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Moulin-Stozek, Daniel; de Irala, Jokin; Beltramo, Carlos; Osorio, Alfonso

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ABSTRACT

How young people spend time out of school is important for their character development. In this article we explore the relationships between adolescents' leisure time and other aspects of their lives, with a particular focus on religion. Using a data set generated by secondary school students in Peru and El Salvador (n = 6085) for a public health project, YOURLIFE, we conducted multiple logistic regression analyses of the relationships between religious identification, salience and practice; five indicators of adolescent risk behaviors; and, four indicators of prosocial attitudes and behaviors. In addition to not participating in risk behaviors such as sex, smoking, drinking alcohol and taking illicit drugs, these analyses show significant relationships between religion and prosocial activities and attitudes. These data are considered in the context of the wider debate over the role of religion in adolescent character development in Latin America and elsewhere.

Introduction

The leisure activities of adolescents are an important but often overlooked aspect of their character development. Not only can behavior in the form of prosocial habits and activities be conceptualized as the outcomes of moral character, but leisure activities and pastimes also provide opportunities for character growth, and strengthen recognized constituents of moral character, such as moral reasoning, motivation and commitment to moral principles. In order to begin to explore the relationships between secondary school students' out-ofschool behaviors with their beliefs and attitudes, we examine the associations between adolescents' leisure activities and their religious identifications and commitments. This opens a renewed and specific line of inquiry in answer to an old and broad question: how does religion relate to the development of character? This study contributes two substantive and methodological strengths in respect to this question. Firstly, by using a large sample of students from randomly selected schools, it provides some reliable evidence about the relationships between religion and character outcomes among adolescents in Peru and El Salvador. Secondly, by including measures of religious identification, salience and participation, it allows for analyses of the associations between personal commitment to religion and behavioral and attitudinal choices, as well as the associations of identifying as a member of a religious community, or coming from a family with some practicing members.

Habits, activities and risk behaviors in the study of adolescent character development

Practicing edifying habits and activities has long been considered essential to the formation of good character (Pieper, 1952). Virtue 'arises out' of appropriate activities, observed Aristotle in The Nicomachean Ethics (2009, p. 24). There are two important corollaries to this. Firstly, it is the performance of a virtuous action that displays true virtue, not just the capacity or inclination to do so. Secondly, one effective way to acquire virtue is to first

practice it. Habituated actions subsequently develop the correct emotional and motivational dispositions that constitute good character. Despite these ancient and deceptively simple insights, empirical research in character and moral education often focuses upon the intermediary psychological dispositions or traits thought to produce virtuous or moral behavior, rather than exploring the relationships and associations between behaviors and activities in their own right (Moulin-Stożek, in press). Measures of intermediary variables—such as self-reported personal strengths (e.g. Ruch, Weber, & Park, 2014)—have drawn critique from educators and psychologists who note their lack of contextual sensitivity and conceptual clarity (Alexander, 2016; Camfield, 2015; Clement & Bollinger, 2016; Kristjánsson, 2013). Given these criticisms, the self-reported behavior and attitudes of adolescents are two relatively simple alternative indicators of good character. While being etiologically complex, behavioral measures offer the advantage of enabling analyses of contextual predictors associated with prosocial attitudes and behaviors, or those with antisocial or self-harming behaviors. In this regard, the study of adolescent risk behaviors is particularly relevant because character educators are often concerned with enabling young people to desist in engaging in harmful or immoral activities in favor of more constructive ones (Lickona, 1992).

Religion, education and character development

Religion is often the subject of disagreement among educators (e.g. Cooling, 2012; Moulin& Robson, 2012; Richardson, 2017). While it is approached in different ways depending on national context, its role in education has been deeply contested historically and remains controversial worldwide (Berglund, Shanneik, & Bocking, 2016). Consequently, leading values educators working in the Anglo-Saxon tradition have often kept religion at a distance on the account that it clouds the universal nature of moral development and the wider

relevance of character education. For example, Kohlberg and Power (1981) argued that there is no religious influence upon the psychology of moral development. More recently, Kristjánsson (2013) asserted that character virtues do not rest on religious values. At the same time, religious education in Europe and North America has been increasingly separated from moral education and given a new remit to promote religious tolerance rather than the cultivation of religious commitment (Moulin, 2012, 2015). This is perhaps necessary for those negotiating ideological differences in order to promote aspirational goals and programs globally, including human rights and public health projects.

