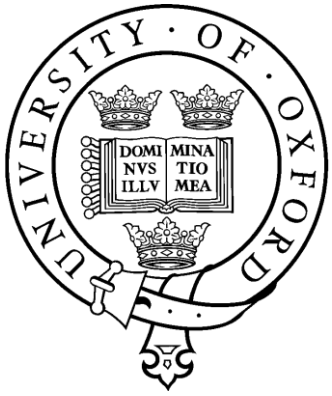
The Role of Religion in Shaping Women's Family and Employment Patterns in Britain and France



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Thesis Abstract

The current study examines the influence of religious affiliation and practice on family patterns and labour market activity for women in Western Europe, focusing on Britain and France. While both countries have experienced a sharp decline in institutionalized forms of religion over the past decades, differences in family and fertility behaviour on the basis of religiosity seem to persist. Although previous studies documented a positive correlation between religion and both intended and actual family size, there is still uncertainty about the different routes through which religion affects fertility, how structural factors are involved in this relationship and whether and how this relationship has changed along with the process of religious decline. This study aims to fill this gap by exploring the interrelationships between religion, educational attainment, female labour force participation, union formation and fertility levels. The data come from the British Household Panel Survey (BHPS), which contains 18 waves from 1991 to 2008, and the French survey of the Generations and Gender Programme (GGP), which was initially conducted in 2005. By following trends in fertility differences by religious affiliation and practice across birth cohorts of women, it is found that religious differences in fertility are not only persistent across birth cohorts, there is also a growing divide between non-affiliated and religiously practicing women who maintain higher fertility levels. Religious differences in family formation patterns and completed fertility are also explored, taking into account the interaction between education and religiosity. It appears that the effect of education on fertility differs by level of religiosity, as higher education is less likely to lead to childlessness or to a smaller family size among more religious women. The findings on the relationships between family and work trajectories by level of religiosity also point to a reduced conflict between paid employment and childbearing among actively religious women, although these patterns vary by religious denomination and by country.

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Acknowledgments

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Preface

The decision to study religious influences on demographic and social behaviour in Western Europe often invokes questions and wonderment. “Is there still such thing as religion in Europe?” is one example of the comments I received when talking about my research to friends and fellow academics. My initial interest in religion and fertility was sparked while studying for a Master’s degree in Demography at the Hebrew University of Jerusalem, when I became more closely acquainted with the diverse fertility regimes of the different religious groups and streams in Israel. However, after moving to the United Kingdom, my focus of attention has shifted as well, and I began to take interest in the ways in which religion shapes the behaviour of individuals in a supposedly highly secularized context. For this purpose, Britain and France serve as good examples of societies that experienced a sharp decline in different forms of religious participation over the past century, but at the same time, as in many other European countries, the majority of population still identify with a particular religion. On the other hand, each country has a unique religious and cultural tradition, as well as different welfare policies, which are also expected to have consequences on demographic and economic behaviours.

The study of religion in Europe inevitably involves the study of secularization. The examination of family and work trends among actively religious individuals therefore also sheds light on the behaviour of their non-religious counterparts, and how the decline in religion during the past decades has influenced these trends for both groups. The secularization process has led to redefinition of religious categorization, as exemplified by the term “Fuzzy fidelity” (see: Voas, 2009), which is used to describe nominally affiliated people who do not actively engage in religious activities. It is not clear however, how these different religious categories - the religiously practicing, the nominally affiliated and the unaffiliated - relate to family and fertility patterns. Building on Calvin Goldscheider’s

(1971) integrated approach to religion and fertility, this study examines how religion interacts with other social systems, such as education and the labour market, and the different links between these institutions and patterns of family formation and fertility. In addition, this study focuses specifically on women, since the links between life cycle events - such as marriage and childbirth - and labour force participation are much more pronounced for women than for men. Finding the appropriate data base for this research was not a simple task. Only a few demographic surveys include questions on religiosity, and other social surveys that do incorporate detailed religious information, usually have poor data related to partnership and birth histories. Eventually, it was decided to use the British Household Panel Study (BHPS) and the French survey of the Generations and Gender Programme (GGP), which are described in further detail in the first chapter. Nonetheless, the shortage in data sources that combines information on religion, family and work in Europe indicates the relative paucity of attention this topic has received so far.

1. Introduction: Religion, Family, Fertility and Work as Interrelated Systems

During the past decades, Western countries experienced major changes in patterns of household formation and reproduction: the age at first marriage and first birth has risen and the proportion of cohabitation and extra-marital births increased dramatically, especially in North-Western Europe (Lesthaeghe, 2010). In addition, a sharp decline in total fertility rates occurred in most developed countries, reflecting the postponement of births as well as a partial catching up at later ages (Surkyn and Lesthaeghe, 2004; van de Kaa, 1993). These changes have been attributed both to cultural shifts and wider socioeconomic developments. Among the main factors associated with these trends are the process of religious decline (secularization) and the shift of values towards greater individualism, emphasising self-fulfilment over traditional family roles (Inglehart, 1990; Lesthaeghe and Surkyn, 1988). Thus, the decline in religion is considered to have played a major role in changes in family and fertility behaviours, alongside other critical social, economic and political processes. The purpose of this study is to examine the role of religious affiliation and practice in shaping family, fertility and employment patterns in the context of highly secularized Western European societies. The countries selected for the analysis are Britain and France; both countries have experienced a marked decline in traditional forms of religion since the mid-twentieth century, although each country embodies different socio-cultural and religious traditions.

As in most other post-industrialized countries, over the past decades there has been a dramatic rise in women's education and participation rates in paid employment in Britain and France (Lewis, 2001; Lewis et al., 2008a; Ní Bhrolcháin and Beaujouan, 2012). These changes are assumed to have a great influence on demographic trends towards later ages at

marriage and first birth and lower fertility rates, as women have alternative and competing roles to traditional family responsibilities (Esping-Andersen, 2009; McDonald, 2000). Nevertheless, it is uncertain whether these changes affect all segments of society in a similar way, or whether women with stronger attachment to religion continue to show more traditional family behaviours despite experiencing these transitions? Moreover, there is little agreement as to whether the social significance of religion is declining in a constant and uniform manner, or whether there is an increasing cleavage between secular and religious individuals in terms of the role that religion plays in everyday lives (Bruce, 2011; Kaufmann, 2010; Kaufmann et al., 2012). Thus, it is possible that in highly secularized societies, differences between religious and non-religious individuals in social and demographic behaviour would increase rather than diminish.

When exploring the relationship between religion and social and demographic behavior, it is important to bear in mind that religion is a complex and multidimensional concept, which includes different levels and measures (Norris and Inglehart, 2004; Southworth, 2005). These may be divided into three main aspects: the first is affiliation - the identification with a specific religion (or lack of such identification). A second dimension is religious practice, most commonly measured as frequency of attendance at religious services or frequency of prayer. The third aspect of religion is belief, which can be measured by self-rated religiosity or the importance of religion in one's life (Voas, 2009).

This study focuses on the two dimensions of affiliation and practice, for both theoretical and methodological reasons; religious affiliation is regarded as a meaningful form of identification, which has consequences on social behavior (Southworth, 2005). In many cases, religious denomination represents the cultural background into which a person was born or grew up, including the social norms and moral values that are associated with specific religious cultures (Day, 2011; Norris and Inglehart, 2004). Moreover, previous

studies have shown that even in modern and secularized societies religious group membership is often correlated with various life course dimensions, including family behaviour, educational attainment, social mobility and political and social attitudes (Heath et al., 1994; Goldscheider, 1971; Stegmueller et al., 2011).

Attendance at religious services is another key measure of religious commitment, and is considered to be a more reliable indicator of religiosity than religious belief, which is more idiosyncratic in nature (Voas, 2009; Voas and Ling, 2010). Bruce (2011:15) also highlights the advantages of using service attendance as an indicator of religiosity, as it forms a "common unit of currency", which enables comparisons over space and time. Moreover, service attendance is highly correlated with other indices of self-described religiosity and the importance attributed to religion in one's life (ibid). In addition, Storm and Voas (2012) maintain that religious service attendance is a stronger signal of commitment than other measures of religiosity, such as private prayer, since it has a public aspect to it and it involves the investment of time and effort.

It is also important to pay attention to the interdependencies of religious affiliation and practice; firstly, the intensity of religious involvement is expected to accentuate the effects associated with religious affiliation, and secondly, the importance of attendance at religious services may vary across different religious traditions. For example, Sunday mass attendance is considered an obligation by canon law for Catholics, while for Protestants, instructions regarding church attendance are more relaxed, although it is still strongly encouraged (Bruce, 2011). Furthermore, religious service attendance may have additional indirect effects on family formation and fertility. For example, religious participation is found related to increased social capital and well-being (Lehrer, 2009; Putnam, 2000), which are in turn positively linked to fertility intentions (Philipov et al., 2006; Philipov and Berghammer, 2007).

Before the 1970s, the study of fertility differences among religious groups was "at the forefront of demographic research" (McQuillan, 2004: 25). However, in the following decades interest in religion as a determinant of fertility behaviour has somewhat declined, due to evidence of a narrowing fertility gap between Catholic and other religions in the United States (Westoff and Jones, 1979) and the vast decline in traditional forms of religion, which has been especially evident in Western Europe (Greeley, 2003; Davie, 2002). Nevertheless, during the past decade there has been a renewed interest in the relationships between religion and fertility patterns, both in Europe and in the US (Adsera, 2006a; Chatters and Taylor, 2005; Frejka and Westoff, 2008; Philipov and Berghammer, 2007). This could be attributed to several developments, including the increased religious diversity in Europe as a result of immigration, and the contrast in fertility patterns between native and migrant populations (Kaufmann et al., 2012; Régnier-Loilier and Prioux, 2008). In addition, some scholars have expressed doubts as to whether the general decline in religion leads to a decrease in the effect of religiosity on demographic behaviour, or whether the divergence between religious and non-religious individuals has actually increased (Goldscheider, 2006; Kaufmann, 2010). Thus, there is still uncertainty about the continuing influence of religion in modern societies and, in respect of fertility, regarding the mechanisms through which religion affects fertility behaviour.

Theoretical explanations for the association between religion and fertility often emphasize the high value that the major religious traditions ascribe to the family and to childbearing (Norris and Inglehart, 2004; Sweet and Bumpass, 1990). As noted by McQuillan (2004: 27): "More than most other social institutions, religions have elaborated moral codes that are meant to guide human behavior, and many of the great religious traditions have given special attention to issues of sexuality, the roles of men and women, and the place of the family in society." Therefore, religion can also influence family behaviour through other, indirect,

routes; for example, religious institutions often reinforce gender segregation through teachings about the appropriate roles for men and women in society, emphasizing the important role of women as mothers and wives (Inglehart and Norris, 2003; Goldscheider, 1999). As a result, religious women may forgo market opportunities, or restrict their participation in the labour market, in order to fulfil familial obligations (Read and Oselin, 2008). Thus, religious involvement can influence not only family patterns; it is also related to other social aspects, such as investments in human capital and occupational choices. Moreover, the interaction between religion and other socioeconomic factors may also have consequences on fertility outcomes. For example, women from some religious groups may be less likely to translate their qualifications into paid work compared to others (Goldscheider, 2006; Lehrer, 2009). Therefore, an exploration of the interdependencies of religion, educational attainment, labour market participation, marriage and childbearing can contribute to the understanding of the ways in which religion affects fertility patterns.

The next sections provide a review of theories and previous research on fertility change, the process of religious decline, the relations between religion, family and fertility patterns, and the interaction between religious involvement and socioeconomic factors. This is followed by a description of the specific characteristics of Britain and France as case studies for the relationships between religion, demographic behavior and employment among women.

Theories of fertility decline

Since the 1960s, following the 'baby-boom' era, fertility levels in most European countries began to drop. By the mid-1980s fertility in most countries was below the replacement level of 2.1 births per woman (van de Kaa 1993). In addition, there has been a pronounced postponement in the age of the first birth, which also leads to lower completed fertility at

the aggregate level (Kohler et al., 2002). Other related demographic trends include the rise in divorce rates and the spread of new types of households, such as non-marital cohabitation and lone parent households (Lesthaeghe, 2010).

According to the Second Demographic Transition (SDT) theory, the move towards smaller and less stable unions is related to cultural processes of secularization and individuation, involving the rejection of traditional authorities and accentuation of individual autonomy. It is argued that decisions regarding family formation and childbearing are increasingly guided by personal aspirations of self-fulfilment, rather than by the moral order of the church and the state (Lesthaeghe and Surkyn, 1988; van de Kaa, 1993). The Second Demographic Transition can be seen as part of a multifaceted revolution, involving economic, technological and societal changes, which all affect fertility levels. These changes include the widespread use of highly efficient and reliable contraception, the sexual revolution that disconnected sexual activity from marriage and procreation, and the gender revolution, whereby women are more independent in making decisions about their own fertility. All of these aspects fit within the framework of a rejection of traditional forms of authority and transformation of the normative structure (Lesthaeghe, 2010).

Other developments of the past decades include the increase in women's education and labour force participation, leading to greater economic independence for women, and to their having alternative options to familial roles (Esping-Andersen, 2009; Lewis, 2001). Microeconomic approaches to fertility, and in particular Gary Becker's (1991) theory of the family, consider these processes as the driving force for the trends of delayed marriage, increasing marital instability, and the decline in fertility. As women become less dependent on men's earnings, they have less to gain from marriage, which leads to a delay in family formation and increasing rates of marriage dissolution. Increases in women's education and labour force participation also raise the opportunity costs of children, since a woman with

greater earning potential pays a higher price for any time spent outside of the labour force and for the long term effects of interruptions during the career course. Thus, as women's investments in education and job careers increase, there is a reduction in the demand for children.

Nevertheless, empirical evidence across different countries is not always in line with the predictions of the microeconomic approach; For instance, fertility has been found to be especially low among unemployed and precariously employed women in Europe (Baizán, 2007). Moreover, in Scandinavian countries, the negative correlation between education and fertility has weakened and in some cases the trend has been reversed, as the highest fertility levels are found among women with tertiary education (Esping-Andersen, 2007; Kravdal and Rindfuss, 2008).

These variations in fertility levels can also be attributed to cross-national differences in welfare policy or in family-friendly employment opportunities; family friendly policies may lower the cost of children, either in terms of direct costs, or by reducing the opportunity costs of motherhood (Esping-Andersen, 2007, 2009). The empirical evidence for the impact of family policies on fertility is rather mixed and in many cases the effect is relatively small, although it has been suggested that policies that facilitate the work-family balance (e.g. the availability of affordable child care and the opportunity to work part-time and flexible working hours) are especially conducive to the ability to combine family and work responsibilities (Gauthier, 2007; Thévenon and Gauthier, 2011).

Nevertheless, family friendly policies are not sufficient without increasing the gender symmetry between spouses in household production, in particular the male partner's willingness to contribute to child caring and rearing. According to McDonald (2000, 2002), a key explanation of low fertility lies in the combination of changed female roles and

preferences, on the one hand, and the resilience of traditional family and gender roles on the other. While there have been considerable advances in gender equity in the institutions of education and the labour market, the male breadwinner model has remained paramount in the family institution as well as in terms of government's provision of childcare. Therefore, countries that are characterized by lower gender equity, where men's contribution to unpaid housework is low and there is a lack of family friendly working conditions - which is often the case in Southern Europe - are also those countries with the lowest fertility rates. Evidence in support of this theory was presented in recent comparative studies on the relationship between the household division of labour and fertility levels (de Laat and Sevilla-Sanz, 2011; Sullivan et al., 2014). For example, de Laat and Sevilla-Sanz (2011) showed that women who live in countries where men contribute more to home production, had both higher fertility and were more likely to participate in the labour force. Hence, differences in the gender division of housework can explain the positive correlation between female labour force participation and family size at the cross-country level; although, within each country women with higher relative wages tend to have lower fertility.

In summary, fertility behaviour is shaped by a complex set of interrelated cultural and structural factors. These include the importance of traditional authorities in social life, educational attainment and career opportunities as well as gender role attitudes, the division of labour in the household and family policy.

Religion in Europe and the secularization debate

As mentioned in the previous section, changes in family and fertility behaviours, especially in Western Europe, have often been associated with the process of secularization and the increased centrality of the individual in the decision-making process about family formation

and the appropriate number of children (Lesthaeghe and Surkyn 1988; van de Kaa, 1993). However, the concept of secularization is a highly contested one, as there is an ongoing debate around its meaning and the extent to which the influence of religion in Western Europe has weakened, or whether it still plays a role in shaping individual behaviour.

