church in Wales). As a consequence of the Education Act 1944, the Free Churches largely withdrew from the provision of church schools, arguing that the close alliance between the churches and state in the provision of religious education throughout the state-maintained system of schools rendered the provision of a separate system of church schools largely superfluous. On this account the Christian presence was to be strengthened throughout all schools, not concentrated in church schools.

The Education Act 1944 offered the Church of England and the Church in Wales the opportunity to develop two different forms of church schools: voluntary controlled schools in which the Church was largely absolved from ongoing running costs but with less control over religious education, staff appointments, and admissions policies; and voluntary aided schools

in which the Church retained greater financial liability and retained more control over religious education, staff appointments, and admissions policies. The key development in theological reflection on the situation provided by the Church of England's response to the Education Act 1944 was offered by *The Fourth R* (Durham Report, 1970).

*The Fourth R* developed a theologically informed distinction between two different rationales for the involvement of the Church of England within the state-maintained system of schools, characterised as the church's general concern and the church's domestic concern. The general concern was to promote the education of all children, irrespective of the religious perspective of their parents, while the domestic concern was with the ongoing Christian education of the children of Anglican parents. The *Durham Report* recognised the irreconcilable tension between the two concerns and advocated that priority should be given to the general concern. Developing the ideas advanced in the *Durham Report* and working as an Anglican theologian, Francis (1990) challenged the Anglican Church to develop a threefold theological rationale for continued involvement within the state-maintained sector of education by: reconceptualising the general concern in terms of a theology of service; reconceptualising the domestic concern in terms of a theology of nurture; and developing a third rationale in terms of a theology of prophecy concerned with the radical Christian critique of an educational system which can only be undertaken from an informed insider perspective. The Church of England's most recent report on church schools, *The Way Ahead* (Dearing Report, 2001), remained surprisingly light on theological reflection.

From the outset the Roman Catholic perspective on church schools in England and Wales was shaped by a very different cultural context from that experienced by the Anglican Church. When the National Society was established in 1811, it was the intention of the established Church to serve all the children of the nation (Burgess, 1958). When the Catholic Poor School Committee was set up in 1847, it was the intention of a socially-marginalised

church to provide an alternative system of education for the children of Catholic parents. It was still this sense of protecting a minority (and potentially marginalised) faith community which inspired the Catholic Church's sacrificial investment in schools following the 1944 Education Act (Hornsby-Smith, 1978). The theological perspective of a minority faith-group continued to shape the influential Catholic theological reflection on church schools published in *Signposts and Homecoming* (Konstant, 1981), a report to the Bishops of England and Wales on "the educative task of the Catholic community". While recognising that Catholic education should be confined neither to the years of compulsory schooling nor to the Catholic school, this report reaffirmed the identity of the Catholic school as a believing and integrated Christian community. The report argues as follows:

> Within a Catholic school the ultimate distinctive element is that its life is based on the vision of Christ in which all learning, growing, service, freedom and relationships are seen as part of a growth in the knowledge, love and experience of God. In other words there is a deliberate hope that the experience of belonging to the school will encourage personal commitment to Jesus Christ, will mark an important stage in the process of conversion and will lead to the discovery of the Christian vocation. (pp. 106-107)

The Independent Christian School movement in England and Wales developed within a very different theological environment from those that sponsored and nurtured Anglican schools and Catholic schools. The independent Christian schools have their roots among committed Christian parents and evangelical churches during the late 1960s and developed in response to a perceived secularisation that was impacting the whole of the state-maintained sector of education, including church schools. The Independent Christian School movement stands outside the state-maintained sector.

Since there is no one national body overseeing the development of independent

Christian schools, commensurate with the national educational arms of the Church of England and the Roman Catholic Church, it is no easy task to trace the development of this movement. The early history has, however, been related by Deakin (1989), who maintains that the first school of this type was opened in Rochester in 1969. According to Deakin (1989) by 1988 the Christian Schools' Trust was in contact with 53 schools. The subsequent development of Christian schools in England and Wales has been chronicled (from the insiders' perspective) by Watson and MacKenzie (1996) and Baker and Freeman (2005) and (from the outsiders' perspective) by Poyntz and Walford (1994) and Walford (1994, 1995a, 1995b, 1995c, 2000, 2001a, 2001b, 2001c).

In his attempt to understand the theological and ideological motivation underpinning the independent Christian schools in the United Kingdom, Walford (1995a) conducted a series of semi-structured interviews with the headteachers of 11 of the 65 schools included in 1993 on the address list of the Christian Schools' Trust, and received completed questionnaires from 42 of the other 54 schools. Walford's data demonstrated considerable diversity in these schools, but also clear underlying themes which united them. On the basis of these data the following profile was offered by Walford (1995a).

> These schools share an ideology of biblically-based evangelical Christianity that seeks to relate the message of the Bible to all aspects of present day life whether personal, spiritual or educational. These schools have usually been set up by parents or a church group to deal with a growing dissatisfaction with what is seen as the increased secularism of the great majority of schools. The schools aim to provide a distinctive Christian approach to every part of school life and the curriculum, and, usually, parents have a continuing role in the management and organisation of the schools. (p. 7)

A clear account of the theological motivation behind the Independent Christian

School movement from within the movement itself is provided by Baker and Freeman's (2005) reflection on their personal involvement in founding such schools and on their contacts with colleagues who had similar personal involvement. This account shows that the new Christian school movement is grounded in belief in the God who takes the initiative within the lives of the people of God to bring to fruition the purposes of God. Here is the God who communicates with individuals and with groups through the word of scripture, through pictures and words of prophecy. Here is the God who authenticates the message through answered prayer, through healing, and through the release of the necessary finances.

Flowing from this theological perspective, four main objectives can be identified in Baker and Freeman's (2005) account of the rationale of the new Christian schools. The first objective stands at the heart of schooling and concerns the *quality of education*. From the outset the new Christian schools emphasised the importance of academic achievement and set out to enable students to perform better than they might have done in their local state-maintained school. Small classes, dedicated teachers and good discipline were all seen as contributing to this goal of academic excellence. According to Baker and Freeman (2005, pp. 133-134), within these schools quality education was to be promoted through a radically different curriculum and a radically different view of the child. In accordance with scriptural principles science education was to include creationism and (in the early days before a significant change in the law of the land) discipline was to include appropriate corporal punishment. In many ways school was to be conceptualised as an extension of the parental home, and quality education was to be furthered by extra-curricular experience as well as by the school environment.