Nevertheless, belief in a religious foundation to moral character and behavior has a long history. In recent years, some commentators, James Davidson Hunter and Charles Taylor chief among them, have advanced the importance of a 'strong source' to morality which is increasingly disputed or missing in public life and educational discourse in North America and Europe (Hunter, 2000; Taylor, 1989). As a strong source of personal, moral and social identity, the potential impact of religion on adolescents' lives is no doubt complex, and plays out in myriad ways, not least influencing educational satisfaction and attainment (Mooney, 2010). Religious identification may indicate commitment to a particular moral code, while religious practice may influence well-being and self-belief through ritual, or make one subject to the regulation and censure of a community which holds a specific moral code (McKay & Whitehouse, 2015). Exploring these factors among adolescents is important because understanding the impact of local moral norms on young people's behavior remains an important but perhaps neglected issue in the field of moral education, particularly when developing global education agendas (Dasen & Akkari, 2008). Taking into consideration the cultural contingency of varying 'conceptions of the good' has therefore been asserted as particularly important to develop context-appropriate character education programs internationally (Alexander, 2016). Examining the role of religious commitment in character

development is pertinent in Latin America in this regard, where patterns of religious participation are much different from North America and Europe (Klaiber, 2009). The data available, although partial, suggest that in El Salvador and Peru, dedication to a theistic source of morality is widespread, even among young people. Estimates suggest that around 88% of the population in El Salvador identify as Christian (Pew Research Center, 2014). While in the 2007 census of Peru (a new one is being conducted at the time of writing), 96% of 12- to 24-year-olds professed a religion (Instituto Nacional de Estadística e Informática [INEI], 2007).

Research conducted internationally suggests religious participation is associated with prosocial behavior and physical and psychological well-being across ages (Koenig, McCullough, & Larson, 2001). This includes volunteering (Yeung, 2004) and a range of positive outcomes among adolescents (Ebstyne King & Furrow, 2008), including the reduced likelihood of delinquency (Regnerus, 2003b). At present there is limited data available regarding the relationship between religion and these kinds of outcomes among adolescent populations in Latin America—a gap that the present study seeks to begin to redress. One controversial behavior examined in this study which is well documented in Latin America, however, is adolescents' sexual exploitation. In El Salvador and Peru, as in much of the region where there is social inequality and violence, sexual risk and lack of sexual education among adolescents are severe public health problems (Cortez, Revuelta, & Guirola, 2015; Sánchez et al., 2003). Sex education is considered a public health issue and religion and cultural values can be seen as a barrier to educating about sexuality on a scientific basis and preventing exploitation (Khubchandani, Clark, & Kumar, 2014). As a result, the influence of Christianity can come under criticism for its teachings on sexual morality (Shepard, 2000). Connected to this is an ongoing debate about the efficacies of abstinence-centered programs of sex education (Kohler, Manhart, & Lafferty, 2008). Evaluations of specific educational

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programs do not explore the underlying relationships between religion and risk behavior, however. Some research undertaken in North America suggests that religious practice and identification can protect against adolescent risk behaviors such as early sexual initiation, use of pornography, tobacco, alcohol and drugs (Sinha, Cnaan, & Gelles, 2007).

Regnerus (2003a) made the observation that most studies of risk behaviors and religion

in adolescence implicitly theorize the role of religion as a form of social control that stops young people from doing things that they may otherwise do. This is coherent with the dominating functionalist tradition in the social scientific study of religion that conceptualizes and explains religion in terms of its social benefits to society (Durkheim, 1912). More recently, however, the interaction of religion (and practices connected to religion) with character traits and moral behavior has been studied with increasing complexity (e.g. McKay & Whitehouse, 2016; Rybanska, McKay, Jong, & Whitehouse, 2017). This is important for the field of character education because although the role of intrinsic motivation in character development has been stressed, arguably little is known about how this may take place in the context of individual adolescents' lives. For example, Ai et al. (2013) show how the virtues of resilience and altruism mobilized in response to disaster, can be associated with individuals' spiritual 'deep connections' to cultural values. While there is a growing body of scientific research of this kind originating in North America and Europe, relatively little research has been undertaken in other cultural contexts—a recognized problem across the social and human sciences (Arnett, 2008; Henrich, Heine, & Norenzayan, 2010). Latin American nations therefore give a relevant opportunity to explore the associations between a commitment to a theistic source of morality and the behaviors and attitudes of adolescents in a social context where religious participation and identification are relatively strong. The present study therefore presents something of intrinsic, broad and timely relevance to the

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fields of moral and character education. Namely, how religious commitment may be related to certain measurable behaviors and attitudes.