The standard theory of secularization contends that processes of modernization, which involves advancements in science, technology, education and economic development, lead to a decline in the importance of religion to individual and social life (Norris and Inglehart, 2004). At the societal level, secularization denotes the declining influence of religion on social institutions, such as law, medicine, education and administration (McQuillan, 2004). At the individual level, secularization takes the form of diminishing participation in religious services and the withdrawal from religious communities. In addition, it encompasses the decline of religious beliefs and private religious practices (Philipov and Berghammer, 2007). A particularly dramatic decline in institutional forms of religiosity is evident in Europe from the 1960s (Brown, 2009; Davie, 2007; Martin, 2005). This includes the erosion in religious service attendance as well as the decreasing popularity of religious rites of passage, such as baptisms and religious weddings (Brown, 2009; Davie, 2007; Storm, 2009; Voas, 2003). Inglehart (1990) explains the decline in the importance of religion as part of a broader process of cultural change in advanced industrial societies. Several developments are said to have given rise to these cultural shifts during the decades following the Second World War, including unprecedentedly high levels of prosperity and increasing social security provided by the welfare state. These have contributed to the spread of secular and post-materialist orientations that place a greater emphasis on individual self-expression, rather than on traditional religious and cultural norms. According to Inglehart and associates (Inglehart, 1990; Norris and Inglehart, 2004), the increasing sense of security has reduced

the need for absolute norms, including traditional norms that were intended to maintain family unity.

While the secularization paradigm has gained firm ground in social sciences and humanities as a common explanation for religious change in modern societies, the standard theory of secularization has been widely challenged (Pollack, 2008). Numerous scholars have argued that the decline in religion is neither as widespread nor as consistent as previously assumed, and that it can vary greatly across countries and social groups depending upon historical traditions and the power of religious institutions (Berger et al., 2008; Davie, 2002; Gorski and Altinordu, 2008; Greeley, 2003; Norris and Inglehart, 2004). Furthermore, some scholars have argued for a global upsurge in the religious realm and a return of the public importance of religion, which is partly expressed through ethno-religious tensions and the growth in fundamentalist movements within Christianity, Islam and other religions (Casanova, 1994; Kaufmann, 2010).

One of the main criticisms of the classic secularization theory concerns the assertion that modernization and individualization processes promote religious decline. According to the economic market approach to religion, the processes of religious pluralisation and institutional differentiation that unfold in modern societies do not undermine religious convictions or practices; rather, the more pluralist the religious market, the greater the competition between religion providers, which in turn leads to greater vitality of religious communities (Iannaccone et al., 1997; Stark and Finke, 2000; Stark and Iannaccone, 1994). This model is particularly useful in explaining the ongoing vigour of religion in the United States, despite it being an indisputably modern country in terms of urbanization, democratization, industrialization etc. Unlike the religious market in the United States, the European religious market is characterized by high levels of state regulation and even religious monopolies, which, according to proponents of the economic market model, lead

to public indifference towards religious institutions and to an erosion of religious participation. Thus, it is argued that the relatively lower levels of religious consumption in Europe are not due to a decline in religious demand, but rather, result from deficiencies in religious supply (Stark and Iannaccone, 1994). It should be noted however, that the religious market theory has received little support in empirical studies (Chaves and Gorski, 2001; Pollack, 2008).

Other scholars have argued that, instead of promoting a decline in religious convictions, modernization processes have simply led to a change in the forms of religious adherence into more individualized and subjective ways of belief (Davie, 1994, 2007; Hervieu-Léger, 1990; Martin, 2005). A well-known theory in this context has been developed by Davie (1994, 2002, 2007), who coined the term 'believing without belonging' to describe the state of religious adherence in modern societies. Davie contends that while there is an obvious drop in institutionalized forms of religious practice (i.e. church attendance and participation in religious rituals), other parameters of faith, such as belief in God or in the supernatural remain high. Thus, according to this theory, there is a mismatch between religious belief and practice, or, at the very least, active religious membership is dropping faster compared to more passive dimensions of religiousness (e.g. nominal affiliation and belief). In contrast, Voas and Crockett (2005), based on repeated cross-sectional and longitudinal analysis from Britain, concluded that religious belief is declining at about the same rate as other main indicators of religiosity, i.e. affiliation and attendance.

Nonetheless, it has been argued that even among regular church goers, religious adherence is becoming increasingly personalized and is more oriented towards fulfilling personal needs (Davie, 2007; Eccles, 2008; Martin, 2005). According to Davie (2007), religious practice in Europe has shifted from obligation to a mode of consumption; only a few decades ago, regular church goers formed a relatively large share of the population who attended church,

partly from social motivations. Now, church goers have become a "noticeably smaller, but still significant group, whose reasons for attending church are still diverse, but derive less from habit or custom and rather more from individual choice" (ibid, p. 144). This process is also depicted by Martin (2005) as a shifting emphasis in Christian faith from ethical attitudes expressed in terms of duty and obligation to stressing individual values of happiness, freedom and self-fulfilment. Furthermore, some scholars have suggested that in the context of rapid social change and increasing uncertainties brought about by modernity and globalization processes, belonging to a religious community can provide a sense of groundedness and security, as well as maintaining a sense of identity (Davie, 2007; Day, 2011; Eccles, 2008; Hervieu-Léger, 1990; Ryan and Vacchelli, 2013). Thus, a general process of religious decline in society does not exclude a revival of faith in some communities (Dogan, 2002), or, at the very least, religion remains a matter of some importance to those who retain their faith while it loses its significance at the societal level (Bruce, 2011). In sum, there is no dispute about the decline in institutional forms of religious participation throughout Western Europe. However, there is a lower degree of consensus about the extent of secularization in society as a whole. As noted by Voas and Doebler (2011: 40): "there is a great deal of disagreement over the degree to which religious ideas and organizations will continue to influence the attitudes and behaviour of individuals in modern society."

Empirical studies from Europe show that in most countries, the majority of people are found between the two extremes of devotion and agnosticism in terms of religious beliefs and the importance of God in life (Dogan, 2002; Greeley, 2003; Voas, 2009). Furthermore, nominal Christians - who are self-defined as affiliated with Christianity but rarely or never engage in religious practice - comprise more than half the population in Europe (Voas, 2009). Day (2011) has argued that nominal Christianity is not an empty category, but rather has a

cultural meaning of its own. Based on a qualitative study in Northern England, Day has found that people who describe themselves as Christians mostly do so in order to affiliate themselves either with a family group (e.g. being brought up in a Christian family), or with a specific national or ethnic group, since Christian affiliation in the UK is often associated with being identified as 'British' and 'White'. In addition, people self-identify as Christians because they perceive it as a respectable category, which has moral implications attached to it. Thus, Day concluded that nominal Christianity nurtures a sense of belonging and strengthens the identity of self versus others (ibid). Nevertheless, as Voas (2009) argues, nominally religious individuals, or those attending church only at special occasions, such as Christmas services, weddings or funerals, tend to ascribe little importance to religion in their daily life. According to Voas, this form of religiosity among those who are neither regular church goers nor completely secular could be described as "fuzzy fidelity", since these people "retain some loyalty to tradition, though in a rather uncommitted way" (ibid, p. 161).

So far, the description of religious trends in Europe has mainly focused on the Christian majority. However, as a result of immigration trends, there is a growing proportion of non-Christian religious groups, with the largest one being Muslims, who comprise around 5 percent of the population in Europe (Pew Research Center, 2009). Non-European immigrants, whether Muslim or Christian, usually come from countries where religion is more dominant and therefore tend to be more religious than their host populations. In addition, inter-generational decline in religion among minority groups occurs more slowly than among the majority populations (Kaufmann et al., 2012). Individuals with migrant origin may have a strong incentive to maintain their attachment to religious tradition as a channel through which their unique identity and sense of belonging are preserved (Cable, 1994). According to McQuillan (2004), in a context of ethno-religious conflict or competition, religion is more likely to be a significant component of one's identity and to

have implications for behaviour. Nonetheless, these implications may vary in different social settings and for different minority groups. The next sections will discuss previous research on religion as a determinant of family patterns and its relationships with other socioeconomic factors.

Religion, fertility and family dynamics

Studies from recent years have documented the persistent relevance of religion to fertility variation in Western countries. Frejka and Westoff (2008) have found that among women in Europe and the United States, those who identify as Protestants and Catholics had higher fertility rates compared to women who were not affiliated with any religion. Additionally, within each denomination, the more devout (based on frequency of service attendance and the importance ascribed to religion in daily life) had more children.

In a comparative study of 18 European countries, Philipov and Berghammer (2007) found a positive correlation between different measures of religiosity (e.g. affiliation, practice, and self-rated religiosity) and individuals' intended and actual fertility. Moreover, Berghammer's (2012) longitudinal study from the Netherlands provided evidence of a causal link between church attendance throughout the reproductive years and completed fertility levels. These religious differences in fertility are also linked with differential patterns of entry into union formation and marital stability; for example, people with high fertility aspirations, as is generally the case for more religious individuals, would have an incentive to marry earlier, or prefer marriage over the less stable arrangement of cohabitation (Lehrer, 2004b).

Several empirical studies of family formation behaviour more generally support this assumption: Surkyn and Lesthaeghe (2004) found an association between household

arrangements and religiosity (based on a set of value items on religious orientations from the European Values Surveys of 1999-2000), showing that being married with children and without prior cohabitation is strongly linked to higher religiosity. Similarly, Lehrer (2004b) found that women who attended religious services at least once a month had lower rates of cohabitation. In addition, she found that women who are identified as Catholics also had a lower probability of entering cohabitation compared to those with no religious affiliation. However, these women also displayed later entry into marriage, which could be explained by the Catholic anti-divorce proscription that influences the process of mate selection (ibid, p. 176-177). Moreover, individuals and couples with no religious affiliation were more likely to experience marital dissolution compared to those identified with a specific denomination (Lehrer, 2009; Sweet and Bumpass, 1990). A stabilizing effect of religiosity on marital stability was also evident in a study by Kraft and Neimann (2009). Based on data from the German panel study, they found that the risk of divorce was lowest when both spouses attended church services or other religious events. Furthermore, they concluded that higher stability among religiously practicing couples is not due to homogamy in couples' characteristics, but is rather a result of the more traditional views on family and marriage held by more religious people.

Theories on the effect of religion on fertility and family behaviour often emphasize the central role of the family and childbearing within the major religious traditions (Adsera, 2006a; Chatters and Taylor, 2005; McQuillan, 2004). Norris and Inglehart (2004) have stressed the high value that is ascribed to family and children in most religions and its implications for other social and demographic behaviours: "One of the most central injunctions of virtually all traditional religions is to strengthen the family, to encourage people to have children, to encourage women to stay home and raise children, and to forbid

abortion, divorce, or anything that interferes with high rates of reproduction" (Norris and Inglehart 2004:23)

It should be noted, however, that some denominations put greater emphasis on childbearing than others. For example, the higher fertility of Catholics in comparison to Protestants was often seen as a consequence of pro-natalist Catholic teachings that forbade the use of artificial means of contraception (McQuillan, 2004). The Catholic Church sees marriage as a lifelong, unbreakable commitment between men and women and as the basis for family formation. Accordingly, children are seen as the "supreme gift of marriage" (Catechism of the Catholic Church 2002, p. 509, cited by Richards, 2009). These views on the sanctity of marriage and the family underlie the Catholic Church's strict opposition to divorce and to any means that interfere with the natural process of procreation, including the use of contraception and artificial abortion. Moreover, since Catholic teachings maintain that the full expression of physical love can only take place within marriage, the Catholic Church also opposes the cohabitation of unmarried couples (Richards, 2009). Similar to the Catholic Church, the Anglican Church also promotes traditional family values and sees the procreation of children as the main purpose of marriage. However, its position in regard to the use of contraception is more pragmatic, and there is greater recognition of individual needs for family planning (Creighton, 2009). According to McQuillan (2004), the different approach towards the use of contraception is seen as the issue that highlights the differences in orientation between Catholic and Protestant traditions.

It should be stressed though, that the influence of religion on fertility norms and behaviour may change over time and according to a given social context; Goldscheider and Mosher (1991) have found that the adherence to church teachings on contraceptive use among Catholics has substantially weakened, and that this may help to account for the sharp decrease in Catholic fertility rates and the convergence of family size between Catholics and

other denominations. Thus, fertility rates in predominantly Catholic countries such as Italy and Spain are even lower compared to those observed in some Protestant countries in Europe (Richards, 2009). However, it is important to note that these cross-national fertility differences are also shaped by other social and structural factors unique to those countries (Frejka and Westoff, 2008).

According to Goldscheider (1971, 2006), the influence of religion on fertility is not conveyed only through religious teachings and specific rules regarding contraceptive use, rather, the mechanism through which religion affects fertility could be better understood through the wider context of social organization, including the social norms and gender role perceptions that are associated with different religious groups. Building on Goldscheider's approach, McQuillan (2004) defined specific social and political settings in which religion would play an important role in shaping demographic behaviour. According to McQuillan, religious norms about family and fertility are most likely to influence behaviour when religious institutions have the means to communicate these teachings to their members and to enforce compliance, through formal organizations or informal social pressure. In addition, religious groups will have a larger effect on fertility patterns when members feel a strong sense of attachment to the religious community (ibid, 2004). These mechanisms may also account for the finding that frequency of service attendance is a stronger predictor of fertility intentions and behaviour than religious affiliation alone (Adsera, 2006a, 2006b; Philipov and Berghammer, 2007). Adsera (2006a) has suggested that following the declining influence of religious institutions in Europe, the frequency of service attendance has become a more salient determinant of family norms among younger generations, since those who continue to go to services represent a more selective group of people, who still adhere to religious doctrines. This explanation is consistent with theories on individual religiosity in the context of secularization; as church attendance is increasingly becoming a matter of

choice, rather than an obligation, the small minority of practicing religious people includes only those with a strong attachment to religious convictions (Davie, 2007; Kaufmann, 2010). Thus, the pattern that prevailed only a few decades ago, when a larger share of people were practicing religion for social reasons, has masked the underlying differences in fertility between "nominal and true believers" Kaufmann (2010: 160). Therefore, religious service attendance both reflects and reinforces belief and commitment to traditional religious values, through the repeated exposure to religious teachings and interaction with people who share similar values (Davie, 2007; McQuillan, 2004).

Another important route through which religious participation may influence fertility is the increased levels of social capital among those attending religious services on a regular basis. Previous studies have found that religious congregations promote the formation of social networks, where different types of emotional and practical support are exchanged between members (Chatters and Taylor, 2005; Eccles, 2008; Putnam, 2000; Waite and Lehrer, 2003). Social capital, as measured by frequency of exchanging different types of help, has been found to have a positive effect on fertility intentions (Philipov, 2002; Philipov et al., 2006). According to Philipov et al. (2006), the help provided in social networks may take any form, including transfers of money, child care, assistance in finding employment, exchange of information etc. This kind of support can reduce uncertainty and ease economic insecurity. Therefore, people with higher social capital are more likely to be in a position to make positive decisions about major life transitions, such as marriage and childbirth (ibid). According to Day (2011), while non-practicing individuals are also likely to form close social ties with friends and family, for practicing people there is an added value of shared religious beliefs and values.

In addition, religious practice and belief can contribute to dealing with the stressors and difficulties of daily life, including work and family responsibilities (Chatters and Taylor,

2005; Eccles, 2008; Storm, 2013). Krause and others (2001) found that church-based social support can promote the use of religious coping strategies with major life stressors. An extensive literature has been dedicated to the links between religious coping and various outcomes of health and well-being (Lehrer, 2009; Pargament et al., 2000); for example, indices of religious coping have been found to be associated with lower rates of depression, improved mental and physical health and lower mortality rates (see Pargament et al., 2000 for a review).

Thus, religious involvement can contribute to higher fertility either through social reinforcement of traditional family norms by members who share similar values, or through the provision of tangible and emotional support, which can positively affect fertility intentions. Finally, religious involvement may contribute to coping with stressing situations and the multiple responsibilities that are associated with work and family roles. Therefore, it may increase the compatibility between paid work and having a larger family among more religious women.

The interdependencies of religion, education and fertility

In addition to being closely linked to family behaviours, religious affiliation and practice may be related to other socioeconomic variables, such as investments in educational attainment and the level of attachment to the labour force. These in turn could potentially affect the relationship between religion and fertility (Goldscheider, 1971; Lehrer, 2004a). The role of education in relation to religion and fertility behaviour is of special interest, since rising education levels are considered to be a major determinant of fertility decline (Caldwell, 1980; Hirschman, 1994). Higher levels of education have been typically found to be associated with later and lower childbearing, as well as a higher incidence of childlessness (Joshi, 2002; Smith and Ratcliffe, 2009). Additionally, education is a strong

predictor of women's employment and a source for elevating women's social position and their power in household decision-making processes (Orbuch and Eyster 1997). Darnell and Sherkat (1997) have argued that religious affiliation may shape educational preferences or constrain options of educational attainment through the socialization process. In a study on conservative Protestants in the United States, they described the reservations found within this group regarding learning in secular institutions, as it was believed that this may undermine religious belief. Additionally, they found that those who believe in the 'inerrancy' of the bible, or had 'inerrant' parents, were less likely to attend college preparatory courses and had lower educational achievements. On the other hand, some religious traditions, as in the case of Judaism, encourage the achievement of high levels of schooling (Lehrer, 1999). A comparison among major religions in the United States revealed that the mean years of schooling was highest for Jews and lowest for conservative Protestants, with Catholics and mainline Protestants at the centre of the distribution (Lehrer, 1999, 2004a).