The second objective stands at the heart of the gospel and concerns *Christian and moral nurture.* According to Baker and Freeman (2005, p. 27), "the greatest priority in children's education is for them to come to know the Lord." Coming to know the Lord

involves character building and character transformation. Children educated in the new Christian schools are to be shaped in a Christian spirituality and in a Christian moral framework.

The third objective concerns the *quality of relationships* experienced by the children. At different points in their narrative Baker and Freeman emphasise three different aspects of relationships. Aspect one focuses on the relationships among students themselves, which should model Christian openness and inclusivity and reflect "training the children in the ways of orderliness, obedience, forgiveness, kindness and love" (p. 27-28). Aspect two focuses on the relationship between students and teachers, "Teachers should pray for and with the children" (p. 132). Aspect three focuses on the relationship between students and the outside world. From the outset the new Christian schools tried both to model an alternative environment for their students and to equip their students to engage with the wider secular world.

The fourth objective concerns the role of education in *preparation for life* beyond the school-leaving age. Baker and Freeman (2005, p. 49) argue that "protection from destructive influences at an early age results in strength to withstand these when the child is older." The schools set out to provide "a good foundation on which pupils can build in the future" (p. 28).

Research into the impact of independent Christian schools, or into the distinctive characteristics of the students who attend them has followed two paths. The first path has used qualitative methodology to chart the perspectives of the alumnae from these schools. The second path has used quantitative methodology to provide a profile of the current students and to set this profile alongside students educated within the state-maintained sector of schools.

In terms of the first path that used qualitative methodology, ap Siôn, Francis, and Baker (2007) traced 106 men who had graduated from Independent Christian schools in the

United Kingdom between 1985 and 2003 and analysed their evaluation of the education they had received in these schools within four main themes: the quality of the education, Christian and moral nurture, the quality of relationships (among the students, with the teachers, and with the wider world) and the preparation received for life after leaving the school. Although there were some issues of criticism, the balance of opinion among former students within all four areas was generally supportive of the new independent Christian schools, which were generally perceived as having prepared them well for life. On the basis of the detailed findings, the following conclusions were drawn.

First, although students were well aware of the limitations imposed on the curriculum by the small number of students and the consequent small number of teachers, generally the advantages of small classes, caring staff and high standards outweighed the negative aspects in the students' minds. Secondly, many students had a general appreciation of the Christian foundation of the school and the opportunities for personal, spiritual, and moral development. In terms of specific content, though, responses were mixed, illustrating a healthy diversity in students' understanding of the Christian faith. Thirdly, although some students wrote in positive terms about their relationships with the outside world while at school and after leaving school, many students felt that their schools provided a protective and sheltered environment, which raised a number of issues retrospectively. Fourthly, most students thought that their schools had prepared them well for the next stage of life in terms of academic competence and personal, spiritual and moral development. However, many students also observed that the step between the school culture and the cultures of the wider world was a large one.

In a second study, ap Siôn, Francis, and Baker (2009) traced 135 women who had graduated from these schools between 1986 and 2003 and analysed their views in response to

the same four themes. In this study the data were more closely aligned to an appreciation of the theologically-influenced aims of the school, leading to the following conclusions.

The first theologically-informed aim of the independent Christian school sector concerned the importance of academic achievement and the provision of high quality education which would enable students to perform better than they might have done in their local state-maintained school. The data suggest that in many ways this aim was being achieved. Many former students praised the high academic standards achieved in their schools which they linked with small class sizes, dedicated teachers, close relationships between home and school and the individualisation of the education process. However, they were also well aware of the effect of limited and, at times, insecure finances, and small student numbers, which placed restrictions on subject choice and teachers as well as resources and facilities. One area which was highlighted by a number of students was the need to develop specific aspects of PSHE (personal, social, and health education) and cultural education, with particular reference to education concerning sex, drugs, alcohol and non-Christian religions.

The second theologically-informed aim of the independent Christian school sector concerned the importance of nurture in the Christian faith and in a Christian moral framework. The data suggest that in many ways this aim was being achieved. Most former students commended the presence and quality of their schools' Christian provision which set them apart from other schools. They felt that the school environment offered them the freedom, support, and security necessary to grow as young Christians, and many students appreciated the fact that their faith permeated all aspects of school life and ethos, making the school a homely, loving and safe place to be. Former students, however, were not uncritical of their experiences, and some offered positive suggestions concerning how this area could be

developed, such as greater focus on linking faith to practice, more opportunities for self-reflection and self-expression, and opportunities to "outwork" their faith in the outside world.

The third theologically-informed aim of the independent Christian school sector concerned the importance of the quality of the relationships experienced by the students. The data suggest that in many ways this aim was being achieved. Most former students appreciated the close relationships that they experienced with other students and with teachers. Teachers were concerned with the growth of the whole person, not just academic development, and most students valued this individual, whole-person approach, coupled with the love, friendship, and support that teachers provided. However, some students highlighted the disadvantages of small class sizes on relationships between students and the effect of some discipline issues on relationships between students and teachers. Where students commented on their relationship with the outside world, they often remarked that they had limited experience of it while at school, and offered positive suggestions about how to increase knowledge and experience of the outside world before students left school. Not all students, though, believed that their relationship with the outside world should have been developed further; some argued that young Christians needed to be protected in their formative years and others felt that they had sufficient opportunities to interact with the outside world.

The fourth theologically-informed aim of the independent Christian school sector concerned the importance of preparing the students for life beyond the school-leaving age. The data suggest that in many ways this aim was being achieved. Most former students felt that their schools had prepared them well for the next stage, and this was understood holistically in terms of academic preparation, faith preparation, and character preparation. Despite feeling generally well prepared for life beyond their school years, many students commented on the large step taken from a close, protective environment, characterised by

distinctive Christian ideals, to a larger, more impersonal environment, characterised by pluralism in beliefs, values, and practices, without familiar supportive frameworks. Some students suggested that further developing education about sex, drugs, alcohol, and other religions and cultures would help this transition.

In terms of the second path that used quantitative methodology, in a pioneering study O'Keeffe (1992) administered the Francis Scale of Attitude toward Christianity, which had been used in earlier studies among students in Anglican and Roman Catholic schools by Francis (1986), to 439 students between the ages of 8 and 16 attending six independent Christian schools. O'Keeffe (1992) drew the following conclusion from her data.