Methods

In order to explore the associations between religion and attitudinal and behavioral outcomes among adolescents in Peru and El Salvador, we analyzed data from an international public health research project, YOURLIFE (Carlos et al., 2016; de Irala et al., 2009; Osorio, Lopez-del Burgo, Ruiz-Canela, Carlos, & de Irala, 2015; Osorio et al., 2012). This uses a questionnaire in secondary schools to generate responses about adolescents' attitudes to love, sexuality and related behaviors. Using the self-reports of 6085 secondary school students (aged 13 to 18) from Peru and El Salvador, we examined the influence of religious commitment upon attitudinal and behavioral outcomes. We compared nominally religious adolescents and practicing religious adolescents with those who reported higher religious salience—the reported subjective importance of religion to life (Wade & Perkins, 1975). These are examined in relation to several reported behaviors, attitudes, habits and activities. Some of these behaviors are frequently classified as 'adolescent risk behaviors', a term used to denote a range of factors that are likely to result in physical, psychological or social harm and/or limit healthy development in adolescence (DiClemente, Hansen, & Ponton, 2013). Others are protectors against risk factors, or indicators of prosociality—attitudes and behaviors intended to help others (Jansen, 2016). While project YOURLIFE is longitudinal in design, this article only draws on cross-sectional data from El Salvador and Peru as examples of two Latin American nations. For the purposes of this article, data from El Salvador and Peru were used as examples of two Latin American nations.

Participants

Within each country, a multi-stage sampling of clusters of public and private schools was performed. In El Salvador, we randomly selected 30 public and private secondary schools from San Salvador, Santa Ana and San Miguel (the three main urban areas of the country). In Peru, we randomly selected 62 public and private secondary schools from the whole country. We targeted sample sizes of approximately 3000 participants in each country, taking into account approximate sample size estimation criteria (Hosmer & Lemeshow, 1989; Vittinghoff & McCulloch, 2007). Estimates were based on the criteria that 10 respondents with the least frequent outcome would be needed for each parameter included in a statistical model used to adjust for confounding factors. With these sample sizes we expected to obtain sufficient statistical power to account for a considerable amount of variables in a given model. Within each school, we invited all 13- to 18-year-old students to participate. The questionnaire was completed by 6085 adolescents aged 13 to 18 (2686 from El Salvador and 3399 from Peru).

Procedure

The study used standardized data-collection protocols for the YOURLIFE project (Carlos et al., 2016). Within each country, locally-recruited research assistants went to the schools to conduct the questionnaire. In order to allow participants' privacy and to enable them to anonymously disclose sensitive information, questionnaires were conducted in schools away from parents and by unknown people—not the participants' teachers but the local research collaborators (Tourangeau & Yan, 2007). The questionnaires, written in local forms of Spanish, had closed-ended questions, including Likert scales. No names or other identifying information were collected, improving the chances of reliability of participants' responses due to anonymity. A pilot study was previously conducted, and adjustments were performed in order to improve comprehension and to fit in a 45 minute classroom session. The data

generation and storage and overall methods were reviewed by an ethical committee. Questionnaires were completed according to the principles of voluntary informed consent. Schools managed parental consent according to their own policies (Ruiz-Canela et al., 2013). Voluntary participation among participants was guaranteed during implementation in all schools: if they wished, students were able to leave the room, leave the questionnaire unanswered and/or leave any question unanswered.

Measures

Independent variables: religious identification, practice and salience

Students were asked what their religion was (religious identification). Those who had a religion were also asked how often they attended their place of worship (religious practice) and how important their faith was for them (religious salience). The latter two variables were dichotomized in the following ways. For religious salience, participants who said that their faith was 'very important' or 'important' for them, formed one group (high religious salience) distinct from those who reported 'more or less important,' 'little important,' or 'not important' (low religious salience). For religious practice, participants who said that they attended their place of worship at least once a week were categorized as one group and those who said they attended their place of worship less often were categorized as another.