The findings on the influence of level of religiosity on education are mixed. Cross-national comparisons point to a general negative relationship between religiosity and education (Jagodzinski and Manabe, 2009). However, the effects of religious participation appear to vary across denominations. Albrecht and Heaton (1984) found that among some religious denominations in the US, as in the case of Mormons, there is a positive correlation between different measures of religiosity, such as frequency of prayer and church attendance and higher levels of education. Moreover, Lehrer (2009) has pointed to the beneficial effects of religious involvement during childhood on later life outcomes in a range of areas, including physical and mental well-being as well as higher educational success. Therefore, a high level of religiosity is not incompatible with higher education, and in some cases may even encourage the pursuit of higher qualifications.

In microeconomic theories, education is a form of human capital which enhances market efficiency and is expected to have a negative effect on fertility, especially among women (Becker, 1991). This is due to the fact that women continue to be the primary caregivers in most societies, and therefore, their potential higher earnings with higher levels of education raise the opportunity costs of children (Becker, 1991; Kravdal and Rindfuss, 2008).

Taking a different perspective, but also supporting the link between higher educational levels and lower fertility, the proponents of the SDT theory view education as a significant driver of ideational and social change. According to this approach, the highly educated would be the first to adopt new behaviours, including the move to smaller family sizes. Moreover, higher education has been found to be related to social non-conformism and diminishing trust in religious institutions (Lesthaeghe and Surkyn, 1988).

According to these approaches, one might expect that when controlling for level of schooling, the fertility differences between religious and non-religious persons would diminish or disappear completely. This expectation, which was labelled the "Characteristics Hypothesis" by Goldscheider (1971:272), maintains that fertility differences among religious groups can be accounted for by diverse socioeconomic attributes. Nevertheless, numerous empirical studies have shown that fertility differences by religion remain after controlling for socioeconomic covariates, such as education, occupation, income and geographic area of residence (Frejka and Westoff, 2008; Goldscheider, 1971; Mosher et al., 1992; Philipov and Berghammer, 2007). Moreover, several studies have found evidence for a widening gap in fertility among religious groups at higher levels of education, indicating that the relationship between socioeconomic characteristics and fertility may vary across religious denominations (Goldscheider, 2006; Heaton, 2011; Newman and Hugo, 2006).

In a comparative study on thirty developing countries, Heaton (2011) found that the Muslim-Christian fertility gap has increased in countries with a higher level of development. In addition, at the individual level, the gap has widened among women with higher levels of education. Similarly, Goldscheider (2006) has found that the fertility gap between Muslim and Jewish women in Israel increases at higher levels of education. In a study conducted in Australia, Newman and Hugo (2006) found that non-affiliated women experience a greater decline in fertility when moving from lower to higher education, in comparison to religiously affiliated women. Similar interaction effects were found among women with different levels of religiosity. Thus, it was suggested that religion in some way counters the general tendency for higher education to be linked to lower fertility (ibid).

The interrelations between religion, education and fertility can be interpreted in several ways; one possible explanation is related to the high value that religious traditions ascribe to family and children and their emphasis on the fulfilment of traditional family roles. Thus, religiously devoted persons are perhaps less susceptible to the impact of social and economic development on childbearing attitudes and behaviour (Heaton, 2011). This argument relates to the ideas expressed by Lesthaeghe and colleagues (Lesthaeghe and Neels, 2002; Lesthaeghe and Wilson, 1986), who maintained that although changes in economic circumstances are a powerful incentive to reduce fertility, it is not a sufficient condition. Instead, a change in fertility behaviour can only occur when these economic developments are accompanied by a cultural transformation as well, which accords a moral legitimization to the new behaviour.

Religious institutions are described by McDonald (2002) as particularly resilient to changes brought about by processes of modernization and globalization, including international flows of capital, education and knowledge, which introduce new opportunities and potentially promote gender equity. Thus, while women may experience improved

opportunities in education and the labour force, there is little change within more traditional societies in women's roles as mothers and wives as defined by religious institutions.

Another important factor in explaining the differential effect of education on fertility among religious and non-religious women is differences in labour force participation. According to Goldscheider (2006), the effect of education on fertility depends on whether and how human capital is translated into female empowerment and increasing opportunities in the labour market. It is possible then, that even when achieving higher levels of education, more religious women have lower attachment to the labour force due to greater social pressure to conform to traditional family roles.

Religion and female labour force participation

Religious involvement can influence women's economic activity, either directly, through norms of traditional family roles and gender segregation, or indirectly, as a result of differential family and fertility patterns (Lehrer, 2004a; Read, 2004; Sherkat, 2000). For example, the larger family sizes of religious women may exclude them from participating in the labour market (Heaton and Cornwall, 1989). The link between religion and gender inequality in the labour force has been stressed by several scholars, who have pointed to the patriarchal and hierarchical character of the major religions institutions and theological scripts (Heaton and Cornwall, 1989; Inglehart and Norris, 2003; Sherkat, 2000). Religion is described as a "carrier" of a normative system which emphasizes distinctive roles for men and women (Heaton and Cornwall, 1989:284). Hence, religious organizations have often actively sought to reinforce social norms of separate and subordinate roles for women as homemakers and mothers (Inglehart and Norris, 2003). Heaton and Cornwall (1989) found that in Canada, religions with more traditional family behaviours, e.g. higher fertility and

lower divorce rates, were also characterized by a lower socioeconomic status of women relative to men. Among smaller and more conservative religious groups, such as Jehovah's Witnesses, Hutterites, Mennonites and Mormons, women were particularly disadvantaged in terms of educational attainment, employment and income compared to men in these groups. Mainline Protestants and Roman Catholics had more moderate levels of inequality while those with no religious preference had the lowest levels of gender inequality.

Other studies have examined the influence of religion on labour force participation during different stages in women's life-cycle: In a panel study of Conservative Christian women in the United States, Sherkat (2000) found that women with a religious fundamentalist background were more likely to choose the home as their 'career' in their early life course. However, they also had higher likelihood of re-entering the workforce when their children were older. Sherkat has argued that among conservative Christians, there is no objection to the idea of women working, only that family engagement should be the first priority (ibid, p.354). Lehrer (1995) has also found that conservative Protestant women had a lower attachment to the labour force compared to other women with children under age six. Moreover, women's labour force participation was lowest when both husband and wife were identified as conservative Protestants.

In contrast to these studies, some scholars have argued that religious participation may also contribute to combining family responsibilities with paid work; For example, several studies from the United States have found that church attendance and church membership were positively associated with the probability of receiving support for various aspects of family and daily life (Chatters et al. 2002; Ellison and George 1994). This type of support in turn, may serve to reduce the conflict between family and work responsibilities, as it decreases the perceived costs of childbearing. In addition, a study from Australia has shown that mothers with a Christian religious background receive better support in childcare from both

their family and community compared to their non-affiliated counterparts, and that this may contribute to increasing ability to achieve in their education and employment careers at the same time as raising a family (Newman and Hugo, 2006). Thus, on the one hand, religious communities may provide better support and practical assistance in childcare, reducing the opportunity cost of children for religious mothers in comparison to non-religious ones. On the other hand, there is strong evidence for greater gender segregation in the house and the labour market, with the effect that more religious women may show lower attachment to the labour force, especially when there are young children at home.

Women's ability to reconcile family responsibilities with paid work is also influenced by the welfare policy in a given country and the availability of family-friendly work environments, which reduce the costs of having children (Esping-Andersen, 2007; Thévenon and Gauthier, 2011). These policies, which vary substantially from one country to another are further discussed in the next section, which focuses on the religious, social, demographic and political landscape in the countries investigated in this thesis: Great Britain and France.

Britain and France as case studies

Britain and France are amongst the countries that have experienced the most notable religious declines in Europe (Greeley, 2003). This was evident mainly in the sharp decline in the proportion of religiously affiliated individuals and in the number of people who attend religious services regularly, especially among the cohorts born after the Second World War (Greeley, 2003; Inglehart and Norris, 2003). However, in both countries today the majority of adult individuals still describe themselves as affiliated with a particular denomination (Régnier-Loilier and Prioux, 2008; Voas and Ling, 2010). This enables a comparison

between members of a specific religion and those who have no religious affiliation, as well as a comparison by level of religiosity. In addition, in both countries, especially in France, a relatively large share of the population identify as Muslims, who manifest different fertility and socioeconomic behaviour from that of the Christian majority (Dubuc, 2009; Régnier-Loilier and Prioux, 2008; Weller, 2007; Westoff and Frejka, 2007).

Although there is similarity in some of the indicators of religion in both countries, Britain and France differ greatly in terms of their religious heritage and the relationship between religion and state. Britain, in common with other Protestant countries in Europe, shares the heritage of a state church, with the Church of England as the established religious institution (Davie, 2002). The establishment of the Church of England took place in the sixteenth century, following King Henry VIII's political break with the Papacy in Rome. This change was part of the Reformation movement, which refers to the attempts by Protestants in a number of European countries to remodel the Christian Church in a way which, they believed, reflected more truly the earliest forms of Christianity (Weller, 2007). Similar to other Protestant nations in Europe, religious activity in Britain is generally low, although there is little evidence of hostility towards the church (Davie, 2002).

France, on the other hand, represents a case of historical conflict between the Catholic Church and the secular state, which dates back to the period of the French revolution and the opposition to the Catholic Monarch (Fetzer and Soper, 2005; Martin, 2005). In 1905 France introduced the law of separation between church and state. The strict separation between religion and state affairs in France is captured by the notion of *laïcité*. More generally, this concept entails that France neither recognizes nor provides financial support to any particular religion. On the other hand, the principle of *laïcité* also aims to guarantee all citizens freedom of conscience and freedom to practice their faiths (Davie, 1999). Nonetheless, the ideals of *laïcité* are constantly being challenged through the complex

relationship between the Catholic majority and the growing proportion of religious minorities, most of whom are Muslim. One example is the recent legislation that restricts Muslim women from wearing the traditional headscarf in public schools (Fetzer and Soper, 2005). This situation is very different from the relationship between religion and state in Britain, where not only there are no similar restrictions on religious symbols, but faith schools of different religious groups also receive public funds (Gorski and Altinordu, 2008). Thus, compared to Britain, in France there is considerably less public accommodation towards faith communities (Fetzer and Soper, 2005).

The conflict between church and state in France is assumed to have consequences on expressions of religious behaviour in France; compared to other Catholic countries in Europe, such as Ireland, Italy and Spain, religious indicators in France, including belief in God and church attendance, are markedly lower (Davie, 1999, 2002). In a series of surveys conducted by the Pew Research Center from 2002 to 2011, it was found that around 10%-15% of French adults say that religion is very important in their life compared to about a quarter of adult population in Italy and in Spain (Pew Research Center, 2013). The proportion of people attending religious services at least monthly in France is slightly above ten percent, which is even lower than in Great Britain, where close to a fifth of the adult population attend religious services on a monthly or weekly basis (Voas and Ling, 2010). Yet, the vast majority of French people identify as "Roman Catholic" (Pew Research Center, 2013; Régnier-Loilier and Prioux, 2008). This apparent contradiction is explained by some scholars as an expression of religious individualization, or the de-institutionalization of religion, rather than simply a process of religious decline; while many Europeans in Catholic countries see themselves as belonging to a religious tradition, they are less willing to engage in public religious rituals (Inglis, 2007). This detachment from the institutional Church appears to be particularly strong among French Catholics (ibid). Nonetheless, Catholicism

is still recognized as an integral part of the national identity in France (Byrnes, 2005). According Hervieu-Léger (1990, 2000), being Catholic is becoming less a matter of adherence to church teachings and regulations, and more a matter of belonging to a shared cultural heritage. Similarly, Pace (2007: 37) has argued that while the ability of the Catholic Church to impose moral codes of conduct is weakening, in many European countries Catholicism (as well as other religious traditions) still functions as "guardian of the collective identity". Moreover, this role of religion is further intensified as Europe becomes increasingly multi-religious, and as the identity of Western European countries as 'Christian' societies is being contested (ibid, 2007).

These explanations resonate with studies on Christian identification in Britain, where the majority of people self-describe as Christians (Day, 2011; Voas and Bruce, 2004). According to Day (2011), people tend to associate with Christianity as a cultural symbol rather than as a practised religion. Thus, many people identify as Christians simply because they were baptized or attended church when they were younger or because they see themselves as part of a Christian 'culture', which is interwoven with national and ethnic identity (ibid).

Nonetheless, compared to France, Britain is characterized by greater religious pluralism, which, according to the religion market model (Stark and Finke, 2000), may contribute to the higher rates of religious service attendance there. While the Catholic Church is the dominant religion in France, the religious landscape in Britain is characterised by greater diversity. The majority of Christians in Britain are identified as Protestants, with the Church of England being the largest religious denomination. The second largest denomination is Roman Catholicism. The Church of Scotland, a reformed church that is Presbyterian in tradition is the established religion in Scotland. Other principal Protestant Churches in Britain include the Methodist Church, the United Reformed Church (congregational) and

the Baptist churches (Weller, 2007). Among non-Christian groups in both Britain and France, Muslims comprise the largest faith community, although they differ internally in terms of both ethnicity and nationality (Davie, 2007).

The Muslim minority in Britain and France

The majority of the Muslim population in Britain has arrived during the post-war decades, mainly from South Asian countries, including Pakistan, Bangladesh and India (Davie, 2007). Today, close to 5 percent of the population in England and Wales identify as Muslims (ONS, 2012). The Muslim population in Britain is younger on average compared to other religious groups and is also the most rapidly increasing faith group, which is the result of relatively high birth rates as well as continuing immigration to the UK (Weller, 2007). In addition to religious and demographic differences, Muslims also differ from the general population in their socioeconomic profile; it is found that Muslims' labour force participation rates, especially among women, are considerably lower than among non-Muslim populations, although the differences are narrowing among second generation migrants (Martin et al., 2010; Peach, 2006; Weller, 2007). Patterns of disadvantage are also apparent in the high proportion of Muslims with no educational qualifications and their overrepresentation in semi-skilled and unskilled occupations (Weller, 2007).

As in the case of Britain, large waves of Muslim immigration arrived in France following the Second World War, initially in response to the severe shortage in labour supply in that country. During that time, French employers and officials focused especially on recruiting workers from such predominantly Muslim countries as Algeria, Morocco, Tunisia and Turkey, mainly to work in blue collar jobs, such as construction, heavy industry and mining (Fetzer and Soper, 2005). By the 1970s, many of the Muslim immigrants had become French

citizens (ibid), and today Muslims form around eight percent of the total population in France (Pew Research Center, 2011). On average, Muslims in France also endure economic disadvantage, as manifested by their higher concentration in poorer areas and lower household income compared to the Christian majority (Adida et al., 2010; Maillard, 2005).

In both Britain and France, Muslim women have considerably higher fertility rates compared to non-Muslim women (Dubuc, 2009; Régnier-Loilier and Prioux, 2008), although these differences appear to narrow over time (Westoff and Frejka, 2007) Furthermore, it is unclear the extent to which the distinct fertility of Muslim women is determined by religious beliefs and norms or by socioeconomic factors (Blyth and Landau, 2009; Dubuc, 2009). Interestingly, Islamic scriptures do not have specific guidelines regarding fertility nor the use of contraception. Nevertheless, procreation is considered a sign of God's will and having a large family is regarded as a blessing. Furthermore, being part of a family and having duties and obligations towards it are central values in Islam (Iqbal and Noble, 2009). The nature of duty arising from one's place in the family also involves segregated gender roles. Therefore the responsibilities of Muslim women to the family are often seen as superior to the fulfilment of individual goals (Iqbal and Noble, 2009; Weller, 2007).

For Muslims in both countries, religion tends to be an important part of identity (Fetzer and Soper, 2005; Ryan and Vacchelli, 2013); as argued by Ryan and Vacchelli (2013: 94): "for migrants in particular, religion can provide a means for both maintaining and expressing continuity of faith and practice while negotiating integration within a new environment". In some cases, there is also evidence of religious revival among second and third generation Muslim immigrants, who seek to reaffirm their Islamic identity (Fetzer and Soper, 2005). In general, Muslims in these countries are more religiously active compared to Christians, as a higher proportion of Muslims report attending the mosque regularly (ibid).