> The main conclusion to emerge from this study is that schools are exercising a positive influence on their pupils' attitudes toward Christianity. The responses of pupils demonstrate that the majority of pupils hold positive attitudes toward God, Jesus, the Bible and personal prayer. (p. 105)

In a second study, Francis (2005) compared the values of the 13- to 15-year-old boys attending 19 independent Christian schools (usually providing quite small secondary facilities) with the boys attending the 114 non-denominational state-maintained schools included in the Teenage Religion and Values project (Francis, 2001). The comparison was based on 136 boys in the independent Christian schools and 12,823 boys in the non-denominational state-maintained schools. Francis (2005) drew the following conclusion from his data.

> The data provided by the present study [demonstrate] . . . that the values environment modelled by 13- to 15-year-old boys attending Christian schools is significantly different from that modelled by boys in the same age range attending non-denominational state-maintained schools. (p. 139)

According to these data, boys attending the Christian schools were more likely to be

committed to belief in God and in the inerrancy of scripture. They were more likely to hold a positive view of the church, to support the place of religious education in school, and to reject superstitious beliefs. They were less likely to hold liberal attitudes toward alcohol, tobacco and sex. They were less likely to be troubled by bullying and more likely to respect their teachers. They were more likely to feel good about life and about themselves.

Looking at the results from this study in greater detail, the following statistics are pertinent. Regarding religious beliefs, 89% of boys in the independent Christian schools believed that Jesus really rose from the dead, compared with 28% in the state-maintained sector. Four- fifths of boys in the independent Christian schools believed that God made the world in six days and rested on the seventh (82%), compared with 19% in the state-maintained sector. Two thirds of boys in the independent Christian schools considered that Christianity was the only true religion (67%), compared with 13% in the state-maintained sector.

Regarding sexual morality, 70% of boys in independent Christian schools believed that homosexuality is wrong, compared with 21% in the state-maintained sector. Three-quarters of boys in independent Christian schools believed that abortion is wrong (73%), compared with 39% in the state-maintained sector. Two-thirds of boys in independent Christian schools believed that it is wrong to have sexual intercourse outside marriage (64%), compared with 13% in the state-maintained sector.

Regarding substance use, 47% of boys in independent Christian schools believed that it is wrong to become drunk, compared with 38% in the state-maintained sector. Half of boys in independent Christian schools believed that it is wrong to smoke cigarettes (50%), compared with 38% in the state-maintained sector. Three-fifths of boys in independent Christian schools believed that it is wrong to use marijuana (60%), compared with 53% in the state-maintained sector.

In a third study, Francis and Robbins (2005, pp. 123-132) returned to the Teenage Religion and Values database to set the profile of year-nine and year-ten students attending independent Christian schools alongside the profile of students attending non-denominational state-maintained schools, specifically in terms of John Fisher's (1998, 2000, 2001, 2004, 2011) model of the four domains of spiritual health: personal domain, communal domain, environmental domain, and transcendental domain.

In terms of the personal domain, some of the indicators signal a much better level of spiritual health among students in Christian schools compared with students in non-denominational schools. While in the non-denominational schools 54% of the students felt their life had a sense of purpose, the proportion rose to 75% in the Christian schools. While 52% of the students in the non-denominational schools often felt depressed the proportion fell to 38% in the Christian schools. While 28% of the students in the non-denominational schools have sometimes considered taking their own life, the proportion fell to 15% in Christian schools.

In terms of the communal domain, there are some key differences in the levels of spiritual health experienced by the students in Christian schools and in non-denominational schools. Some of these differences are to the advantage of the Christian school sector and some are to the disadvantage of the Christian school sector. On the positive side, the students in Christian schools were less likely to be worried about being bullied at school (19% compared with 28% in non-denominational schools) and more likely to derive help from talking about their problems with close friends (75% compared with 63% in non-denominational schools). On the negative side, the students in Christian schools were more likely to be worried about how they get on with other people (58% compared with 49% in non-denominational schools) and less likely to like the people with whom they go to school (84% compared with 90% in non-denominational schools).

In terms of the environmental domain, students within the Christian school sector enjoy a significantly higher level of spiritual health in comparison with students in non-denominational schools. To begin with they were much more likely to feel empowered to exercise a beneficial influence on the world in which they live. While 27% of the students in non-denominational schools felt that there was nothing they could do to help solve the world's problems, the proportion fell to 17% in Christian schools. The students in Christian schools were much less likely to hold racist attitudes. In non-denominational schools 18% of the students maintained that there are too many black people living in this country, but the proportion fell to 6% in Christian schools. The students in Christian schools are much more likely to hold positive attitudes toward world development. In non-denominational schools 57% of the students expressed concern regarding the poverty of the third world, but the proportion rose to 71% in Christian schools.

In terms of the transcendental domain, students in Christian schools enjoy a significantly higher level of spiritual health in the transcendental domain compared with students in non-denominational schools. This difference is reflected in two main ways. First, the students in Christian schools held traditional religion in much higher regard. Four-fifths of the students in Christian schools expressed belief in God (83%), compared with 37% in non-denominational schools. Three-quarters of the students in Christian schools expressed belief in life after death (74%), compared with 43% in non-denominational schools. These beliefs were accompanied by a more positive attitude towards religious institutions. Just 13% of the students in Christian schools considered the church to be irrelevant to life today, compared with 28% in non-denominational schools. Just 14% of the students in Christian schools considered the bible to be irrelevant to life today, compared with 31% in non-denominational schools.

Second, the students in Christian schools held non-traditional religious beliefs in much lower regard. Just 8% of the students in Christian schools believed in their horoscope, compared with 36% in non-denominational schools. In Christian schools 13% of the students believed that fortune-tellers can tell the future, compared with 20% in non-denominational schools. In Christian schools 21% of the students believed in the possibility of contacting the spirits of the dead, compared with 32% in non-denominational schools.

### Research question

Although the analysis of the Teenage Religions and Values data reported by Francis (2005) and by Francis and Robbins (2005) provided valuable insights into the comparative attitudes of different groups of students attending independent Christian secondary schools and community secondary schools, the kind of statistical analyses employed were not capable of demonstrating the extent to which such differences could be attributed to influences of the school rather than to influences of other personal, contextual or psychological factors. Against this background, the aim of the present study is to revisit the Teenage Religion and Values data and to reanalyse these data to examine the contribution of independent Christian schools to students' religious, personal and social values, employing multilevel linear modelling. This new analysis complements two parallel studies designed to identify the effect of Catholic schools (Village & Francis, in press) and Anglican schools (Francis, Lankshear, Robbins, Village, & ap Siôn, in press).