Dependent variables: prosocial behaviors and attitudes and risk behaviors

Prosocial behaviors and attitudes. Items assessing prosocial behaviors were regular community volunteering and participating in structured group activities. Items to measure positive attitudes comprised a measure of attitude to sexism and attitude to pornography. Participants were asked how frequently they participated in regular community volunteering activities during their leisure time (from 'Never' to 'Every day or almost every day'). For

structured group activities, participants were asked how frequently they participated in several activities during their leisure time (from 'Never' to 'Every day or almost every day'). We constructed a composite measure of 'Structured leisure' with the frequency of three activities: sports, other school unrelated club activities and artistic activities. This variable was dichotomized by splitting it along the median and this resulted in comparing 'Never' versus other frequencies, from 'Once a month or less' to 'Every day or almost every day.' Participants were asked four questions to give a measure of sexism/being against sexism. These included whether they thought that media should avoid showing women and men as sexual objects, or associating femininity or masculinity with having more sexual partners. Those who replied 'Yes' to all four questions were considered 'Against sexism.' Those who replied 'No' or 'I don't know' to any of them were considered as 'Not against sexism.' In addition, participants were asked whether they thought that 'Viewing pornography should be avoided' which was dichotomized: 'Yes' versus 'No' or 'I don't know.' These items were dichotomized in this manner because being unsure was not considered strong enough to attribute anti-sexist/pornography attitudes. Several other items also accessed personal and socio-demographic information which were used in the present study as control variables: age, sex, economic status, school type (public/private) and impulsivity (dichotomous variable based on three questions).

Risk behaviors. The risk behaviors included were unstructured leisure, sexual initiation and use of tobacco, alcohol and illicit drugs. Participants were asked how frequently they participated in several activities during their leisure time (from 'Never' to 'Every day or almost every day'). No distinction was made between kinds of illicit drugs. We constructed a composite measure of 'Unstructured leisure' with the frequency of four activities: being in the street, bars/discos, premises without adult supervision, or in malls. The variable was

dichotomized splitting it by the median. Participants were asked whether they had already had sexual relationships; and how frequently they used tobacco, alcohol, or illicit drugs. All of these variables were dichotomized to compare 'Never' versus other frequencies.

Data analysis strategies

Bivariate associations were assessed with Chi-square tests. Then, multivariate non-conditional

logistic regression models were fit with reported religious identification (identifying with a religion), religious practice and religious salience as independent variables, and the different behaviors and attitudes as dependent variables. In all the models we also introduced, as possible confounders: age, sex, economic status, school type (public/private) and impulsivity. We first compared participants with a religion versus participants without a religion. The variable religious identification was therefore the main independent variable and the behaviors and attitudes were the dependent variables. Secondly, for participants who reported identifying with a religion, we assessed the independent impact of religious salience and religious practice. These variables were the main independent variables and the behaviors and attitudes became again the dependent variables. In each of these sets of analyses, for each country, we ran nine different regressions (one for each outcome). All analyses were performed using Stata 12 and $p < 0.05$ was considered statistically significant.

Results

Descriptive results

Table 1 (at the end of the manuscript) shows the main socio-demographic characteristics of participants by country and in total. Participants had a mean age of 15.2 years and almost half of them were female (49.7%). Most of them studied in public schools and lived in families

with a middle socioeconomic level. Christianity was the majority religion with Catholicism the main denomination (63.8%); with only a minority of 5.3% of participants identifying with a religion other than Christianity. Of the 88.4% of participants who stated having a religion, only 39.2% reported both religious practice and religious salience. El Salvador had a higher percentage of Protestants (29.9%) in comparison with Peru (11.3%). Compared with available data, these findings confirm significant trends, El Salvador being one of the countries with higher rates of 'switching' from Catholicism to Protestantism in the region (Pew Research Center, 2014). Among Peruvian adolescents, religious identification was less than the national average reported in the last available census data, which returned 81.33% Catholic compared with 72.5% in this study (INEI, 2007). A similar proportionate difference can be seen in the percentage of Peruvian adolescents reporting Protestant affiliation compared with the census, 12.5% being the national average in 2007, in this study, 11.3%. Associations between religious identification and prosocial and risk behaviors Table 2 (at the end of the manuscript) shows the behaviors and attitudes associated with identifying with a religion (religious identification). Columns 2, 3, 5 and 6 in Table 2 show the reported behaviors and attitudes according to the respondents' religious identification separately for each country. Columns 4 and 7 of Table 2 show the adjusted impact of religious identification over the outcomes with the main independent variable being religious identification. When compared with those of no religion, participants that identified with a religion were significantly more likely to report structured leisure in El Salvador (OR = 1.98; 95% CI: 1.47–2.67) and volunteering in Peru (OR = 1.66; 95% CI: 1.30–2.10). They were significantly less likely to report sexual initiation in both countries (El Salvador: OR = 0.61; 95% CI: 0.46–0.81; Peru: OR = 0.74; 95% CI: 0.55–1.00) and in El Salvador, unstructured leisure (OR = 0.70; 95% CI: 0.54–0.92), smoking (OR = 0.47; 95% CI: 0.35–0.64) and using illicit drugs (OR = 0.34; 95% CI: 0.23–0.52).