Family, fertility and employment trends in Britain and France

Similar to other European countries, Britain and France have experienced major shifts in family patterns over the past decades, including a decline in marriage rates and an increase in divorce as well as an increase in non-marital cohabitation and extra-marital births (Chan and Halpin, 2001; Perelli-Harris et al., 2009; Toulemon et al., 2008). Nevertheless, Britain and France differ from one another in some aspects of family formation; in France, family formation patterns are closer to those in Nordic countries, as around 90 percent of unions in 1995-2005 began with cohabitation, compared to 75 percent in the UK (Perelli-Harris et al., 2009). In addition, about half of first births in France occur within cohabitation, compared to a third of first births in the UK (Perelli-Harris et al., 2010). The UK non-marital childbirth profile is more similar to that of the United States than the rest of Europe, with a relatively high proportion of births for single women and a high rate of teenage pregnancies (Sigle-Rushton, 2008).

General fertility levels in Britain and France have been relatively high compared to other European countries: in the mid-1960s the Total Fertility Rate (TFR)[1] in the United Kingdom reached a peak of nearly three births per woman. This was followed by a drop in fertility to replacement level (around 2.1 children on average) in the early 1970s in all the countries comprising Great Britain. Since then, fertility rates declined gradually to a level of 1.6 in 2000, and rose again to 1.9 in 2011[2] (ONS, 2013). In France, total fertility rates have also declined markedly since the 1960s from a level of 2.7 to below replacement in the mid-1970s. Since 1975 the TFR was almost stable at around 1.8 with a slight decrease in the

[1] TFR is a hypothetical measure, defined as "the average number of births a woman would have if she were to live through her reproductive years (ages 15-49) and bear children at each age at the rates observed in a particular year or period." (Bongaarts and Feeney, 1998: 271).

[2] While TFR in England and Wales was estimated at around 1.9, the fertility rate for Scotland is slightly lower, and was estimated at 1.7-1.8 in recent years.

early 1990s and a small increase since 2000 (Toulemon et al., 2008). The current total fertility rate in France is around two children per woman, which is markedly higher than the average fertility rate of 1.5 in the rest of Europe (Eurostat, 2012).

Thus, overall fertility trends in Britain and France are rather similar, as both countries currently have total fertility rate that is near two children on average. However, a closer look at the distribution of fertility across different age groups and social strata reveal some fundamental differences in childbearing patterns; Rendall et al. (2009) have found that the distribution of age at first birth is much more homogeneous in France than in Britain, where the distribution of age at first birth is polarized between women who have their first birth at their late teens and early twenties and women who delay their first birth until after the age of 30. In addition, the age distribution of first birth in Britain is increasingly polarized by social strata; while women with medium and higher education have their first birth increasingly later, the age at first birth among women with low levels of education in Britain has remained the same. In contrast to that, French women at all education levels have experienced a shift towards later entry to motherhood (Rendall et al., 2005, 2009). These differences are attributed to the distinct family-policy regimes in each country; Rendall and associates (2009) argue that universalistic family-policy regimes, as in France, seek to reconcile the conflicting demands of employment and motherhood, and therefore maintain a homogeneous fertility distribution across socioeconomic strata. In Britain on the other hand, where child care provisions are lacking, women with better earnings prospects have a greater incentive to delay motherhood to later ages, as the opportunity costs of children are higher.

Universalistic childcare subsidies and cash benefits, driven by long-term pro-natalist ideology, have been provided in France since the late 1970s (Parkes, 1997). For the past decades, French governments have introduced measures that were aimed to facilitate women

to combine paid work alongside family life. These measures include public childcare services, allowances to reduce the costs of childcare, parental leave and other childrearing benefits (Fine-Davis et al., 2004; Hantrais, 1999). This progressive family policy has placed France among the leading member states in the European Union in state provision of childcare facilities and support. However, these policies have been criticized for mainly promoting higher fertility rather than supporting maternal employment, as women with large families were eventually encouraged to leave the labour market (Hantrais, 1999).

By contrast, family policy in the UK has been traditionally aimed at tackling poverty rather than facilitating the combination of family and paid work. In this sense, the UK is similar to other English-speaking countries with a liberal heritage that favours state intervention only in cases of crisis or need (Esping-Andersen, 2009; Daly, 2010). At the end of the 1990s several important changes to family policy were introduced by the New Labour government. These included an extension of parental leave, introduction of tax credits to families with children and extended child care provision for preschool children (Lewis et al., 2008b). However, these provisions remain considerably weaker than in France (Rendall et al., 2009).

In the light of low availability of affordable childcare in the UK, especially for children under 3 years old, a common solution for mothers is part-time employment (Baizán, 2007; Del Boca, 2005). Thus, in the UK there is a combination of a relatively high female employment rate (about 67% compared to 57% in France among women age 15-64 in 2005), though with a large share of women working part-time; nearly 40 percent of all employed women in the UK work in a part-time job compared to less than a quarter of employed women in France (Lewis et al., 2008a). The availability of part-time jobs is expected to have a positive effect on childbearing, as it is more compatible with family responsibilities. However, it often involves lower pay and limited opportunities for promotion, with long term effects on the gender wage gap (Baizán, 2007). It should be noted, however, that the

effect of public policies on work and family behaviour has been found to be rather limited (Lewis et al., 2008a; Thévenon and Gauthier, 2011), and also heavily dependent on other social and cultural factors. For example, Saraceno (2011) argues that preferences for labour force participation are socially structured and shaped by both personal identities and a complex system of labour market conditions, class and gender-specific local cultures.

The purpose of the current study is therefore to explore how being religious (either actively or nominally) affects women's family and work behaviours in highly secularized societies. While both Britain and France have experienced a marked decline in traditional forms of religious adherence, there is uncertainty about the extent to which religion continues to affect demographic behaviour among different social groups and how this relationship has changed over time. Although the importance of religion in society as a whole may have weakened, those who are still actively religious may show increasingly distinct fertility patterns compared to individuals with lower attachment to religion. Moreover, since each country represents a different religious tradition – a Catholic majority in France compared to a Protestant majority alongside a substantial Catholic minority in Britain – this may be reflected in differential patterns of fertility, as these religious traditions vary in their teachings and the emphasis they put on reproduction and family life. As mentioned above, the demographic transitions of the past decades, including the delay in marriage and first birth and the decline in fertility, are often explained by increases in women's education and changing opportunities in the labour market. However, it is unclear whether and how indicators of religiosity interact with other socio-demographic factors, and the consequences these interactions might have on fertility outcomes. While higher education is related to later and lower childbirths for most women, this may not necessarily be the case for women with a strong commitment to religious values. Finally, the relationship between religion, women's fertility and employment patterns may differ in Britain and France, as they

represent different welfare regimes and labour market conditions, influencing both work and family practices.

Thus, exploring the nexus of relationships between religion, fertility, education and labour force participation will contribute to a better understanding of the mechanisms through which religion shapes reproductive behaviour. In addition, it can shed light on the interdependencies between cultural traits (represented by religion), structural factors and reproductive behaviour in Western Europe.

Description of data sources

The choice of data sources for this study was based on the availability of information on religious characteristics, including religious affiliation, denominational identification and frequency of religious practice as well as information on partnerships and births histories and other relevant demographic and socioeconomic variables. For Britain, data are taken from the British Household Panel Survey (BHPS), carried out by the ESRC UK Longitudinal Studies Centre and the Institute for Social and Economic Research at the University of Essex[3]. The BHPS is designed as an annual survey of each member (age 16+) of a nationally representative sample of over 5,000 households (making a total of more than 10,000 individual interviews), starting from 1991 through 2008 (18 waves in total). The initial selection of households for inclusion in the panel survey was drawn from the small users Postal Address File (PAF) for Great Britain, which is used for large government surveys. The sample design used is an approximately equal probability of selection method (espem). The same individuals were interviewed in successive waves and, if they split-off from

[3] University of Essex. Institute for Social and Economic Research, *British Household Panel Survey: Waves 1-18, 1991-2009* [computer file]. *7th Edition.* Colchester, Essex: UK Data Archive [distributor], July 2010. SN: 5151, http://dx.doi.org/10.5255/UKDA-SN-5151-1

original households, all adult members of their new households are also interviewed. Children are interviewed once they reach the age of 16. Additional sub-samples from Scotland and Wales were added to the BHPS in 1997[4]. On the other hand, the original sample was reduced by attrition, as a result of refusal, loss of contact or death (Taylor et al., 2010). Thus, over time, approximately the same number of people was interviewed in each year. Additional data from the consolidated union and births histories file (Pronzato, 2011) was supplemented to the BHPS. This file contains retrospective lifetime histories and subsequent panel data related to respondents' partnerships and childbearing.

The data source used for France is based on the French version of the Generation and Gender Programme (GGP)[5], a programme of nationally representative surveys (mainly from Europe) coordinated by the UNECE. The French GGP is also designed as a panel survey, with the first wave carried on in 2005 and the second wave in 2008. However, there was a substantial attrition between the first and the second wave of around 35% of the original sample. This was partly due to some people refusing to participate in the second wave, some who have died and some who moved without leaving an address. Moreover, since the attrition was not due to random causes, the remaining sample in 2008 is not representative of the population in France and can only be used as part of a longitudinal analysis with appropriate weights (Régnier-Loilier et al., 2011). Therefore, the data analysis for France is based on the first wave from 2005, except for the longitudinal analysis that employs data from both waves in Chapter 6. The first wave of the French survey covers a sample of over 10,000 individuals aged 18 to 79 and includes detailed information on partnership and birth histories, as well as socioeconomic variables and data on religious affiliation and the

[4] Another sub-sample from Northern Ireland was added in 1999, although these cases were excluded, since the religious characteristics of the population in Northern Ireland are very different from that in the other countries comprising the United Kingdom. Moreover, the purpose of this study was to focus on Great Britain (i.e. England, Wales and Scotland) rather than the UK (which also includes Northern Ireland).

[5] United Nations 2005. Generations & Gender Programme: Survey Instruments. New York and Geneva: UN.

frequency of attendance at religious services. The sample was constructed using a simple random sampling from the household addresses of the 1999 census master sample and the sampling frame of dwellings constructed after March 1999. Within each household unit, the person whose first name begins with the letter the closest to the beginning of the alphabet and is eligible for interview (aged 18-79 on December 31st, 2005) was selected (Régnier-Loillier, 2014).

While the majority of data analyses from France is based on the GGP survey from 2005, comparable analyses from Britain are based on the last wave of the BHPS from 2008. The reason for this gap is that the question on religious affiliation does not appear in all waves of the BHPS panel, and before 2008 it last appeared in 2004. Therefore, it was decided to use data from the more recent wave.

While both data sources include information on religious affiliation and frequency of service attendance, there are also several limitations in regard to available measures of religiosity. For example, the survey from France does not include information on parental or spousal religiosity, or any retrospective data on religious upbringing. In the BHPS, although it was possible to retrieve information on parental religiosity for those who are living in the same household with their parents, this group is rather small and is not representative of most British households. Another issue of concern is the possibility of a reversed causality between life-cycle events such as marriage and childbirth and level of religiosity. This issue could only be addressed using the BHPS data, where information on religiosity is collected repeatedly for the same individuals over time. In the French GGP, however, questions on religious affiliation and practice were only included in the first but not in the second wave, and therefore reversed causality could not be examined in the French data. This issue is further developed in Chapter Two.

2. Religious Indicators in Britain and France

One of the central debates in regard to secularization is whether this process is driven by aging effects or whether the decline in religion is generational (Chaves, 1991; Voas, 2009). In most post-industrial countries, various measures of religiosity indicate that older generations are more religious than younger ones (Jagodzinski and Manabe, 2009; Norris and Inglehart, 2004; Voas, 2009; Voas and Crockett, 2005). This could be interpreted either as a long-term decline in religion from one generation to the next, or, it could represent an aging effect, meaning that people become more religious as they grow older. Moreover, these age effects may be related to specific life-cycle events, such as marriage and childbearing (Argue et al., 1999; Stolzenberg et al., 1995; Tilley, 2003; Voas, 2009). This chapter provides a description of religious affiliation and practice in Britain and France and the way these indicators vary across birth cohorts and by other socio-demographic variables. In addition, a longitudinal analysis is performed in order to test for possible life course effects on religious service attendance. These life course factors include leaving the parental home, changes in marital status, childbirth and changes in employment and education. Since the data for France do not include repeated measures of religion for the same individuals over time (see Chapter One) this analysis is limited to Britain.

Religiosity and the life course

The debate on the underlying forces of religious change - i.e. whether it is driven by cohort or aging effects – is part of the broader dispute about the secularization process. This has been particularly relevant for the United Sates, where aggregate data on church attendance have been relatively stable over the years, at least until the 1990s (Norris and Inglehart, 2004). Thus, if life course (or aging) effects are indeed responsible for older people being

more religious than younger ones, it would undermine the secularization paradigm, since there would be no reason to expect a decline in religion over time (Voas, 2009). In Europe however, the aging effects hypothesis did not receive much support; for example, repeated cross-sectional findings based on the Eurobarometer data show that attendance rates have dropped in practically every country during the last three decades of the twentieth century (Norris and Inglehart, 2004: 72). Moreover, longitudinal studies from Britain have shown that religious involvement of people who were born during the same period of time is highly stable throughout their adult life (Voas and Crockett, 2005; Crockett and Voas, 2006). These findings support the generational approach to religious decline, according to which younger cohorts are less religious than older ones simply because they were born at a later period and grew up in a different and more secular social environment (Tilley, 2003; Voas, 2009). Further support for the generational decline in religion is found in a study on intergenerational transmission of religiosity from parents to their young adult children (Voas and Crockett, 2005). The reported findings show that if both parents attend services at least monthly, there is a less than 50 percent chance that their children would also do so. On the other hand, if neither parent attends services on a regular basis, the chances that their children would be regular attenders are lower than 3 percent. Similar results were found on the intergenerational transmission of affiliation (ibid, p. 21-22). Hence, parents are highly successful in transmitting non-religious behaviour to their children. On the other hand, children of religious parents are only half as likely to be actively religious themselves.

It should be noted though that a generational decline in religion does not preclude the possibility of changes in religiosity over the life course (Chaves, 1991). Several studies from the United States have found evidence that life cycle events, such as marriage and childbearing lead to an increase in individual religiosity; for example, Stolzenberg et al. (1995) found that both marriage and childbearing increase the probability of religious

participation among men and women, and that the effect of childbearing is particularly strong for people who enter parenthood at conventional ages. Similarly, Argue et al. (1999) showed that the presence of children aged two to ten leads to a slight increase in the perceived influence of religion on daily life. Stolzenberg and others (1995) have suggested that people who have recently been married or became parents may increase their involvement with local church communities as these provide emotional support and social contacts with other families in a similar position. In addition, parents may seek religious instruction for their children or feel that exposure to religious values may be beneficial to childrearing (Ingersoll-Dayton et al., 2002; Stolzenberg et al., 1995). Another explanation involves the implications of childbirth as a spiritual experience, which may prompt questions about the meaning of life and lead new parents to seek answers in religion (Ingersoll-Dayton et al., 2002; Trzebiatowska and Bruce, 2012). In accordance with that, respondents in a qualitative study reported an increase in religious practice following childbirth and the importance of religion in children upbringing (Ingersoll-Dayton et al., 2002). Nevertheless, religious involvement decreased when the children grew older. A similar curvilinear pattern was found in McCullough et al. (2005); in this study, which identified different types of religious trajectories, it was found that having more children increases the probability of experiencing accelerated levels of religiosity during the main childrearing years. However, this increase is then followed by a decline in religiosity as parents reach their mid-fifties onwards, when most of them had completed raising their children (ibid).

In contrast with findings from the US, studies in Europe found little or no evidence of family formation effects on religiosity. Based on analysis of a Dutch panel survey, Berghammer (2012) has shown that while church attendance is strongly correlated with future childbearing, there is no significant effect of the transition to first birth on subsequent frequency of attendance. In Britain, Tilley (2003) found a weak effect of marriage and

childbearing on the frequency of church attendance, although it was argued that these effects cannot account for the higher religiosity of older people. A possible explanation for the different implications of family formation on religious practice in the US and Europe may be related to the pivotal role that religion plays in social life in the former compared to that in more secular European countries (Berghammer, 2012).