## Method

### Context

The Teenage Religion and Values Survey was conducted during the 1990s to provide a detailed profile of the attitudes and values of year-nine and year-ten students throughout England and Wales (students between the ages of 13 and 15 years). A detailed questionnaire was administered throughout all year-nine and year-ten classes within 163 schools throughout England and Wales, from Pembrokeshire to Norfolk, and from Cornwall to Northumberland.

A proper mix of rural and urban areas was included, as was a proper mix of independent and state-maintained schools. Within the state-maintained sector attention was given to the balance between Roman Catholic voluntary schools, Anglican voluntary schools and schools without a religious foundation.

**Procedure**

Participating schools were asked to follow a standard procedure. The questionnaires were administered in normal class groups. Students were asked not to write their name on the booklet and to complete the inventory under examination-like conditions. Although students were given the choice not to participate, very few declined to do so. They were assured of confidentiality and anonymity. As a consequence of this process thoroughly completed questionnaires were processed for 33,982 students (Francis, 2001).

**Instrument**

The questionnaire used in this study is a revision of the Centymca Attitude Inventory previously employed by Francis (1982a, 1982b, 1984a, 1984b) and Francis and Kay (1995). Alongside a range of broad background and demographic variables, the instrument was designed to profile values over a number of areas, with each area assessed by a pool of items designed for Likert scaling (see Likert, 1932). Students were required to grade their agreement with each statement on a five-point scale anchored by *strongly agree, agree, not certain, disagree,* and *disagree strongly*. From the revised Centymca Attitude Inventory, three main groups of variables were selected to serve in the analyses as dependent variables, as religious predictor variables, and as control variables, alongside the key independent variable of school type, recorded as independent Christian schools and as schools without a religious foundation.

*Dependent variables*

Six multi-item scales (identified in Table 1) accessed attitudes toward six key constructs: scale of low self-esteem (four items); scale of rejection of drug use (six items): scale of endorsing illegal behaviours (six items); scale of racism (four items); scale of positive attitude toward school (six items); and scale of conservative Christian belief (five items). Additionally five items accessed views on sexual morality (abortion, contraception, divorce, homosexuality and sex outside marriage). Those five items, which did not form a unidimensional scale, were coded so that a high score indicated opposition.

*Control variables*

Three groups of control variables took into account personal, contextual, and psychological factors. The personal factors were sex (male and female) and school year (year-nine and year-ten). The contextual factors were father in full-time employment, mother in full-time employment, academic expectations (going to university or not going to university), location of home (rural or not rural), and parental social class calculated on the basis of the classifications prepared by the Office for Population, Censuses and Surveys (1980), using the mean for both parents where available, or otherwise based on a single parent. The psychological factors were measured by the short form of the Junior Eysenck Personality Questionnaire (JEPQ-S, Francis & Pearson, 1988), providing measures of the three major dimensions of personality (extraversion, neuroticism, and psychoticism), together with the lie scale.

*Religious predictor variables*

Religion was assessed by four variables: self-assigned religious affiliation, public religious practice (church attendance), personal religious practice (personal prayer), and religious belief (belief in God). Self-assigned religious affiliation was employed as a dummy variable (religious affiliation, no religious affiliation). Church attendance was accessed on a five-point scale (never, once or twice a year, sometimes, at least once a month, and nearly

every week). Personal prayer was accessed on a five-point scale (never, occasionally, at least once a month, at least once a week, and nearly every day). Belief in God was accessed on a five-point scale (agree strongly, agree, not certain, disagree, disagree strongly).

**Analysis**

A multilevel linear model was used to allow for the fact that students were tested within schools (Bickel, 2007; Bryk & Raudenbush, 1992; Hox, 2002; Snijders & Bosker, 1999). Each school was given a unique numerical code and this was employed as the subject (grouping variable) using the mixed model procedure of SPSS version 19 (Norusis, 2011). Three models were run for each dependent variable. Model 0, the null model, had no predictor variables. The Intraclass Correlation Coefficient (ICC) indicated what proportion of the variance on the dependent variable was attributable to variations between schools. In model 1, school type was entered along with all the (non-religious) control variables. This model assessed whether the dependent variable differed between independent Christian schools and schools without a religious foundation (community schools), after allowing for personal, contextual and psychological differences between students. Since differences between types of schools may have been due to independent Christian schools having a higher number of religious students, model 2 included the four measures of religiosity alongside the other control variables and school type. Differences between school types that remained after controlling for individual differences in student religiosity were interpreted as effects of independent Christian schools on their students.

**Sample**

Drawing on the Teenage Religion and Values data, the present analysis employs information provided by 271 students from 11 independent Christian schools and 20,348 students from 93 community schools.

## Results

The first stage of data analysis (table 1) examines the properties of the seven sets of items proposed as dependent variables concerned with measuring low self-esteem, rejection of drug use, endorsing illegal behaviours, racism, positive attitude toward school, conservative Christian belief, and sexual morality. In respect of each of these measures, table 1 presents the item endorsement (in terms of the sum of the 'agree strongly' and the 'agree' responses) and the item rest of scale correlation (in terms of the correlation between the individual item and the sum of the other items within the proposed scale). Six of these seven sets of items demonstrated sufficiently high internal consistency reliability, in terms of the alpha coefficient (Cronbach, 1951) and the item rest of scale correlations, to serve as acceptable cumulative measures. The seventh set of items, concerning sexual morality, generated an alpha coefficient of .56, well below the threshold of acceptability of .65 proposed by DeVellis (2003). These five items will therefore be employed as single-item measures rather than as a cumulative scale. As a consequence, subsequent analyses will be conducted on eleven dependent measures, six scales (concerning low self-esteem, rejection of drug use, endorsing illegal behaviours, racism, positive attitude toward school, and conservative Christian belief) and five single items (concerning abortion, contraception, divorce, homosexuality, and sex outside marriage).

- Insert table 1 about here –

The second stage of data analysis (table 2) examines the scale properties of the six scales employed as dependent variables in terms of the alpha coefficients and sets out the mean scores and standard deviations for the six scales and for the five single item measures in respect of the students attending independent Christian schools and the students attending schools without a religious foundation. The alpha coefficients demonstrate that the five scales of low self-esteem, rejection of drug use, endorsing illegal behaviours, positive attitude toward school, and conservative Christian belief all achieved satisfactory levels of internal

consistency reliability. While the scale of racism was less satisfactory, it was nonetheless acceptable for an instrument of only four items. The t-tests demonstrate that there were many significant differences in the mean scores recorded by students within the two types of schools. In view of the large size of the sample and the multiple use of bivariate significance testing, attention will only be drawn to those differences that achieve at least the one percent probability level. Overall, students in independent Christian schools had higher self-esteem, higher rejection of drug use, lower endorsing of illegal behaviours, lower racism, a more positive attitude toward school, and higher levels of conservative Christian belief. In terms of the items concerning sexual morality, the students in independent Christian schools were less accepting of abortion, contraception, divorce, homosexuality, and sex outside marriage. Although these data demonstrate a different ethos among students in the two types of schools, this form of data analysis does not allow us to attribute the differences to the effects of the school. The next task is to explore the extent to which students in the two types of school vary according to the control variable.