Associations between religious salience and practice and prosocial and risk behaviors

We also wanted to assess, among participants who identified with a religion, the independent impact of religious salience and religious practice (Table 3 – at the end of the manuscript). Religious salience and practice were associated with higher frequencies of volunteering in Peru only (Salience: OR = 1.47; 95% CI: 1.25–1.72; Practice: OR = 2.24; 95% CI: 1.91–2.63). In both countries, religious salience was significantly associated with structured leisure (El Salvador: OR = 1.43; 95% CI: 1.12–1.84; Peru: OR = 1.26; 95% CI: 1.08–1.48), attitude against pornography (El Salvador: OR = 1.90; 95% CI: 1.48–2.44; Peru: OR = 1.87; 95% CI: 1.57–2.23) and attitude against sexism (El Salvador: OR = 1.59; 95% CI: 1.22–2.08; Peru: OR = 1.65; 95% CI: 1.35–202). Religious practice, on the other hand, was only significantly associated with structured leisure in both countries (El Salvador: OR = 1.50; 95% CI: 1.17–1.92; Peru: OR = 1.92; 95% CI: 1.64–2.25), and against pornography in El Salvador (OR = 1.45; 95% CI: 1.12–1.87). With the exception of unstructured leisure, in El Salvador, religious salience was significantly associated with protecting against all risk behaviors: sexual initiation (OR = 0.55; 95% CI: 0.42–0.72), smoking (OR = 0.44; 95% CI: 0.33–0.58), drinking (OR = 0.53; 95% CI 0.40–0.71) and using drugs (OR = 0.36; 95% CI: 0.23–0.55). While religious practice in El Salvador was significant in protecting against unstructured leisure (OR = 0.76; 95% CI: 0.59–0.97), sexual initiation (OR = 0.74; 95% CI: 0.57–0.97), smoking (OR = 0.69; 95% CI: 0.51–0.93), drinking (OR = 0.61; 95% CI: 0.46–0.81), but not using drugs. In Peru, religious salience was associated with protecting against unstructured leisure (OR = 0.84; 95% CI: 0.71–0.99), smoking (OR = 0.61; 95% CI: 0.50–0.73), drinking (OR = 0.68; 95% CI: 0.57–0.80), and using drugs (OR = 0.47; 95% CI: 0.35–0.64), but not sexual initiation. Religious practice in Peru was significantly associated with sexual

initiation (OR = 0.75; 95% CI: 0.60–0.94), smoking (OR = 0.77; 95% CI: 0.64–0.93), and

drinking (OR = 0.72; 95% CI: 0.61–0.86), but not unstructured leisure or using illicit drugs.

Discussion

The study is limited in several important respects. In the first place, it is important to note that

as a cross-sectional study, no assumptions of cause should be made. Indeed, participating in

risk behaviors may also inhibit religious salience and practice as well as vice versa.

Moreover, there is still much we do not know about the lives of the adolescents surveyed,

religious and otherwise. It offers no developmental data about how religion may interact with

social, cognitive and affective aspects of adolescent development to become an effective

strong source of moral character. This may include social processes such as participating in

ritual, role-modeling and aesthetic factors (Moulin-Stożek, in press). Moreover, the study

only explores the relationships between a strong theistic source of morality in regard to

established norms of behavior that relate to well-known and established Christian moral

teachings and norms. In that sense, it empirically affirms a logical assumption that self-

reported commitment to a moral code is associated with self-reported behavior congruent

with that moral code. Related to this are issues concerning respondent social desirability

biases.