Interestingly, studies that have reported changes in religiosity over the life course have found that some indicators of religiosity actually decline with age, and that this decline is most likely to occur during early adulthood, when many people leave their parental home (Berghammer, 2012; Need and De Graaf, 1996). As Need and De Graaf's (1996) study from the Netherlands shows, the highest proportion of people leaving their faith (becoming unchurched) occurs between the ages of 15-20. After that age, "it becomes increasingly unlikely" that they would do so (ibid, p. 93). Thus, change in religiosity is most likely to occur before the start of family formation. It is therefore assumed that religious service attendance is generally stable over the life course, especially in highly secularized countries. Thus, *the first hypothesis contends that current religious practice is determined by past frequency of service attendance, rather than by life course factors, such as age, marriage or childbirth*. This hypothesis is tested using a longitudinal analysis of life course effects on religious practice in Britain.

The following section provides a description of the measures and methods used to explore religious indicators in Britain and France. Then, descriptive statistics of religious indicators and distribution by gender and birth cohorts are presented, as well as a cross- sectional analysis of religiosity by socio-demographic characteristics, before moving on to the longitudinal analysis.

Data, measures and methodology

As described in Chapter One, the data for Britain and France are derived from the BHPS and the GGP respectively. Descriptive statistics for Britain were restricted to the data collected on the most recent wave in 2008 and were calculated using the cross-sectional weight for this wave in order to derive up-to-date estimates (see: Taylor et al., 2010). Thus, the basic sample included over 12,000 respondents (5,550 men and 6,616 women). The data for France are based on the first wave of the French GGP, which was conducted in 2005 on a sample of over 10,000 respondents (4,371 men and 5,708 women). The descriptive statistics for France were also estimated using the country specific population weight (see: Régnier-Loillier, 2014).

In both surveys, respondents were asked to name a particular religion to which they adhered. The main answer categories in Britain include no religion, Church of England, Roman Catholic, other Christian, Muslim and other religions. In France, the main categories are: no religion, Roman Catholic, Protestant, Muslim and other religions. However, there are differences in way the question on religion is phrased in each survey: the question in the BHPS is phrased as: "Do you regard yourself as belonging to any particular religion? If Yes: Which?", while the question in France is phrased in a more affirmative manner: "What is your religious affiliation (or your religion by birth)?". It has been argued that answers to questions on religion may be susceptible to factors such as the context in which the question appears on the survey, the way it is formalized and even more importantly, by the social and political context in a given place and time (Voas and Bruce, 2004). Therefore, interpretations of cross-country comparisons based on religious affiliation alone should be done with caution.

In addition to religious affiliation, the level of religiosity was measured based on the frequency of attendance at religious services. The question on service attendance in the BHPS is: "How often, if at all, do you attend religious services or meetings?". This question has five response categories: "once a week or more", "at least once a month", "at least once a year", "never" and "only weddings, funerals etc". The parallel question in the French survey is: "How often, if at all, do you attend religious services (apart from weddings, funerals, baptisms, and the like)?". The GGP survey includes the number of times the respondent attended services in a year, which could be grouped to match the categories in the BHPS. Although the BHPS question is not conditional on excluding attendance at public ceremonies such as weddings and funerals, this option is included as one of the answer categories[6], and therefore, it was possible to create a comparable variable for religiosity. In order to differentiate between regular and non-regular attendants at religious services, as representing those with strong versus weak commitment to religious tradition, the religious practice variable was dichotomised to those attending once a month or more ("practicing") and those who attend less often or not at all ("nominal"). According to Burkimsher (2014), monthly attendance is a commonly used cut-off between attenders and non-attenders, although some studies use weekly attendance. Since those attending services on a weekly basis form a small sample size in some denominations, monthly attendance was the preferred cut-off point.

The first part of the findings section includes descriptive statistics of religious affiliation and practice in Britain and France among men and women across birth cohorts. In this case, the year of birth was used to derive comparable birth cohorts of ten-year intervals since 1925 for analyzing cross-cohort changes in religiosity.

[6] The answer category of "only weddings etc." was added in the third wave of the BHPS in 1993.

Apart from religious differences by gender and birth cohort, religiosity is correlated with various other socio-economic and demographic factors. For example, religiosity may vary by educational attainment and country of birth (Goldscheider, 1971; Jagodzinski and Manabe, 2009; Kaufmann et al., 2012), which in turn can also affect fertility levels. In order to estimate the different associations between religious practice and socio-demographic factors, a logit regression model was conducted, using a binary dependent variable to indicate whether the respondent attended religious services at least once a month, or less than monthly. The independent variables include religious denomination (the model was restricted to respondents who identify themselves with a specific religion), sex, age and age squared and educational attainment. The measurement for education is based on the International Standard Classification of Education (ISCED 1997) to enable cross-country comparison. The six education categories of the ISCED were grouped to three levels: "lower secondary", which refers to less than completed secondary school, "upper secondary", which refers to completed secondary school or any post-secondary education that is non-tertiary. The highest level, "tertiary education", refers to Bachelor or higher degree. It is often assumed that religiosity decreases with education; however, the empirical evidence for this relationship is complex and some studies show a positive correlation between education and religious participation (Iannaccone, 1998; McFarland et al., 2011).

Additional covariates included marital status, which has also been found correlated with religiosity; in general, people with higher religious involvement have more traditional family behaviours, including higher rates of marriage, lower rates of cohabitation and higher marital stability (Heaton and Goodman, 1985; Lehrer, 2004b; Surkyn and Lesthaeghe, 2004; Mahoney et al., 2001; Thornton et al., 1992). The categories of this variable include being married (as the reference category), living in a cohabitating union, never married, divorced (or separated) and widowed. It is expected that being single, cohabitating and being divorced

are negatively correlated with regular attendance at services. The logit model also controls for nativity status – the country of birth of the respondent and the respondent's mother. This measure is included in the model since the country of birth is closely linked with religious affiliation and religiosity. Those with a migrant origin are more likely to be affiliated with a non-Christian religion and they are also more likely to be religious compared to the native population (Kaufmann et al., 2012). The reference category for nativity comprises those who are, on their mother's side, at least third generation in the country of interview. The other categories included the main areas of origin for migrant populations, divided into first and second generation migrants. Place of residence is also controlled; in France a binary variable is used to indicate residence in an urban or rural area. In Britain however, no comparable variable that differentiate rural and urban areas is available in the main data base, and therefore a dummy variable is used instead to indicate whether the respondent resides in England, Scotland or Wales, as these countries differ in their religious traditions (Weller, 2007).

The second part of the chapter presents a longitudinal analysis from Britain examining the effect of life course factors on religious service attendance. First, pooled data from the 18 waves of the BHPS were used to observe transitions over time in religious practice. Thus, the average probabilities of individuals to move from monthly attendance to less than monthly attendance and the opposite transition across the panel waves were calculated separately for men and women. Then, the influence of life-cycle events on religious practice was estimated in two different time periods of seven years each: 1994-2001 and 2001-2008. In each time period, a separate subsample of men and women aged 18-35 at the time of the first observation is included, as these are the ages when the main life-cycle transitions are expected to occur (e.g. leaving the parental home, obtaining higher education, family formation etc.). The reason for splitting the data into two shorter periods is twofold: first, as

mentioned in Chapter One, the original sample of the BHPS from the first wave has been reduced by attrition at each subsequent wave (Taylor et al., 2010). Thus, only a small proportion of the original sample remained throughout the 18 waves of the panel and this subsample is highly selective. Second, according to Berghammer (2012), there is an advantage in using relatively shorter intervals (of around 5 years) when estimating the relationship between life course transitions and subsequent church attendance, as it reduces the number of potentially confounding events that may occur during the observed period (ibid, p. 203). In the current analysis, seven-year intervals are used, as it allows enough time for children born during that period to reach primary school, when parents are most likely to increase their participation in religious services according to Stolzenberg and colleagues (1995).

For each time period, a logistic regression analysis is performed, where the dependent variable denotes whether the respondent attends services on a monthly basis or not at the end of the observation period (2001 and 2008)[7]. The model covariates include a dummy variable which indicates whether the respondent is a regular attendant at religious services at the first observed wave. The other independent variables include various life course transitions which may affect religiosity between the first and the last observed wave in each time period. This includes the transition to first birth (yes or no) as well as changes in marital status: single, married, cohabiting or entering cohabitation, entering marriage union and union split. Due to the small number of cases of union dissolution, it was not possible to distinguish dissolution from marriage and from cohabitation. For the same reason, living in cohabitation throughout the observed period and entering cohabitation at some point during that time are also collapsed into one category. Other covariates include a binary variable to

[7] A binary dependent variable is used in this analysis to match the measure of religious practice that is used in other analyses. A similar method to assess the contribution of family formation factors on religious attendance is demonstrated by Tilley (2003).

indicate whether the respondent has obtained higher education during the observed time period (including those who are still enrolled in higher education at the end of the period). This is added since the secularization paradigm postulates that education, particularly at higher levels, contributes to religious decline (Norris and Inglehart, 2004; Schwadel, 2014). In addition, the proportion of time in which the respondent was employed during the observed period (i.e. the number of waves from the total observed waves in which paid employment is reported) is also included in the model. An additional dummy variable indicates whether the respondent is living with his/her parents, living outside the parental home, or whether the respondent has left the parental home during the observed period. The model also controls for age at the time of the first observation.

In order to control for non-random attrition during the period of observation, a propensity score was calculated by modelling the probability of attrition (yes or no) as a function of the relevant predictor variables at the time of the first observation (religious practice, age, education, marital status, employment status, living in parental home). Then, the predicted probability of attrition for each respondent was included as a control variable in the logistic regression analysis for religious practice in 2001 and in 2008. This method is based on techniques for handling attrition in longitudinal data described by Kristman et al., (2005).

Findings

Religious affiliation and practice in Britain and France

While the religious landscape in France is dominated by the Roman Catholic Church, Britain is characterised by diverse Christian traditions, as a result of varied national and religious histories of the different parts of the United Kingdom (Weller, 2007). In Britain (Table 2.1), the group with the highest frequency are those reporting no religion (44%), though this group is considerably larger among men (51.5%) than among women (38%). The largest religious tradition in Britain is the Church of England, which is grouped together with other Protestant traditions. The next largest church is Roman Catholic, comprising almost nine percent of the adult population. The proportion of other Christian groups (including non-specified Christians) is close to six percent. Muslims comprise about one percent in this sample, and the remaining three percent is affiliated with other religious groups.

The distribution of religious affiliation by birth cohort in Britain (Figure 2.1) reveals that among those born since mid-1960s onwards, the proportion of people reporting no religious affiliation becomes the majority, while the proportion of those identifying as Protestants drops from 62% among the 1925-1934 cohort to only 10% among the youngest cohort. The proportion of Catholics also declines from older to younger cohorts, though in a more moderate way (from 10% to 6% respectively).

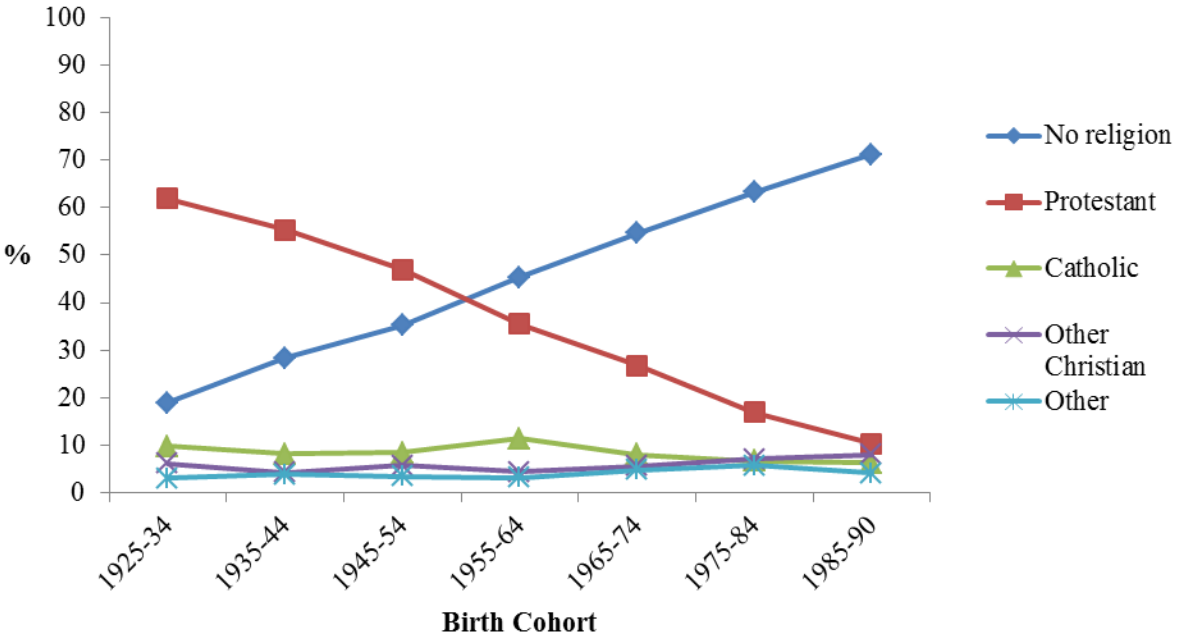
The religious distribution in France consists of over 70 percent Roman Catholics, which comprise the largest religious group. Close to eight percent of the sample did not respond to the question on religious affiliation, which is probably due to the fact that this question is considered especially sensitive in France (Blum, 2002; Peri-Rotem, 2012). Table 2.2 presents the weighted percentages next to the weighted valid figures.

Table 2.1 Religious denominations in Britain: adults aged 18 and above

	Total		Men		Women	
Religious Denomination	**N**	**%**	**N**	**%**	**N**	**%**
No Religion	4,904	44.3	2,582	51.5	2,303	37.9
Roman Catholic	959	8.7	397	7.9	564	9.3
Protestant	4,140	37.3	1,581	31.6	2,575	42.4
-Church of England	3,408	30.8	1,310	26.2	2,110	34.8
-Presbyterian	394	3.6	157	3.1	238	3.9
-Other Protestant	338	3.1	114	2.3	226	3.7
Other Christian	634	5.7	249	5.0	387	6.4
Muslim	112	1.0	57	1.1	54	0.9
Other	330	3.0	143	2.9	188	3.1
Total	**11,079**	**100**	**5,009**	**100**	**6,070**	**100**

Source: BHPS (2008)

Figure 2.1 Religious affiliation by birth cohort in Britain: adults aged 18 and above



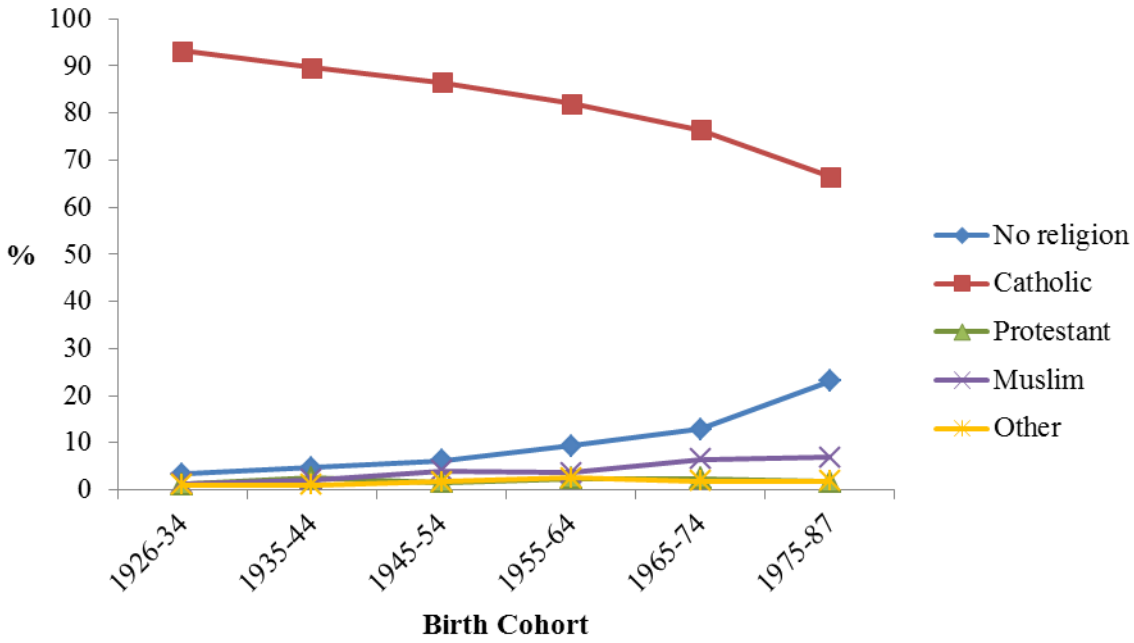
Source: BHPS (2008)

Table 2.2 Religious denominations in France: adults aged 18 and above

Religious Denomination	Total			Men			Women		
	N	%	% valid	N	%	% valid	N	%	% valid
Roman Catholic	7,460	74.0	80.2	3,149	72.1	78.3	4,330	75.9	81.9
Protestant	183	1.8	2.0	81	1.8	2	103	1.8	1.9
Muslim	431	4.3	4.6	208	4.8	5.2	218	3.8	4.1
Other	164	1.6	1.8	71	1.6	1.8	93	1.6	1.8
No religion	1,065	10.6	11.4	511	11.7	12.7	543	9.5	10.3
No response	776	7.7	-	351	8.0	-	421	7.4	-
Total	**10,079**	**100**	**100**	**4,371**	**100**	**100**	**5,708**	**100**	**100**

Source: GGP (2005)

Figure 2.2 Religious affiliation by birth cohort in France: adults aged 18 and above



Source: GGP (2005)

The non-affiliated group is relatively small (compared to other Western European countries), comprising around eleven percent of the adult population (age 18+). The Muslim population in France forms nearly five percent of respondents, and only two percent of respondents are Protestants.