- Insert table 2 about here –

The third stage of data analysis (table 3) examines the scale properties of the four measures proposed by the short form of the Junior Eysenck Personality Questionnaire in terms of the alpha coefficients and sets out the mean scores and standard deviation in respect of the students attending independent Christian schools and the students attending schools without a religious foundation. The alpha coefficients demonstrate that the two scales of extraversion and neuroticism achieved satisfactory levels of internal consistency reliability. While the scale of psychoticism and the lie scale were less satisfactory, they were nonetheless acceptable for instruments of this length. The t-tests demonstrate that there were significant differences in the mean scores recorded by students within the two types of schools on the extraversion scale and on the psychoticism scale, but not on the neuroticism scale or the lie

scale. Overall, students in independent Christian schools recorded higher psychoticism scores, and lower extraversion scores. Such differences in personality scores may partly explain the differences in the dependent variables recorded by students attending the two types of schools.

- Insert table 3 about here –

The fourth stage of data analysis (table 4) examines the control variables that employ dichotomous data: two personal factors (sex and school year), four contextual factors (father in full-time employment, mother in full-time employment, rural location of home, and academic expectation to attend university), and one religious factor (self-assigned religious affiliation). Percentages are reported in respect of the students attending independent Christian schools and the students attending schools without a religious foundation. Taking the one percent probability level as the threshold, the chi-square tests demonstrate that the composition of the students within the two types of schools did not differ greatly in terms of personal factors (sex and age) or generally in terms of contextual factors (father in full-time employment, mother in full-time employment, expecting to go to university). There were, however, significant differences in terms of one contextual factor and the religious factor. Higher proportions of students in independent Christian schools lived in non-rural locations and identified themselves as religiously affiliated.

- Insert table 4 about here –

The fifth stage of data analysis (table 5) examines the control variables that employ continuous data: one contextual factor (parental social class) and three religious factors (church attendance, personal prayer, and belief in God). Mean scores and standard deviations are reported in respect of the students attending independent Christian schools and the students attending schools without a religious foundation. The t-tests demonstrate that there were significant differences in the mean scores recorded by students within the two types of

schools in terms of parental social class and in terms of all three religious factors. Students in independent Christian schools came from higher social class backgrounds, displayed higher levels of church attendance, engaged in higher levels of personal prayer, and held higher levels of belief in God.

The sixth stage of data analysis (tables 6, 7, 8, and 9) employs multi-level linear models to allow for the fact that students were grouped within schools and to take into account the influence of the control variables. In respect of each of the dependent variables three models were tested. The null model (Model 0) had no predictor variables, and indicated the amount of variation in the dependent variable that was linked to differences between schools. Model 1 controlled for the personal factors (sex and school year), for the contextual factors (father in full-time employment, mother in full-time employment, academic expectations, location of home, and parental social class), and for the psychological factors (extraversion, neuroticism, psychoticism, and the lie scale). Model 2 controlled additionally for the religious factors (self-assigned religious affiliation, public religious practice, personal religious practice, and belief in God). Table 6 presents the three models in respect of three multi-item scales: scale of low self-esteem, scale of rejection of drug use, and scale of endorsing illegal behaviour. Table 7 presents the three models in respect of the other three multi-item scales: scale of racism, scale of positive attitude toward school, and scale of conservative Christian belief. Tables 8 and 9 present the three models in respect of the five items which did not form a unidimensional scale, on sexual morality: abortion, contraception, divorce, homosexuality, and sex outside marriage.

According to the data presented in these three tables for model one, the personal factors, the contextual factors, and the psychological factors are all shown to have a part to play in shaping individual differences in the dependent variables, confirming the wisdom of taking these factors into account. After taking these personal factors, contextual factors and

psychological factors into account, school type is shown to have a statistically significant effect (at the one percent probability level) on ten of the eleven dependent variables. According to this model, independent Christian schools seem to shape students who have better self-esteem, who maintain greater rejection of drug use, who show less support for illegal behaviours, who display less racist attitudes, who hold higher levels of conservative Christian belief, and who hold more conservative views on sexual morality (abortion, conception, divorce, homosexuality, and sex outside marriage). The only dependent variable not to show a statistically significant effect for school type is attitude toward school. Overall students attending independent Christian schools felt neither more positively nor more negatively about their school in comparison with similar students (in terms of personal, contextual and psychological factors) attending schools without a religious foundation.

Model 2 allows for the idea that the apparent effect of the independent Christian schools on the students' values could be an artefact of the higher levels of religiosity among the students attending these schools. Model 2, therefore, controls additionally for four religious factors (religious affiliation, church attendance, prayer frequency and belief in God). After taking these religious factors into account, school type is still shown to have a statistically significant effect (at the one percent probability level) on eight of the eleven dependent variables. The two dependent variables that dropped below the threshold of statistical significance at the one percent probability level after controlling for the personal religious factors were self-esteem and racism. These data suggest that the higher level of self-esteem and the lower level of racism among students attending independent Christian schools can be attributed to the higher levels of their personal religiosity, although the schools may well be responsible for nurturing and sustaining these higher levels of religiosity. On the other hand, these data also suggest that the greater rejection of drug use, the lower support for illegal behaviours, the higher levels of conservative Christian belief, and the more

conservative views on sexual morality can be attributed to the effect of the independent Christian schools, irrespective of the students' personal religiosity in terms of religious affiliation, church attendance, prayer frequency and belief in God.

## Conclusion

The present study set out to examine whether attendance at an independent Christian secondary school exerted detectable impact on students' religious, personal and social values. The research question was operationalised by drawing on data from the Teenage Religion and Values Survey as reported by Francis (2001), by identifying a set of 11 specific measures of religious, personal and social values, by taking into account a set of control variables specifying personal, contextual, psychological and religious factors, and by employing multilevel linear models to take into account the nesting of students within schools. This approach to the research question assumed that differences between school types remaining after controlling for the specified personal, contextual, psychological and religious factors within the context of multilevel linear modelling could be interpreted as attributable to the effects of independent Christian schools on their students.