Despite these limitations, the results suggest that among adolescents in El Salvador

and Peru, religious identification, salience and practice are significantly associated with

prosocial behaviors and attitudes and protect against risk factors. When compared among

those who identify with a religion, religious salience seems to be a stronger predictor of

outcomes than religious practice. For example, religious salience is associated with being

against sexism and not using illicit drugs in both countries, whereas religious practice is not

associated with either in either country. The association of being against sexism and religious

salience is a surprising and potentially illuminating finding. While the Church, particularly the Catholic Church, is often assumed to be patriarchal, this suggests that commitment to Christian moral principles (by far the majority religion) may actually help prevent sexist attitudes among adolescents, when only identifying with a religion or practicing it has no significant association. In short, nominal self-identification with a religion, while significant in some respects, is not associated positively with as many protective behaviors or negatively with as many risk behaviors as religious practice, or most of all, as religious salience. These data go some way, therefore, in demonstrating the association of a strong source of moral commitment with character outcomes. They confirm similar associations as found in North America and Europe about the relationships between religious salience and volunteering (Yeung, 2004), and religious salience and the avoidance of a range of risk behaviors with negative implications for healthy adolescent development (Ebstyne King & Furrow, 2008; Regnerus, 2003a; Sinha et al., 2007).

While these findings suggest that religion can have a positive effect on reducing factors

that relate to problems of sexual health and sexual exploitation, they cannot contribute substantially to the debate about abstinence-centered sex education programs. This is because those who self-reported not participating in risk behaviors were more frequently those who already professed a faith. Although religious salience is associated with reduced risk behavior,

this certainly does not imply that religiously-based interventions, for example, would have any impact on those with no subjective sense of the importance of religion beforehand.

Religious salience as an indicator of the efficacious action of religion upon individuals

goes someway to mitigate for a model of religion that purely functions in terms of social control (Regnerus, 2003b). By separating religious identification from the reported subjective importance of religion, the findings of the study suggest that religion does not protect against risk behaviors and promotes positive life-style choices only by virtue of belonging to a religious community, but rather through personal commitment and the choices adolescents may make in relation to it. These findings suggest that a naïve functionalist view of religion as social control (or even educational indoctrination), may not account for the importance of the individual salience of religion as a principal factor in the relationship between religion and moral choice. This is perhaps reflected in findings of recent research that suggests religious practice and identification are predictors of higher scores in tests of moral reasoning (Walker, Thoma, Jones, & Kristjánsson, 2017). Our conclusion is strengthened by the range of adjusted variables included in the analyses that could have otherwise confounded this relationship, such as socio-economic status, age, sex and school-type. Further questions raised by the data, but not answerable with it, are concerned with the variance between countries. While there are similar findings across the national contexts, there are discrepancies. For example, why should volunteering be associated with religious practice and salience in Peru, but not in El Salvador? A further, potentially related question is the comparative differences between religions, particularly between Protestants and Catholics. Could it be, for example, that for Catholics, who are religiously obliged to attend Church weekly, salience may be a better indicator of the subjective importance of religion than religious participation? Could the converse also be true for Protestants? Participation being a better indicator of subjective importance of religion because of the emphasis on personal faith in Protestant denominations as opposed to the reception of sacraments. These questions imply the need for future studies to be denominationally sensitive and incorporate more complex theoretical frameworks in the research design.

Conclusion

Religion, sexuality and morality are controversial. But they are also inextricably linked to any comprehensive and scientific study of character development in adolescence. In educational discourse, there is perhaps an absence of hard quantifiable evidence concerning the various issues that arise in these broad and contestable areas, despite the fact that many questions, when adequately defined, are in principle empirical in nature. For example, the finding that religious identification and even religious practice, can be weaker predictors of positive behaviors than religious salience, suggests that the attempts of religious communites to promote certain moral choices through religious education may have limited effect without considering more thoroughly how religion may engage personal intrinsic moral motivation overall. In this way, perhaps both the religiously inclined and skeptics can agree on the salience of freedom of religious belief. However, this given, in cultural contexts where religious commitment may already prevail, commitment to a strong source of moral conduct and principles, such as religion, should be recognized as an important and relevant feature of adolescent character development (Moulin, 2011). More research is needed to compare religion with other motivating factors, but the findings presented in this study go some small way to suggest religion cannot remain controversial on account of its lack of objective efficacy, or subjective value, to some adolescents. Given this, the study suggests that the relationships between religion and character development in adolescence should be explored further. This includes the extent to which religious salience and practice are dependent upon contextual factors, like schooling, or personal factors, such as religious style; and, how religion and other comparable social phenomena, may instill through such means, intrinsic motivation for good character.