The distribution of religion by birth cohort in France (Figure 2.2) shows a consistent decline in the proportion of people identifying as Catholics from older to younger generations, and a parallel increase in the percentage of non-affiliated respondents. The percentage of Muslims is also higher within the younger generations, due to the age structure of migrant populations.

Although religious denomination is an important marker of identity (Day, 2011; Southworth, 2005), it is also important to look at the practical aspect of religious adherence as this might accentuate the effects associated with religious affiliation (Lehrer, 2004a). Attendance at religious services is considered a reliable measure of religious commitment, since it requires active engagement in religious ceremonies and religious congregations.

While the majority of adult population in Britain and France consider themselves as members of a particular religion, only a small minority attend religious services on a regular basis (monthly or more). In addition, in both countries, women are more likely to be regular attenders than men. In Britain (Table 2.3) fifteen percent of respondents reported that they attend services at least once a month (12% of men and 18% of women). The same proportion attends a few times a year, but less than once a month, while over two thirds of respondents do not attend services, or do so only on rare occasions.

Table 2.1 Religious service attendance in Britain

	Adult Population		Men		Women	
Frequency of Service Attendance	**N**	**%**	**N**	**%**	**N**	**%**
At least once a month	1650	15	587	12	1071	18
A few times a year	1681	15	638	13	1049	17
Rarely or never	7771	70	3795	75	3962	65
Total	**11,102**	**100**	**5,020**	**100**	**6082**	**100**

Source: BHPS (2008)

Table 2.2 Religious service attendance in France

	Adult Population		Men		Women	
Frequency of Service Attendance	**N**	**%**	**N**	**%**	**N**	**%**
At least once a month	1127	11	395	9	754	13
A few times a year	1418	14	556	13	876	16
Rarely or never	7485	75	3400	78	4049	71
Total	**10,030**	**100**	**4,351**	**100**	**5,679**	**100**

Source: GGP (2005)

Table 2.3 Proportion attending services monthly or more by religious affiliation in Britain (adults aged 18 or over, in %)

Religious Denomination	Total	Men	Women
Roman Catholic	38	33	41
Protestant	19	15	21
Other Christian	40	38	42
Muslim	48	68	25
Other	37	34	39

Source: BHPS (2008)

Table 2.4 Proportion attending services monthly or more by religious affiliation in France (adults aged 18 or over, in %)

Religious Denomination	Total	Men	Women
Roman Catholic	11	8	14
Protestant	24	21	27
Muslim	27	37	16
Other	34	36	32

Source: GGP (2005)

In France (Table 2.4), the proportion of regular attendants at religious services is slightly smaller: about eleven percent of the adult population (9% of men and 13% of women) attend services at least once a month. About three quarters of respondents declared they rarely or never attend religious services.

Tables 2.5 and 2.6 show the distribution of regular (monthly or more) service attendance by religious affiliation. Interestingly, those identified as Catholic in France are less likely to attend services regularly compared to Protestants (11% and 24% respectively). The opposite is true for Britain, where Catholics have a considerably higher proportion of regular attendants (38% of Catholics compared to 19% of Protestants in Britain). A likely reason for this difference is that Catholics form the majority in France, while being a minority in Britain. According to Stark and Finke (2000), religious identity and solidarity would be stronger when religion is a marker that distinguishes people from other groups who are conceived as competitors or oppressors. Another finding of interest is that among Muslims, contrary to other religious groups, women's participation in religious services is markedly lower than that of men (16% of Muslim women in France attend services regularly compared to 37% of men. The respective figures in Britain are 25% of women and 68% of men). This relates to the fact that Muslim women are not obliged to attend the mosque, and, in many cases the mosque does not accommodate women, as they are supposed to pray separately from men. In some cases, women are discouraged altogether from worshipping in mosques, so they tend to go there less often than men (Weller, 2007, p.233).

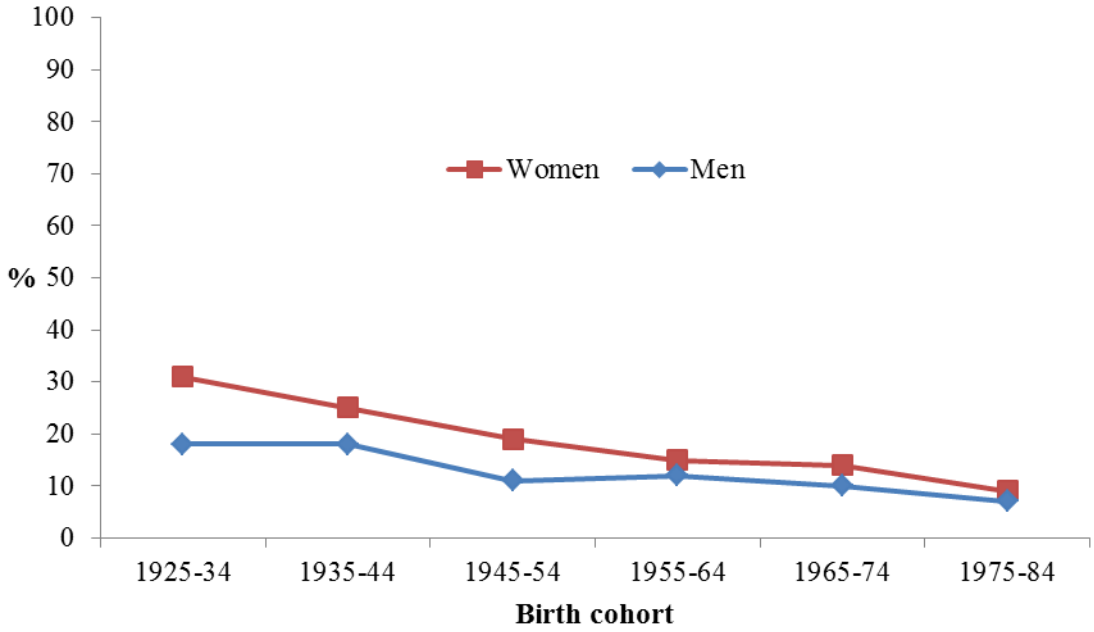
Figures 2.3 to 2.4 present the proportion of regular attendants at religious services by sex and birth cohort. As expected, older cohorts show much higher participation than younger cohorts. Nevertheless, the decline seems to level off from the cohorts born in 1945 onwards in France and to some extent in Britain. The gender difference in religiosity also narrows

among the younger generations. It should be noted, however, that inter-cohort differences in religious practice may also reflect ageing effects on religiosity.

Tables 2.7 and 2.8 present the results of the logistic regression for the likelihood of attending religious services on a regular basis (at least once a month) with controls for other socio-demographic factors. The results of the logistic regression for Britain and France confirm that women are more likely to attend services at least once a month than men: the odds for being a regular attendant at religious services for women in Britain are 45% higher than for men. In France, the odds for women are 60% higher compared to those of men. These results are significant at the level of 1%. Age is also positively related to religious participation, as each additional year increases the odds of attending religious services on a monthly basis by 2 or 3 percent in Britain and in France respectively. However, in this model it is not possible to distinguish between age and cohort effects.

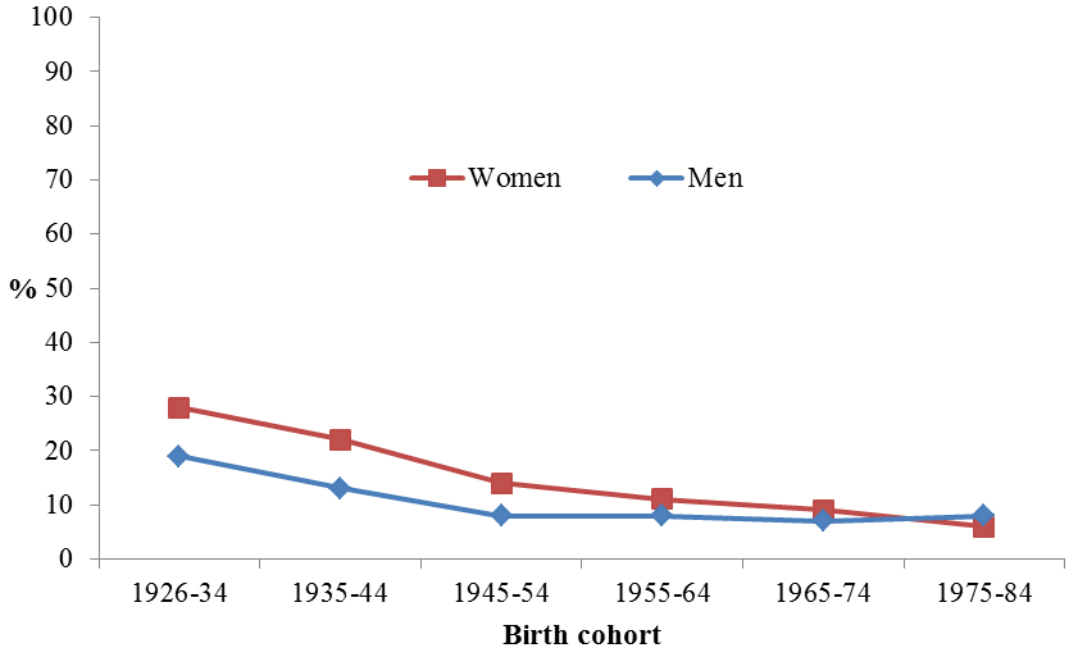
In line with the descriptive data, Protestants in France are more likely to attend church regularly than Catholics even when controlling for a range of socio-economic and demographic factors, while the opposite is true for Britain. Muslims in France also show more frequent service attendance than Catholics, even when restricting the sample to women (see Table 2.8). The country of origin and nativity status is also related to religious participation; in general, people with migrant origin are more religious than the native population in Britain and France. In Britain for example, people with South Asian origin are more likely to actively practice religion than those with British origin, though this effect has weakened for second generation migrants. In France, the pattern for people from Maghreb countries is not consistent for men and women, which may be due to the confounding effect of the "Muslim" category, which explains a larger share of the variance in religious attendance than country of origin.

Figure 2.3 Proportion of regular attendants at religious services by sex and birth cohort in Britain



Source: BHPS (2008)

Figure 2.4 Proportion of regular attendants at religious services by sex and birth cohort in France



Source: GGP (2005)

Table 2.7 Estimated odds ratio for monthly attendance at religious services in Britain[a]

		All Respondents	Men	Women
Sex	Male	Ref		
	Female	1.453***		
Age	Age	1.021***	1.017***	1.024***
Religious Affiliation	Catholic	2.545***	2.365***	2.687***
	Protestant	Ref	Ref	Ref
	Other Christian	2.799***	3.370***	2.543***
	Other	2.082***	2.919***	1.692***
Education	Lower Secondary	Ref	Ref	Ref
	Upper Secondary	1.495***	1.383**	1.587***
	Tertiary Education	2.812***	3.021***	2.751***
Marital Status	Never Married	0.928	0.945	0.910
	Married	Ref	Ref	Ref
	Cohabiting	0.270***	0.219***	0.299***
	Divorced	0.646***	0.696	0.642***
	Widowed	1.115	0.962	1.099
Nativity	UK born (3rd generation)	Ref	Ref	Ref
	South Asia 1st	3.195***	3.500***	2.808***
	South Asia 2nd	2.274**	2.356**	1.673
	Europe 1st	1.094	1.480	0.969
	Europe 2nd	1.163	1.543	0.962
	Other 1st	1.723**	2.383*	1.473
	Other 2nd	2.213***	1.950	2.326***
Place of Residence	England	Ref	Ref	Ref
	Wales	1.224***	1.136	1.268**
	Scotland	1.979***	2.090***	1.941***
	N	5,485	2,144	3,341

[a] Respondents aged 18 or above.

*p<0.1, **p<0.05, ***p<0.01

Source: BHPS (2008)

Table 2.8 Estimated odds ratio for monthly attendance at religious services in France[a]

		All Respondents	Men	Women
Sex	Male	Ref		
	Female	1.618***		
Age	Age	1.034***	1.030***	1.037***
Religious Affiliation	Catholic	Ref	Ref	Ref
	Protestant	2.379***	2.518***	2.275***
	Muslim	3.545***	5.318***	2.150***
	Other	3.982***	5.429***	3.170***
Education	Lower Secondary	Ref	Ref	Ref
	Upper Secondary	0.889	0.834	0.950
	Tertiary Education	1.281**	1.380**	1.242*
Marital Status	Never Married	0.937	0.997	0.899
	Married	Ref	Ref	Ref
	Cohabiting	0.323***	0.197***	0.396***
	Divorced	0.593***	0.693	0.557***
	Widowed	1.138	1.212	1.051
Nativity	Born in France (3rd generation)	Ref	Ref	Ref
	Maghreb 1st	1.023	1.507	0.587*
	Maghreb 2nd	1.164	2.353**	0.640
	Europe 1st	1.222	0.971	1.464*
	Europe 2nd	0.846	0.770	0.894
	Other 1st	2.602***	2.420***	2.718***
	Other 2nd	3.064***	3.083	3.328***
Place of Residence	Urban	Ref	Ref	Ref
	Rural	0.970	0.935	0.992
	N	8,059	3,430	4,629

[a] Respondents aged 18 or above.

*p<0.1, **p<0.05, ***p<0.01

Source: GGP (2005)

As expected, a significant correlation is found between marital status and the level of religiosity. In Britain and France, the odds for being regular attenders for people who live in cohabitation are about 70% lower compared to those of married persons (odds ratio of 0.270 in Britain and 0.323 in France, significant at $p<0.01$). The odds for divorced to be regular attendants at religious services are lower by around 40% compared to those who are married (odds ratio of 0.646 in Britain and 0.593 in France, significant at $p<0.01$).

Another finding of interest is the positive correlation between service attendance and higher education, which is found in both countries, especially for tertiary education. In Britain, the odds of attending services regularly are 50% higher among people with upper secondary education compared to those with lower education. Moreover, the odds of monthly attendance among the highly educated are almost three times higher compared to those of the least educated group (significant at $p<0.01$). In France, the odds of highly educated people being regular attendants are about 30% higher than the least educated, and this result is significant at 5%. The positive correlation between religiosity and education holds for both men and women. This finding contradicts the classic theory of modernization, which assumes that the rise of science and the expansion of mass education would bring a decline in religious adherence (Norris and Inglehart, 2004). However, some studies have shown that higher education is not necessarily incompatible with religiosity. Although in many cases highly educated people tend to be less religious, this relationship is not consistent across all countries and religious groups (Albrecht and Heaton, 1984; Jagodzinski and Manabe, 2009).

In terms of place of residence, British people who reside in Wales or in Scotland appear to be more religious than those living in England. In France however, no significant differences are found for those living in rural or urban areas.

Life course effects on religious practice

This section presents findings on the stability of religious practice over time and the effects of life-cycle events on whether a person attends religious services on a regular basis or not. Table 2.9 shows the probabilities of the shift from practicing to non-practicing and the opposite transition for men and women in Britain during the period from 1991-2008. It appears that the probability of reducing the frequency of service attendance over time is higher than the probability of increasing it. Around 16% of men and women who were attending religious services at least once a month reduced their frequency of attendance to less than monthly over the observed period. The proportion of respondents who became regular attenders over time is much lower, although slightly higher for women than for men; only 2% of men increased their attendance at religious services to at least once a month, compared to 4% of women. These findings are consistent with Berghammer's (2012) longitudinal study from the Netherlands, which showed that people who never attend church or do so only several times a year are most stable in their behaviour, while a much higher proportion of those attending religious services on a monthly basis reduce their participation over time (ibid). However, the overall stability of religious practice appears to be relatively high.