The main finding from these analyses is that independent Christian schools exert influence over the values of their students in addition to the effects that can be attributed to personal factors (sex and school year), to contextual factors (father in full-time employment, mother in full-time employment, rural location of home, and academic expectation to attend university) and to psychological factors (extraversion, neuroticism, and psychoticism). Assuming that the higher levels of religiosity evidenced by students attending independent Christian schools (religious affiliation, church attendance, frequency of prayer, and belief in God) are at least partly nurtured and sustained by these schools, it can be argued that the effects of independent Christian schools are reflected in six areas, namely better self-esteem, greater rejection of drug use, lower support for illegal behaviours, less evidence of racist

attitudes, higher levels of conservative Christian belief, and more conservative views on sexual morality. Each of these effects is consistent both with the theological rationale for independent Christian schools and with the empirical evidence marshalled by ap Siôn, Francis, and Baker (2007, 2009) on the basis of qualitative data provided by men and women who had graduated from independent Christian schools in the United Kingdom between 1985 and 2003. Both this theological rationale and the qualitative data also provide a narrative through which the quantitative results may be interpreted, both in broad terms and more specific terms.

In broad terms, the origins of independent Christian schools, with their explicit theological rationale, may well be an important factor in explaining the types of values displayed by their students. In comparison with other schools with a distinctive religious character, independent Christian schools emerged in response to a perceived need for the provision of a different kind of 'Christian education' for students, one that was unavailable within the current state-maintained education sector, including the schools with church-related foundations. Qualitative analyses of the responses of past students of independent Christian schools (ap Siôn, Francis, & Baker, 2007, 2009) have demonstrated that many recognized that their education had been distinctive when compared to that provided by other schools. The reflections on their school experiences illustrated a holistic approach to education that was centred on particular interpretations of the Christian faith and concern with the faith development (broadly conceived) of each individual child. Many commented on the close relationships between staff and students and the family-like environment in which they were educated; boundaries between what would normally be considered 'school' concerns and 'home' concerns could be argued to be less apparent in the Christian schools (ap Siôn, Francis, & Baker, 2009, p 243). Within this very distinctive type of environment, it

is possible to understand more readily how the independent Christian schools may influence the beliefs and values of their students.

In more specific terms, the qualitative data presented by ap Siôn, Francis, and Baker (2007, 2009) may offer insights into some of the current study's findings relating to the six areas where the positive effects of independent Christian schools have been demonstrated. One example of material from the qualitative studies, providing depth to the quantitative results, is the teachers' concern for individual students and for all aspects of their growth, the 'safe, loving and caring' environment at times linked explicitly to the schools' Christian foundation, the development of a strong Christian foundation in their lives and the importance of 'protection' during this key formative period from unhelpful influences, a strong moral grounding and an awareness of their place in and responsibilities to society. These observations from past students are highly consistent with the quantifiable presence of better self-esteem, greater rejection of drug use, and lower support for illegal behaviours.

Finally, it is also reasonable to postulate that certain characteristics of teachers employed in independent Christian schools may be significant in interpreting the influence that the schools appear to exert on their students' beliefs and values. For example, it is likely that many teachers in independent Christian schools come from distinctive Christian backgrounds. It would be interesting to explore the extent to which teachers hold and model shared values, which may be reflected in their students' values. It would be useful to test this hypothesis by conducting further qualitative and quantitative studies designed to explore the teachers' beliefs and values specifically.

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Table 1

*Dependent variables: item properties*

| | IRC | %E |
|---|---|---|
| *Scale of low self-esteem* | | |
| I feel my life has a sense of purpose† | .40 | 46 |
| I find life really worth living† | .52 | 68 |
| Sometimes I considered taking my own life | .41 | 27 |
| I feel I am not worth much as a person | .46 | 13 |
| *Scale of rejection of drug use* | | |
| It is wrong to sniff glue | .42 | 77 |
| It is wrong to use marijuana | .47 | 50 |
| It is wrong to become drunk | .34 | 18 |
| It is wrong to sniff butane gas | .45 | 72 |
| It is wrong to smoke cigarettes | .44 | 41 |
| It is wrong to use heroin | .51 | 72 |
| *Scale of endorsing illegal behaviour* | | |
| There is nothing wrong in shop lifting | .45 | 7 |
| There is nothing wrong in buying cigarettes under age | .54 | 30 |
| There is nothing wrong in travelling without a ticket | .48 | 21 |
| There is nothing wrong in cycling without lights | .39 | 17 |
| There is nothing wrong in buying alcohol under age | .57 | 42 |
| It is wrong to have sex under age† | .43 | 22 |
| *Scale of racism* | | |
| Some of my best friends are black† | .40 | 23 |
| I have friends who are black† | .43 | 64 |
| There are too many black people in this country | .40 | 14 |
| Immigration should be restricted | .30 | 28 |
| *Scale of positive attitude toward school* | | |
| I am happy in my schools | .53 | 71 |
| I like the people I go to school with | .27 | 89 |
| My school is in a boring place† | .32 | 31 |
| School is boring† | .55 | 37 |
| Teachers do a good job | .45 | 43 |
| My school helps prepare me for life | .40 | 68 |
| *Scale of conservative Christian belief* | | |
| I believe Jesus Christ is the son of God | .72 | 47 |
| I believe Jesus really rose from dead | .76 | 30 |
| God made the world in six days and rested | .67 | 19 |
| Christianity is the only true religion | .45 | 15 |
| God punishes wrongdoers | .51 | 19 |
| *Items concerning sexual morality* | | |
| Abortion is wrong | .30 | 37 |
| Contraception is wrong | .35 | 6 |
| Divorce is wrong | .39 | 19 |
| Homosexuality is wrong | .26 | 36 |
| It is wrong to have sex outside marriage | .33 | 14 |

Note: Note: IRC = Item-rest of scale correlation
%E = percentage endorsement of the item.
† These items were reverse coded.