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Disclosure statement

The authors declare no conflicts of interest.

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Notes on contributors

Daniel Moulin-Stożek received his doctorate in Educational Studies from the University of Oxford. He was Research Fellow in the Institute for Culture and Society in the University of Navarra, Spain, 2014–2017. Presently he works at the Jubilee Center for Character and Virtues in the University of Birmingham, UK.

Jokin de Irala has a medical degree from the University of Navarra (1985), an MPH degree from the University of Dundee (UK, 1987), and a doctoral degree in Medicine at the University of Navarra (1990). He obtained a second doctoral degree in Epidemiology at the University of Massachusetts (USA, 2000). Dr. de Irala is the principal investigator of the 'Education of human affectivity and sexuality' project in the Institute for Culture and Society, University of Navarra. The scientific contributions of Dr. de Irala include 12 books, 58 book

chapters and approximately one hundred and fifty scientific papers in both Spanish and international peer reviewed journals.

Carlos Beltramo is coordinator of Character and Affective Education in the Education of human affectivity and sexuality project. He is also Academic Director of the Latin-American Alliance for the Family. His academic work is focused around character, emotional education, and the application of philosophical anthropology to education. He is co-author of two international character education courses: Quiero Querer and Alive to the World, both published in several languages.

Alfonso Osorio is Associate Professor in Psychology in the University of Navarra where he teaches different subjects in the degrees of Psychology and Pedagogy. He has also taught in universities in Chile, Peru and El Salvador, at both undergraduate and postgraduate levels. He is a researcher at the Institute for Culture and Society focusing on family and the education of adolescents, especially sexual education.

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Table 1. Socio-demographic characteristics of the participants

Features	El Salvador (N=2686) n (%)	Peru (N=3399) n (%)	Total (N=6085) n (%)
Sex			
Female	1166 (43.4)	1856 (54.6)	3022 (49.7)
Male	1520 (56.6)	1543 (45.4)	3063 (50.3)
TOTAL	2686 (100.0)	3399 (100.0)	6085 (100.0)
Age (years)			
13	491 (18.3)	115 (3.4)	606 (10.0)
14	564 (21.0)	868 (25.5)	1432 (23.5)
15	520 (19.4)	1071 (31.5)	1591 (26.2)
16	428 (15.9)	974 (28.7)	1402 (23.0)
17	409 (15.2)	309 (9.1)	718 (11.8)
18	274 (10.2)	62 (1.8)	336 (5.5)
TOTAL	2686 (100.0)	3399 (100.0)	6085 (100.0)
Type of school			
Public	1655 (61.6)	1573 (46.3)	3228 (53.1)
Private	1031 (38.4)	1826 (53.7)	2857 (47.0)
TOTAL	2686 (100.0)	3399 (100.0)	6085 (100.0)
Socioeconomic level			
Low	396 (15.6)	401 (12.0)	797 (13.6)
Middle	1728 (68.2)	2451 (73.5)	4179 (71.2)
High	409 (16.2)	482 (14.5)	891 (15.2)
TOTAL	2533 (100.0)	3334 (100.0)	5867 (100.0)
Religion			
No religion	334 (13.3)	348 (10.4)	682 (11.6)
Catholic	1318 (52.3)	2426 (72.5)	3744 (63.8)
Protestant	754 (29.9)	379 (11.3)	1133 (19.3)
Other [a]	113 (4.5)	195 (5.8)	308 (5.3)
TOTAL	2519 (100.0)	3348 (100.0)	5867 (100.0)
Religiosity			
No religion [b]	334 (14.2)	348 (11.0)	682 (12.3)
Nominal religion only [c]	143 (6.1)	742 (23.4)	885 (16.0)
Religion practice only [d]	277 (11.8)	508 (16.0)	785 (14.2)
Religion salience only [e]	302 (12.8)	704 (22.2)	1006 (18.2)
Religion practice and salience [f]	1300 (55.2)	868 (27.4)	2168 (39.2)
TOTAL	2356 (100.0)	3170 (100.0)	5526 (100.0)