Table 2.10 presents the results of the logistic regression for monthly service attendance in 2001 and in 2008 as a function of attendance at the first wave of observation (1994 and 2001 respectively) and life-course transitions during the observed period. The findings point to some differences in life-course effects on religious practice between the two periods and by gender. While no relationship is found between the transition to first birth and religious service attendance for women, men who became fathers during that time were more likely to be regular attendants at the later period compared to other men. These findings are consistent with US studies on gender differences in the effect of family formation on men

and women's religious participation (Becker and Hofmeister, 2001; Wilson and Sherkat, 1994). For example, Becker and Hofmeister (2001) have found that family formation, and having children in particular, is directly linked with increased religious participation for men but not for women. Similarly, Wilson and Sherkat (1994) have showed that men were more likely to return to the church when they had a family of their own compared to women. A possible explanation may be that, since women are usually more frequent religious attenders than men, it is more likely for non-practicing men to form a union with practicing women than the other way around. Therefore, if men adapted their religious attendance to be more like their partners, family formation would have a stronger positive effect on men's religious participation than on women (ibid). However, the current findings lend further support to the assumption that women's religious participation is not affected by the transition to first birth. On the other hand, other life course factors were found associated with future service attendance. For example, living in or entering non-marital cohabitation in 1994-2001 is linked to reduced religious participation among men and women, and disrupted marriage or cohabitation is also negatively associated with religious practice for men during that period. A negative effect of non-traditional family life-cycle stages, such as cohabitation and divorce, on religious participation is also found in Stolzenberg et al. (1995). There, this relationship is attributed to the fact that cohabitation and divorce reflect disrespect for proscriptions about the sanctity of marriage and against premarital sex. On the other hand, no significant relationship is found in the current analysis between cohabitation or union split and religious practice in the more recent period of 2001-2008. This may be due to the increase in cohabitation and divorce during that time, making alternative living arrangements both more widely acceptable and more normatively conformist (Beaujouan and Ní Bhrolcháin, 2011).

Table 2.9: Transition probabilities in reporting religious practice (at least monthly/ less than monthly) [a]

	Women	Men
Change from practicing to non-practicing	16.7%	16.2%
Change from non-practicing to practicing	4.4%	2.2%

[a] Respondents aged 18 or above.
Source: BHPS 1991-2008

Table 2.10: Odds ratios for monthly attendance at religious services in 2001 and 2008[a]

	Women		Men	
	Monthly attendance in 2001	Monthly attendance in 2008	Monthly attendance in 2001	Monthly attendance in 2008
Age	1.007	0.879**	1.065	0.964
First birth	1.101	1.436	2.765**	2.806*
Single	Ref	Ref	Ref	Ref
Married	1.622	0.816	0.601	1.309
Cohabiting/ enter cohabitation	0.129*	0.336	0.161**	0.877
Disrupted marriage/ cohabitation	1.229	0.702	0.078*	0.557
Enter marriage	1.848	0.987	0.782	1.743
Obtains higher education	3.144***	1.281	0.707	2.897
% of time in paid work	0.115***	0.507	0.788	0.390
Living outside parental home	Ref	Ref	Ref	Ref
Live in parental home	0.758	0.568	0.748	0.737
Left parental home	0.682	0.503	1.171	0.311*
Monthly attendance in 1994/2001	16.910***	14.863***	69.257***	101.631***
Pseudo R-squared	0.29	0.24	0.39	0.50
N	560	670	632	727

[a] Respondents aged 18-35 at the time of first observation.

*p<0.1, **p<0.05, ***p<0.01

Source: BHPS 1994-2008

A positive association is found between the attainment of higher education and subsequent religious practice among women in the 1994-2001 period. This finding is in line with previous studies on the relationship between education and religiosity (McFarland et al., 2011; Sacredote and Glaeser, 2001; Stolzenberg et al., 1995). The common explanation for this positive relationship is that well educated people have higher social capital (Helliwell and Putnam, 2007), and since religious attendance is a major form of social interaction, investment in human capital goes hand in hand with investment in social capital through participation in religious activities (Sacredote and Glaeser, 2001).

Another finding of interest is the negative association between the proportion of time spent in paid employment and religious practice among women in the period 1994-2001. According to previous studies, people who are in paid employment have more time constraints as well as alternative social networks to those that can be found in religious congregations (de Vaus and McAllister, 1987; Ruiter and van Tubergen, 2009). Although it is also possible that engaging in paid employment increases women's individualism and contributes to rejection of traditional gender roles that are associated with religious institutions (Hertel, 1995). Nevertheless, this relationship is not significant in the more recent period.

It is also found that age is negatively associated with religious participation for women in the 2001-2008 period[8]. This could perhaps reflect an increasing rate of decline in religious attendance for women over the past decade. In addition, a negative marginal effect of leaving the parental home on religious practice is found for men in the 2001-2008 period. However, throughout the analysis by far the strongest determinant of religious practice in the last observed wave is monthly attendance in the first wave. For example, the odds ratios for

[8] When adding age squared to the analysis both age and age squared were insignificant.

monthly attendance at the end of the period for women who attended monthly at the first wave are around 15-17 times higher than women who attended less than once a month in the first wave (odds ratios are 16.910 for the 1994-2001 period and 14.863 for the 2001-2008 period, both significant at $p<0.01$). For men, the parallel odds ratios are 69.257 and 101.631 (significant at $p<0.01$) for the 1994-2001 and 2001-2008 periods respectively. These odds ratios are considerably higher than, for example, the odds ratios for the transition to fatherhood (2.765, significant at $p<0.05$ and 2.806, significant at $p<0.1$ for the earlier and the later periods respectively). This finding is in line with previous research in Britain, which showed that "past church attendance is extremely good at predicting current attendance" (Tilley, 2003: 275). Thus, the hypothesis about the stability of religious practice is for the most part supported by the findings - past attendance at religious services is by far the most important determinant of current religious practice, although there is also some evidence of life-course effects on religious behaviour.

Discussion

This chapter has explored trends in religious affiliation and practice by gender and across birth cohorts in Britain and France, as well as the links between religious practice and other socio-demographic variables. In addition, in order to address the question of the stability of religious practice over time, a longitudinal analysis from Britain explored the influence of life-cycle events such as changes in marital status and the transition to first birth on religious practice.

In line with previous research, the findings indicate that women are generally more religious than men, and that people from younger birth cohorts are less religious than those who were born earlier, in terms of religious affiliation and practice.

The longitudinal analysis from Britain supports the assumption that religious decline is cohort-driven rather than a result of aging. Firstly, it appears that over time, people are more likely to reduce their attendance at religious services - from at least once a month to less than monthly - rather than increasing it (as shown in Table 2.9). Secondly, in the logistic regression analysis for religious practice as a function of previous religious activity and other life course factors, there is either a negative association or no relationship between age and current religious practice. Therefore, the more appropriate explanation for the finding that older people are more religious than younger ones is that they were born at an earlier period. In addition, according to expectations, it is found that past religious activity is a very strong determinant of current practice. On the other hand, several life course factors are also, more weakly, associated with future religious practice. For example, entering or living in non-marital cohabitation is negatively associated with subsequent religious practice compared to being single, although this association is not consistent in more recent years. In addition, the transition to first birth is found to be positively linked with religious practice for men, which may be the result of an adjustment to the higher level of religiosity of their female spouse following family formation. Nevertheless, there is no evidence that childbirth among women is linked to increased religious practice.

There are several limitations to this analysis, since it only captures changes in religious practice for a period of seven years and, therefore, does not reflect complete life-course transitions in religiosity. In addition, the analysis cannot account for the effect of childbearing on religiosity at older ages. Furthermore, since a similar analysis could not be performed with the data from France, these findings are limited to Britain. Nonetheless, while the option of fertility effects on religiosity cannot be completely discounted, the findings are in accordance with expectations from existing literature, which indicate that religious attendance is relatively stable over the life course (at least in Europe), and that

average declines in religious attendance over time are likely to be due to cohort rather than life-course effects.

The next chapter presents findings on the relationship between religion and fertility in Britain and France and trends in this relationship across cohorts.

3. Religion and Fertility in Britain and France: Continuity and Change across Cohorts

Previous studies have documented a general positive association between religion and both ideal and actual family size. However, the declining importance of religious institutions in society, especially in Western Europe (Berger et al., 2008; Inglehart and Norris, 2003), may have implications for the role of religion in shaping fertility patterns. Thus, this relationship may have changed over time. On the one hand, the forces of secularization could lead to a diminishing effect of religion on family and fertility behaviours. On the other hand, the general decline in religion could result in increasing divergence in fertility patterns between secular people and those who maintain strong attachment to religious tradition. The current chapter analyses the relationships between religion - in terms of affiliation and service attendance - and fertility levels in Britain and France, focusing on the changes in these relationships across birth cohorts.

Secularization and demographic changes

The process of religious decline has often been associated with diverging family and fertility trends within and between countries (Frejka and Westoff, 2008; Impicciatore and Billari, 2012; Lesthaeghe, 2010; Lesthaeghe and Surkyn, 1988). According to the Second Demographic Transition theory, the processes of secularization and individuation in Western countries have played a key role in the transformations of family and fertility behaviours. These changes include the delay in marriage and first birth, the increase in cohabitation and non-marital fertility, increasing divorce rates and fertility decline to below replacement level (Lesthaeghe, 2010; Van de Kaa, 1993). Moreover, differences in the pace of these transformations can be attributed to variation in the process of secularization among different societies (Lesthaeghe and Neels, 2002). In recent decades most European countries,

particularly in Western Europe, have witnessed a fall in the proportion of people identifying as members of a particular denomination and by the erosion in attendance at religious services. Moreover, the importance of churches in public life has greatly diminished (Berger et al., 2008; Inglehart and Norris, 2003). The weakening importance of religion in the lives of individuals and society at large may have also altered the way religion shapes fertility patterns. For example, previous studies have pointed to a sharp decline in fertility rates among those identified as Catholics in the United States and in Ireland (Goldscheider and Mosher, 1991; Mosher et al., 1992; O'Grada and Walsh, 1995; Westoff and Jones, 1979). The decline in Catholic fertility was partly attributed to the weakening adherence to church teachings about restrictions on artificial methods of contraception as well as general teachings on reproductive behaviour (Goldscheider and Mosher, 1991; Mosher et al., 1992). As a result of this decline, Catholic fertility moved closer to the fertility levels of other major religious denominations (McQuillan, 2004). This process was described by Westoff and Jones (1979) as "the end of Catholic fertility".

However, some scholars have maintained that a general decline in religion, does not necessarily imply a weakening effect of religiosity on demographic behaviour; rather, the increasing cleavage between secular and religious individuals, may have sharpened the differences between these groups in terms of social and moral attitudes, which also concern family behaviours (Kaufmann, 2010; Régnier-Loilier, and Prioux, 2008; Stegmueller et al. 2011). As argued by Davie (2007), since church attendance is increasingly becoming a matter of personal choice, the minority of people who continue to attend religious services on a regular basis form a more homogeneous group with strong attachment to religious convictions. Some evidence for this argument is described by Adsera (2006b), who found an increasing gap in marital fertility between practicing and non-practicing Catholic women in Spain; while the results of the Spanish fertility survey in 1985 showed no difference in

the family size of practicing and non-practicing Catholics, the results from the same survey in 1999 revealed that the latter had significantly lower fertility compared to practicing women, and that their family size was similar to that of women without a religious affiliation. Based on these findings, it was suggested that following the declining influence of the Catholic Church in Spain, individuals who continued to attend religious services represent a more selective group of people who remained faithful to church doctrines, including those on reproductive behaviour (ibid). Thus, religious service attendance is assumed to both reflect and reinforce belief and commitment to traditional religious values on the importance of family and children, through the repeated exposure to religious teachings and interaction with people who share similar values (Davie, 2007; McQuillan, 2004). Compared to actively religious people, nominally religious individuals - who identify with a particular religion but attend services only occasionally or not at all - are assumed to retain some loyalty to religious tradition, although they tend to attach lower importance to religion in everyday life (Day, 2011; Voas, 2009). Therefore, the more religious individuals (in terms of affiliation and practice) are expected to attach greater importance to having children, as well as having higher levels of fertility. In this context, *it is first hypothesized that regular attenders at religious services (at least once a month) will ascribe higher importance to having children compared to those attending less often. In addition, nominally religious individuals are expected to express higher importance to children than those who state having no religion, although less than actively religious ones*. In a similar fashion, *according to the second hypothesis, religiously affiliated women will have larger completed family sizes compared to women without any religious affiliation, while completed family size is expected to be highest among practicing religious women (those attending religious services at least once a month)*.

Moreover, as those attending services regularly are becoming a more selective group, who maintain a strong adherence to traditional religious doctrines (Adsera, 2006a; Davie, 2007), it is likely that they would also sustain a higher level of fertility (or experience a smaller decline in fertility) compared to less religious women over time. Thus, *the third hypothesis contends that the fertility gap between women attending religious services at least once a month and those attending less often increases among younger birth cohorts*.

The group of religiously active Catholics in France may be particularly selective in character, given the historical conflict between the church and the state in France and the relatively strong anti-church sentiments within French society (Greeley, 2003; Martin, 2005). Therefore, *the fourth hypothesis postulates that fertility divergence between practicing and nominal Catholic women in France would be more pronounced than among Catholic or Protestant women in Britain, especially for younger cohorts.*

Data and Methods

The data for this chapter are based on the BHPS data from 2008 and the French GGP survey from 2005 (see Chapter 2). In order to test the first hypothesis on the relationship between religiosity and the ascribed importance of having children, the first part of the analysis presents data on religious differences in attitudes towards the importance of children. The BHPS includes a rather straightforward question, in which each respondent is required to choose a value on a scale of 1 to 10 to mark how important having children is for them, where '1' equals 'Not important at all', and '10' equals 'Very important'. Differences in the average level of importance of having children are then estimated separately for men and women (aged 18 and above) by religious group using analysis of variance (ANOVA). This method is statistically equivalent to a regression analysis, although it is particularly

appropriate for the purpose of testing differences in population means. As Powers and Xie (2008) explain, in ANOVA, the categorical explanatory variables (in this case religious groups) are coded in a way that the resulting parameters reflect differences from an average rather than deviations from a reference category, as in the case of regression with dummy variables.

The religious group variable is constructed using the major religious denominations, where respondents in each denomination are divided into "practicing" (attending religious services at least once a month) and "nominal" (attending service less often than once a month). Those who stated they have no religion were classified under the "no religion" group. Due to small sample size of the minority religions in each country (i.e. other Christian groups, Muslims and other religions, including Jewish, Hindu and more) these groups were collapsed into the Other religions group. Additional covariates include age, educational attainment, nativity, marital status (married/ not married) and parity (divided into four dummy variables: 'no children', '1 child', '2 children' and '3 or more children')[9]. Based on this model, predicted means of the score for the importance of having children are derived for each religious group, including confidence intervals (at a confidence level of 95%) to assess differences between pairs of religious groups.

Since there is no comparable question on the importance of children in the French GGP, the probability of expressing agreement with the statement "A woman has to have children in order to be fulfilled" is used as a proxy for the importance that is attributed to having children. This question originally has five optional answers: 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree' and 'strongly disagree'. However, the distribution of responses to this question is generally skewed towards agreement with the statement rather

[9] See Chapter 2 for details on measurement of religiosity, education and nativity.

than disagreement, so that the number of observations in some of the categories is relatively low among some of the religious groups. Therefore, this variable is dichotomised, so that respondents who said they agree or strongly agree with the statement receive the value of 1 and all other answer categories are coded as zero. Then, a logistic regression is used to estimate the likelihood of men and women agreeing with the statement and for producing predicted probabilities of agreement with the statement for each religious group. The religious group variable and other covariates used in this model are the same as those used for the parallel analysis in Britain.

The next part explores hypotheses 2 to 4 on religious differences in completed fertility and the way this relationship varies across cohorts and between the two observed countries. First, descriptive findings on completed (or near completed) fertility levels are presented for each religious group - defined both by affiliation and religiosity - for women aged 40 or above. These differences in completed fertility are then examined using an ordinary least squares (OLS) regression model for the number of children ever born as a function of religious group, birth cohort, highest level of education achieved, nativity and region of residence.[10] The regression model also includes interaction between religious groups and birth cohort, to detect changes in the relationship between religiosity and fertility across different cohorts. Finally, predicted means for the number of children for each religious group in a specific birth cohort are calculated.

[10]Long and Freese (2006) suggest that when modelling count outcomes (as in the case of the number of children ever born), it is preferable to use count models, such as the Poisson Regression Model (PRM) rather than a linear regression model, which assumes a normal distribution of the observed outcome. For this reason, in addition to the OLS models, I have also estimated Poisson regression models using the same variables as in the OLS models (not shown). The PRM yielded results that are very similar to the OLS models in terms of significance and magnitude. However, since OLS models are relatively straightforward and easier to interpret, it was decided to use them for this analysis.