Table 2

*Dependent variables: scale properties and metrics*

| | | | Christian | | Community | | |
|---|---|---|---|---|---|---|---|
| | N items | Alpha | Mean | SD | Mean | SD | *t* |
| Scale of low self esteem | 4 | .66 | 8.3 | 3.0 | 9.2 | 3.2 | 4.9*** |
| Scale of rejection of drug use | 6 | .71 | 22.8 | 5.0 | 20.8 | 4.9 | 6.7*** |
| Scale of endorsing illegal behaviours | 6 | .74 | 12.7 | 5.0 | 15.7 | 4.8 | 10.0*** |
| Scale of racism | 4 | .60 | 9.8 | 2.3 | 10.6 | 3.2 | 5.4*** |
| Scale of positive attitude toward school | 6 | .68 | 21.4 | 4.3 | 21.1 | 4.1 | 1.4 |
| Scale of conservative Christian belief | 5 | .83 | 20.6 | 3.9 | 13.8 | 4.5 | 28.6*** |
| Item on abortion | | | 4.1 | 1.1 | 3.1 | 1.4 | 16.0*** |
| Item on contraception | | | 2.2 | 1.0 | 1.9 | 1.0 | 4.3*** |
| Item on divorce | | | 3.4 | 1.3 | 2.5 | 1.2 | 11.6*** |
| Item on homosexuality | | | 4.2 | 1.1 | 3.0 | 1.4 | 13.9*** |
| Item on sex outside marriage | | | 3.7 | 1.4 | 2.0 | 1.2 | 20.7*** |

Note: For individual items, high score indicated a negative attitude. *** $p < .001$.

Table 3

*Eysenck's personality measures: scale properties and metrics*

| | | | Christian | | Community | | |
|---|---|---|---|---|---|---|---|
| | N items | Alpha | Mean | SD | Mean | SD | *t* |
| Extraversion | 6 | .68 | 4.0 | 1.7 | 4.6 | 1.5 | 5.2*** |
| Neuroticism | 6 | .69 | 3.2 | 1.9 | 3.3 | 1.8 | 1.4 |
| Psychoticism | 6 | .61 | 1.8 | 1.5 | 1.6 | 1.4 | 2.7** |
| Lie scale | 6 | .58 | 2.2 | 1.6 | 2.3 | 1.6 | 0.5 |

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

Table 4

*Dichotomous control variables*

| | Christian % | Community % | $\chi^2$ |
|---|---|---|---|
| *Personal factors* | | | |
| sex (proportion female) | 49 | 50 | 0.3 |
| school year (proportion year-ten) | 53 | 47 | 4.2* |
| *Contextual factors* | | | |
| father in full-time employment | 84 | 81 | 1.6 |
| mother in full-time employment | 35 | 38 | 1.1 |
| rural location of home | 20 | 39 | 43.4*** |
| expects to go to university | 56 | 53 | 1.0 |
| *Religious factors* | | | |
| Self-assigned religious affiliation as 'none' | 12 | 58 | 242.3*** |

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

Table 5

*Continuous control variables*

| | Christian | | Community | | |
|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | *t* |
| *Contextual factors* | | | | | |
| parental social class | 3.1 | 0.9 | 3.6 | 0.8 | 7.8*** |
| *Religious factors* | | | | | |
| frequency of church attendance | 4.2 | 1.3 | 1.9 | 1.3 | 27.4*** |
| frequency of personal prayer | 3.5 | 1.6 | 1.8 | 1.2 | 17.5*** |
| belief in God | 4.4 | 1.0 | 3.1 | 1.3 | 22.9*** |

Note: ***$p < .001$

Table 6 *Self-esteem, drug use, and illegal behaviours in relation to school type and religiosity*

| | Low self-esteem | | | Rejection of drug use | | | Endorsing illegal behaviour | | |
|---|---|---|---|---|---|---|---|---|---|
| | Model | | | Model | | | Model | | |
| | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 |
| Intercept | 9.16*** | 9.87*** | 9.79*** | 20.93*** | 19.67*** | 19.83*** | 15.50*** | 16.39*** | 16.23*** |
| Male (female) | | -0.33*** | -0.38*** | | 0.77*** | 0.87*** | | 0.10 | -0.02 |
| Year 9 of school (10) | | 0.13** | 0.15*** | | 0.66*** | 0.63*** | | -0.74*** | -0.70*** |
| Father in full-time work | | -0.40*** | -0.39*** | | 0.26** | 0.25** | | -0.22** | -0.21** |
| Mother in full-time work | | 0.13** | 0.10* | | -0.14* | -0.09 | | 0.28*** | 0.21*** |
| Living in village | | 0.00 | -0.01 | | -0.16* | -0.15* | | 0.17** | 0.17* |
| Expecting university | | -0.56*** | -0.51*** | | 0.58*** | 0.48*** | | -0.66*** | -0.53*** |
| Extraversion | | -0.33*** | -0.33*** | | -0.27*** | -0.28*** | | 0.35*** | 0.35*** |
| Neuroticism | | 0.75*** | 0.76*** | | -0.03 | -0.05** | | 0.07*** | 0.09*** |
| Lie scale | | -0.15*** | -0.10*** | | 0.63*** | 0.55*** | | -0.88*** | -0.79*** |
| Psychoticism | | 0.25*** | 0.23*** | | -0.92*** | -0.87*** | | 0.99*** | 0.94*** |
| Parental class | | 0.26*** | 0.24*** | | -0.01 | 0.04 | | 0.18*** | 0.11** |
| Religiously affiliated | | | 0.09 | | | -0.19* | | | 0.14* |
| Church attendance | | | -0.02 | | | 0.08* | | | -0.27*** |
| Belief in God | | | -0.30*** | | | 0.41*** | | | -0.32*** |
| Prayer frequency | | | 0.00 | | | 0.06 | | | -0.09** |
| Independent Christian school | | -0.88*** | -0.41* | | 1.98*** | 1.09** | | -3.00*** | -1.78*** |
| ICC | 1.1% | 0.6% | 0.5% | 5.3% | 4.9% | 4.4% | 5.5% | 3.8% | 3.3% |