Table 2: Associations between identifying with a religion and a selection of behaviors and attitudes

Outcomes	El Salvador			Peru		
	No religion (N=334) n (%)	Identifying with a religion (N=2,185) n (%)	OR (95% CI) [a]	No religion (N=348) n (%)	Identifying with a religion (N=3,000) n (%)	OR (95% CI) [a]
Protective behaviors /attitudes						
Volunteering	60 (19.5)	434 (21.1)	1.02 (0.75-1.40)	146 (42.3)	1558 (52.7)	1.66 (1.30-2.10)
Structured leisure	70 (21.7)	777 (36.3)	1.98 (1.47-2.67)	159 (45.8)	1436 (48.0)	1.18 (0.94-1.50)
Against porn	234 (75.2)	1530 (73.7)	1.01 (0.75-1.36)	210 (62.1)	2032 (69.6)	1.14 (0.89-1.47)
Against sexism	89 (27.6)	660 (31.0)	1.09 (0.83-1.43)	61 (17.9)	631 (21.4)	0.94 (0.70-1.27)
Risk behaviors						
Unstructured leisure	129 (39.7)	819 (37.9)	0.70 (0.54-0.92)	183 (52.7)	1595 (53.3)	0.93 (0.73-1.19)
Sexual initiation	102 (31.9)	454 (21.1)	0.61 (0.46-0.81)	82 (23.8)	493 (16.6)	0.74 (0.55-1.00)
Smoking	82 (25.7)	342 (16.4)	0.47 (0.35-0.64)	98 (30.7)	748 (25.9)	0.86 (0.66-1.12)
Drinking	66 (20.5)	394 (18.6)	0.74 (0.53-1.02)	122 (38.1)	1022 (35.7)	0.89 (0.69-1.15)
Using drugs	41 (12.6)	107 (5.0)	0.34 (0.23-0.52)	40 (12.4)	239 (8.3)	0.84 (0.57-1.21)

[a] Adjusted odds ratios (and their respective 95% confidence intervals). Each row is a logistic regression where the variable in the first column is the dependent variable. The independent variable is always having a religion (the reference category is participants without a religion). Analyses are adjusted for age, sex, type of school, socioeconomic level and impulsivity

Table 3: Associations between religious salience/practice and a selection of behaviors and attitudes

Outcomes	OR (95% CI) [a]			
	El Salvador		Peru	
	Religious salience	Religious practice	Religious salience	Religious practice
Protective behaviors /attitudes				
Volunteering	1.19 (0.89-1.60)	1.04 (0.79-1.38)	1.47 (1.25-1.72)	2.24 (1.91-2.63)
Structured leisure	1.43 (1.12-1.84)	1.50 (1.17-1.92)	1.26 (1.08-1.48)	1.92 (1.64-2.25)
Against porn	1.90 (1.48-2.44)	1.45 (1.12-1.87)	1.87 (1.57-2.23)	1.17 (0.98-1.40)
Against sexism	1.59 (1.22-2.08)	1.17 (0.92-1.50)	1.65 (1.35-2.02)	1.09 (0.90-1.32)
Risk behaviors				
Unstructured leisure	0.78 (0.61-1.00)	0.76 (0.59-0.97)	0.84 (0.71-0.99)	0.97 (0.82-1.14)
Sexual initiation	0.55 (0.42-0.72)	0.74 (0.57-0.97)	0.81 (0.65-1.01)	0.75 (0.60-0.94)
Smoking	0.44 (0.33-0.58)	0.69 (0.51-0.93)	0.61 (0.50-0.73)	0.77 (0.64-0.93)
Drinking	0.53 (0.40-0.71)	0.61 (0.46-0.81)	0.68 (0.57-0.80)	0.72 (0.61-0.86)
Using drugs	0.36 (0.23-0.55)	0.67 (0.42-1.07)	0.47 (0.35-0.64)	0.93 (0.69-1.25)

[a] Adjusted odds ratios (and their respective 95% Confidence Intervals). Each row is a logistic regression where the variable in the first column is the dependent variable. The independent variables are always religious salience and religious practice. Analyses are adjusted for age, sex, type of school, socioeconomic level and impulsivity.