Note: Table gives unstandardized parameter estimates (B). Reference categories are in parentheses.
ICC= Intraclass Correlation Coefficient. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 7 *Racism, school, and Christian belief in relation to school type and religiosity*

| | Racism | | | Attitude to school | | | Conservative Christian belief | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Model | | | Model | | | Model | |
| | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 |
| Intercept | 10.56 | 10.11*** | 10.07*** | 21.00 | 20.20*** | 20.30*** | 14.41 | 13.96*** | 14.28*** |
| Male (female) | | 1.16*** | 1.12*** | | -0.02 | 0.06 | | -0.44*** | 0.03 |
| Year 9 of school (10) | | -0.01 | 0.00 | | 0.24*** | 0.22*** | | 0.24*** | 0.09* |
| Father in full-time work | | 0.09 | 0.09 | | 0.30*** | 0.29*** | | 0.14 | 0.09 |
| Mother in full-time work | | -0.14*** | -0.17*** | | -0.05 | -0.01 | | -0.28*** | -0.03 |
| Living in village | | 0.07 | 0.07 | | -0.09 | -0.07 | | -0.10 | -0.02 |
| Expecting university | | -0.28*** | -0.23*** | | 0.93*** | 0.85*** | | 0.02 | -0.41*** |
| Extraversion | | -0.21*** | -0.21*** | | 0.29*** | 0.28*** | | 0.10*** | 0.04** |
| Neuroticism | | -0.02 | -0.02 | | -0.33*** | -0.34*** | | 0.17*** | 0.09*** |
| Lie scale | | 0.01 | 0.05** | | 0.59*** | 0.52*** | | 0.62*** | 0.21*** |
| Psychoticism | | 0.25*** | 0.23*** | | -0.62*** | -0.58*** | | -0.26*** | -0.02 |
| Parental class | | 0.07* | 0.05 | | -0.22*** | -0.18*** | | 0.01 | 0.21*** |
| Religiously affiliated | | | 0.02 | | | -0.10 | | | -0.16** |
| Church attendance | | | -0.08*** | | | 0.05 | | | 0.21*** |
| Belief in God | | | -0.11*** | | | 0.39*** | | | 2.34*** |
| Prayer frequency | | | -0.06** | | | 0.02 | | | 0.25*** |
| Independent Christian school | | -0.86** | -0.41 | | 0.44 | -0.26 | | 6.91*** | 2.87*** |
| ICC | 7.3% | 6.8% | 7.1% | 3.2% | 2.5% | 2.5% | 16.1% | 3.6% | 1.9% |

Note: Table gives unstandardized parameter estimates (B). Reference categories are in parentheses.
ICC= Intraclass Correlation Coefficient. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 8 *Abortion, contraception, and divorce in relation to school type and religiosity*

| | Abortion | | | Contraception | | | Divorce | | |
|---|---|---|---|---|---|---|---|---|---|
| | Model | | | Model | | | Model | | |
| | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 |
| Intercept | 3.17*** | 3.32*** | 3.30*** | 1.91*** | 1.81*** | 1.77*** | 2.54*** | 2.42*** | 2.44*** |
| Male (female) | | -0.09*** | -0.07** | | 0.32*** | 0.32*** | | 0.26*** | 0.29*** |
| Year 9 of school (10) | | 0.17*** | 0.16*** | | 0.29*** | 0.29*** | | 0.08*** | 0.07*** |
| Father in full-time work | | -0.15*** | -0.15*** | | -0.11*** | -0.11*** | | 0.00 | 0.00 |
| Mother in full-time work | | -0.03 | -0.01 | | -0.03 | -0.02 | | -0.04** | -0.03 |
| Living in village | | -0.06* | -0.05* | | 0.00 | 0.00 | | -0.01 | -0.01 |
| Expecting university | | -0.21*** | -0.24*** | | -0.26*** | -0.26*** | | -0.15*** | -0.18*** |
| Extraversion | | 0.03*** | 0.02*** | | -0.04*** | -0.04*** | | -0.02** | -0.02** |
| Neuroticism | | 0.03*** | 0.03*** | | -0.01 | -0.01 | | 0.02*** | 0.02*** |
| Lie scale | | 0.08*** | 0.05*** | | 0.08*** | 0.07*** | | 0.10*** | 0.08*** |
| Psychoticism | | -0.06*** | -0.05*** | | 0.01 | 0.01* | | -0.01* | 0.00 |
| Parental class | | 0.11*** | 0.13*** | | 0.08*** | 0.08*** | | 0.04** | 0.05** |
| | | | | | | | | | |
| Religiously affiliated | | | 0.07** | | | 0.07*** | | | -0.01 |
| Church attendance | | | 0.06*** | | | 0.02*** | | | 0.06*** |
| Belief in God | | | 0.10*** | | | 0.02** | | | 0.06*** |
| Prayer frequency | | | 0.03** | | | 0.01 | | | 0.06*** |
| | | | | | | | | | |
| Independent Christian school | | 1.11*** | 0.83*** | | 0.29*** | 0.22** | | 0.89*** | 0.58*** |
| | | | | | | | | | |
| ICC | 6.6% | 2.9% | 2.7% | 4.0% | 2.6% | 2.6% | 3.2% | 1.0% | 0.8% |

Table 9 *Homosexuality and sex outside marriage in relation to school type and religiosity*

| | Homosexuality | | | Sex outside marriage | | |
|---|---|---|---|---|---|---|
| | Model | | | Model | | |
| | 0 | 1 | 2 | 0 | 1 | 2 |
| Intercept | 3.13 | 2.77*** | 2.78*** | 2.17 | 2.10*** | 2.11*** |
| Male (female) | | 0.83*** | 0.84*** | | 0.02 | 0.07*** |
| Year 9 of school (10) | | 0.04 | 0.03 | | 0.10*** | 0.09*** |
| Father in full-time work | | -0.02 | -0.02 | | -0.06** | -0.07** |
| Mother in full-time work | | -0.09*** | -0.08*** | | -0.09*** | -0.06*** |
| Living in village | | -0.01 | -0.01 | | -0.03 | -0.03 |
| Expecting university | | -0.23*** | -0.24*** | | -0.08*** | -0.13*** |
| Extraversion | | -0.01 | -0.01* | | -0.09*** | -0.09*** |
| Neuroticism | | -0.04*** | -0.04*** | | -0.03*** | -0.03*** |
| Lie scale | | 0.06*** | 0.05*** | | 0.16*** | 0.13*** |
| Psychoticism | | 0.06*** | 0.07*** | | -0.08*** | -0.06*** |
| Parental class | | 0.06*** | 0.07*** | | 0.00 | 0.02* |
| | | | | | | |
| Religiously affiliated | | | -0.01 | | | 0.03 |
| Church attendance | | | 0.00 | | | 0.10*** |
| Belief in God | | | 0.04*** | | | 0.07*** |
| Prayer frequency | | | 0.03** | | | 0.10*** |
| | | | | | | |
| Independent Christian school | | 1.14*** | 1.03*** | | 1.64*** | 1.18*** |
| | | | | | | |
| ICC | 7.0% | 2.5% | 2.3% | 13.2% | 1.9% | 1.1% |

Note: Table gives unstandardized parameter estimates (B). Reference categories are in parentheses.
ICC= Intraclass Correlation Coefficient. * $p < .05$; ** $p < .01$; *** $p < .001$.