Findings

Attitudes towards the importance of having children

Tables 3.1.1-3.1.2 present the analysis of variance for men and women in Britain for the stated importance of having children. The results from both tables indicate a significant relationship between religious group affiliation and the importance attributed to having children. Age and number of children are also significantly correlated with the importance of having children, although education and nativity are not found associated with the dependent variable. Being married is significantly correlated with the importance of having children for men, though not for women.

More detailed differences in the importance of having children by religious group and gender are shown in Figure 3.1. The figure shows the predicted means of the importance attributed to having children for men and women from each religious group, with their associated confidence intervals. These predicted means are based on the ANOVA models in Tables 3.1.1-3.1.2 after adjusting for all other covariates in the model.

First, the results from Figure 3.1 show that women in Britain attribute higher importance to having children compared to men. In terms of religious differences, in general men and women with no religious affiliation ascribe lower importance to having children compared to individuals who define themselves as members of a particular religion. Among women, the exceptional result is for nominal Catholics, with a score that is not significantly different from that of non-affiliated women, although nominal Catholic men have a significantly higher score than their non-affiliated counterparts. Among men, most religious groups show a significantly higher score for the importance attributed to having children compared to non-affiliated, although for nominal Protestant and practicing men from the Other religions group the difference is not statistically significant.

Table 3.1.1 Analysis of variance for the stated importance of having children among women in Britain (adults aged 18+)

Number of obs = 5796 R-squared = 0.3638
Root MSE = 2.150 Adj R-squared = 0.3617

Source	Partial SS	DF	MS	F	Prob > F
Model	15275.4	19	804.0	173.9	0
Religious group	332.7	6	55.4	12.0	0
Age	855.7	1	855.7	185.1	0
Level of education	9.5	2	4.7	1.0	0.3592
Nativity	15.3	6	2.6	0.6	0.77
Married	7.9	1	7.9	1.7	0.1916
Number of children (grouped)	12720.9	3	4240.3	917.0	0
Residual	26708.4	5776	4.6		
Total	41983.8	5795	7.2		

Source: BHPS (2008)

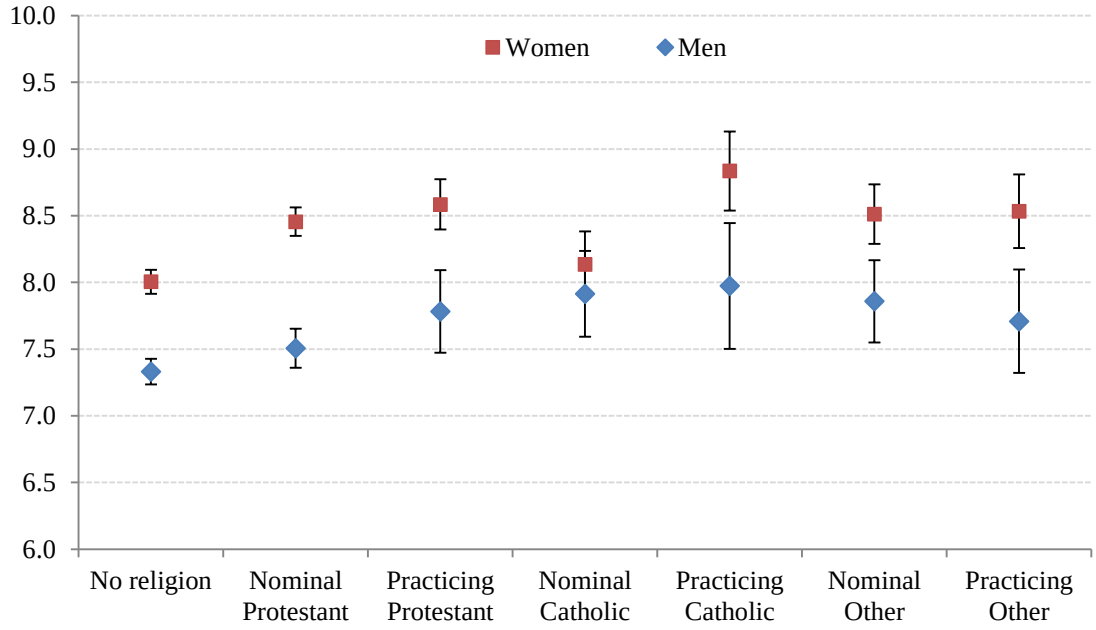
Table 3.1.2 Analysis of variance for the stated importance of having children among men in Britain (adults aged 18+)

Number of obs = 4777 R-squared = 0.3292
Root MSE = 2.430 Adj R-squared = 0.3265

Source	Partial SS	DF	MS	F	Prob > F
Model	13786.8	19	725.6	122.9	0
Religious group	176.6	6	29.4	5.0	0
Age	755.9	1	755.9	128.0	0
Level of education	13.3	2	6.6	1.1	0.3256
Nativity	5.4	6	0.9	0.2	0.9888
Married	162.6	1	162.6	27.5	0
Number of children (grouped)	9345.9	3	3115.3	527.5	0
Residual	28093.4	4757	5.9		
Total	41880.2	4776	8.8		

Source: BHPS (2008)

Figure 3.1 Predicted means for the importance of having children by religious affiliation and practice in Britain (adults aged 18+)



Source: BHPS (2008)

Interestingly, no significant differences in the importance ascribed to having children are found between practicing and nominal religious groups within religious affiliations, with the exception of the large divergence between nominal and practicing Catholic women.

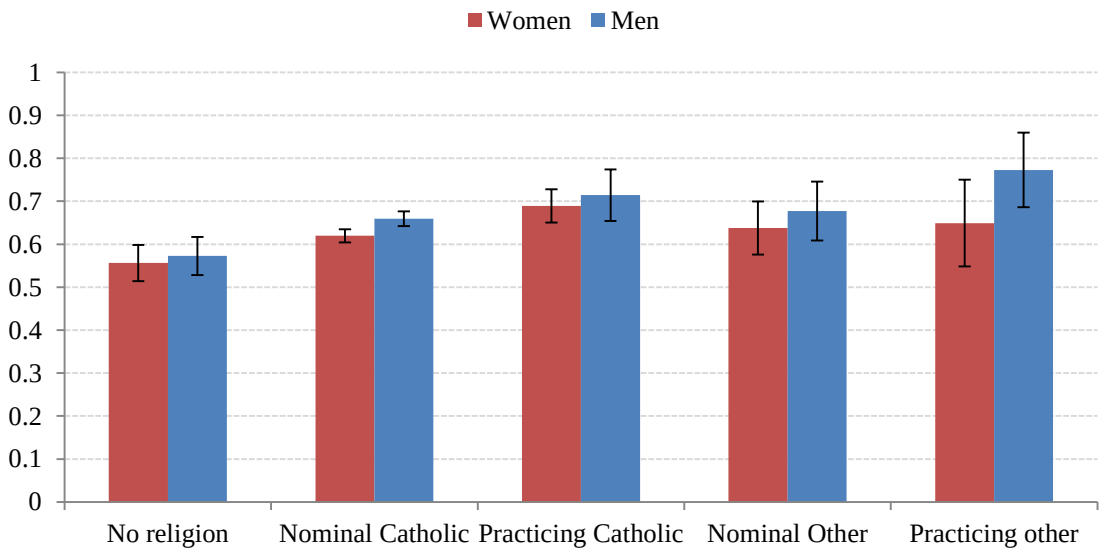
In France, where the likelihood of agreement with the statement 'A woman has to have children in order to be fulfilled' is used as a proxy for the importance of having children, the results also indicate that more religious men and women ascribe higher value to having children (see Table 3.2, and Figure 3.2). As shown in Table 3.2, compared to non-affiliated respondents, nominal Catholics are more likely to agree with the statement (odds ratio of 1.330 for women and 1.483 for men, significant at $p<0.01$). For practicing Catholics, the odds of agreeing with the statement were almost twice as high as the odds of people with no religion (odds ratio of 1.858 for women and 1.947 for men, significant at $p<0.01$).

Table 3.2 Odds ratios for agreeing that 'a woman has to have children in order to be fulfilled' in France (adults aged 18+)

		Women	Men
Age	Age	1.011***	1.023***
Religious group	No Religion	Ref	Ref
	Nominal Catholic	1.330***	1.483***
	Practicing Catholic	1.858***	1.947***
	Nominal Other	1.448**	1.616**
	Practicing Other	1.526	2.700***
Education	Lower Secondary	Ref	Ref
	Upper Secondary	0.662***	0.873
	Tertiary Education	0.412***	0.647***
Nativity	Born in France	Ref	Ref
	Maghreb 1st Gen	1.389	1.206
	Maghreb 2nd Gen	1.286	1.121
	Europe 1st Gen	0.797	0.956
	Europe 2nd Gen	0.985	0.779
	Other 1st Gen	1.062	0.801
	Other 2nd Gen	1.834*	0.937
Marital st'	Married	0.990	1.104
Number of children	No children	Ref	Ref
	1 child	1.766***	1.345***
	2 children	1.938***	1.287**
	3+ children	1.894***	1.425***
	Constant	0.729**	0.418***
	N	5,117	3,835

*p<0.1, **p<0.05, ***p<0.01
Source: GGP (2005)

Figure 3.2 Predicted probabilities for agreeing that 'a woman has to have children in order to be fulfilled' in France (adults aged 18+)



Source: GGP (2005)

A higher likelihood of agreement with the statement compared to non-affiliated people is also found for nominal and practicing respondents from other religions, although the coefficient for practicing women from other religions is not significant for women.

Based on the logistic regression model in Table 3.2, the predicted probabilities for agreement with the statement were estimated for women and men in each religious group in France, adjusting for all other variables (Figure 3.2). The predicted probabilities in Figure 3.2 show that practicing Catholic women are significantly more likely to agree with the importance of having children compared to non-affiliated women and compared to nominal Catholic women, although no significant differences are found between nominal and practicing women from Other religions. Among men, nominal and practicing Catholic and practicing men from Other religions show significantly higher agreement with the importance of having children than those with no religion, although no differences are found between nominal and practicing religious men.

Similar to Britain, age has a significant positive effect on the importance ascribed to having children in France. Also, respondents with children ascribe higher importance for having children compared to childless people, with no great differences by family size. Another finding of interest is that in both countries religion seems to be a much stronger determinant of attitudes towards children than nativity status. This may be due to the larger heterogeneity among migrants from different regions; though it also supports the argument that religious institutions exert a particularly strong influence on norms related to family life, in comparison to other social institutions (McQuillan, 2004; Norris and Inglehart, 2004). Moreover, no significant effect of education on the perceived importance of having children was found in Britain. In France on the other hand, education is inversely related to agreeing that a woman has to have children in order to be fulfilled. However, this may be due to

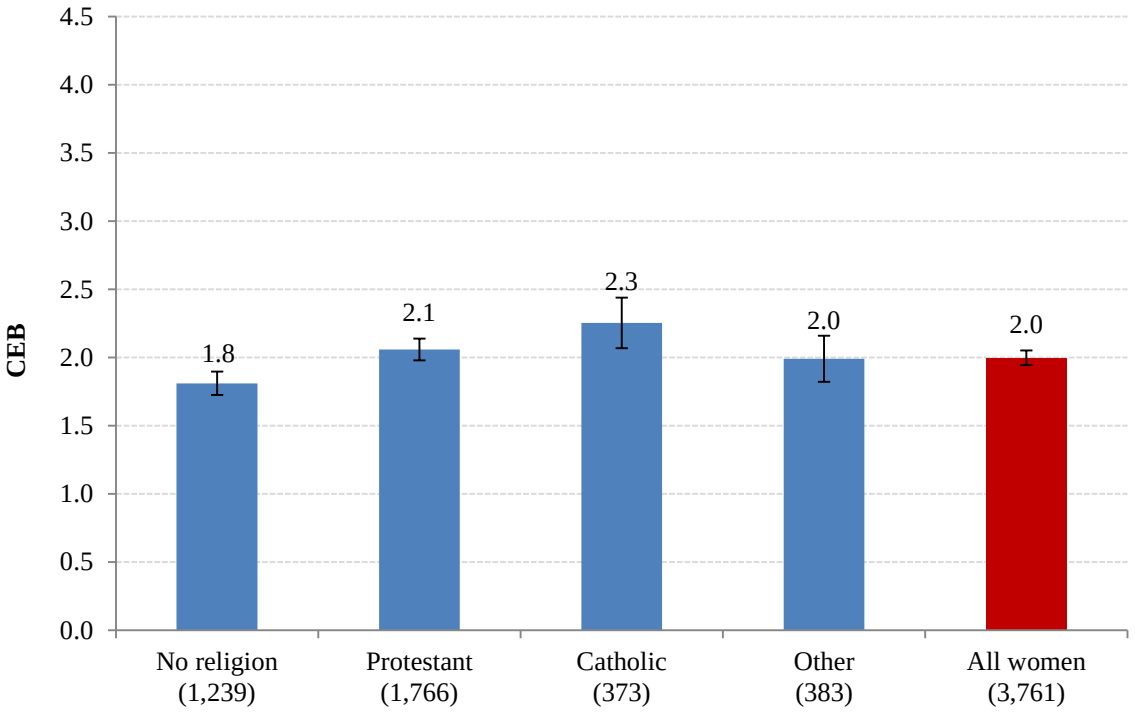
strong association of this statement with conformism to traditional gender roles, which is often negatively associated with education (Lesthaeghe and Surkyn, 1988; Surkyn and Lesthaeghe, 2004).

The results from these analyses partially support the first hypothesis, which concerns the higher value that more religious individuals attribute to having children; in Britain and France, both nominal and practicing religious people ascribe higher importance to having children than non-affiliated ones, although apart from Catholic women, no major differences are found between practicing and nominally affiliated individuals. The next section presents completed fertility rates by religious affiliation and practice, and changes in these trends across cohorts.

Fertility differences by religious affiliation and practice across birth cohorts

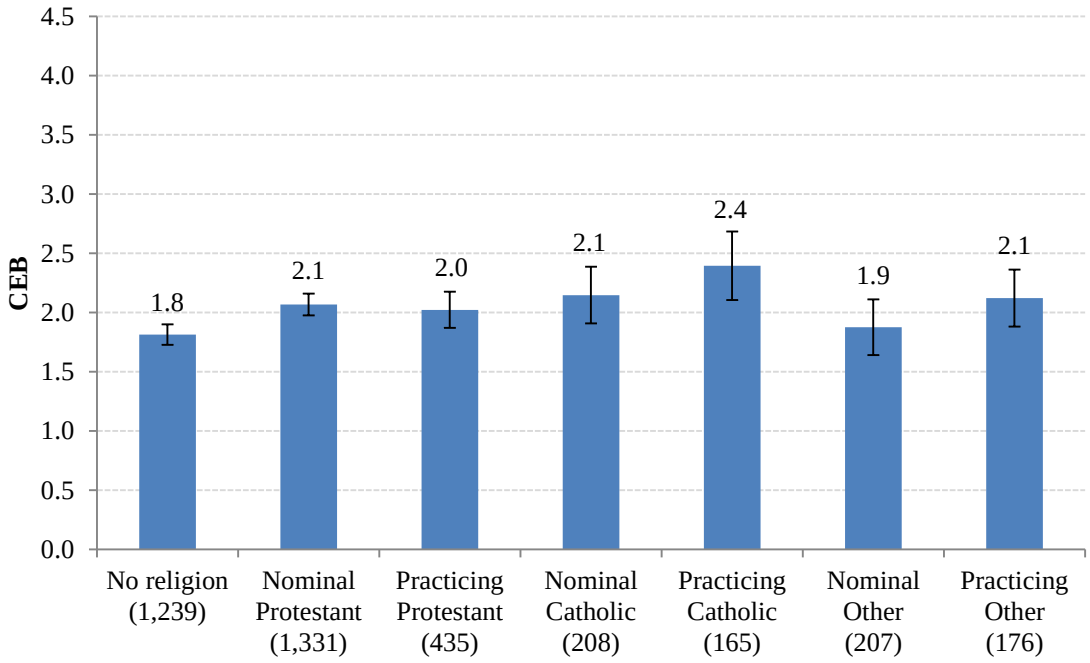
The first part of this section presents descriptive data on fertility differences by religious affiliation and practice in each country. Figure 3.3.1 shows the completed fertility rate for women in Britain by religious affiliation. The highest number of children (2.3 on average) is found among Catholic women, while Protestant women have 2.1 children, and women from other religions have two children on average. Women who state they have no religion have the lowest fertility – an average of 1.8 children per woman, which is lower both compared to women who are affiliated to a specific religion and in comparison to the national average of two children. When dividing religious groups into practicing and nominal groups (where practicing means attending services at least once a month), it appears that all practicing women, with the exception of Protestants, have higher fertility compared to nominally religious women, though these differences are not significant.

Figure 3.3.1 Average number of children among women aged 40+ by religious affiliation in Britain



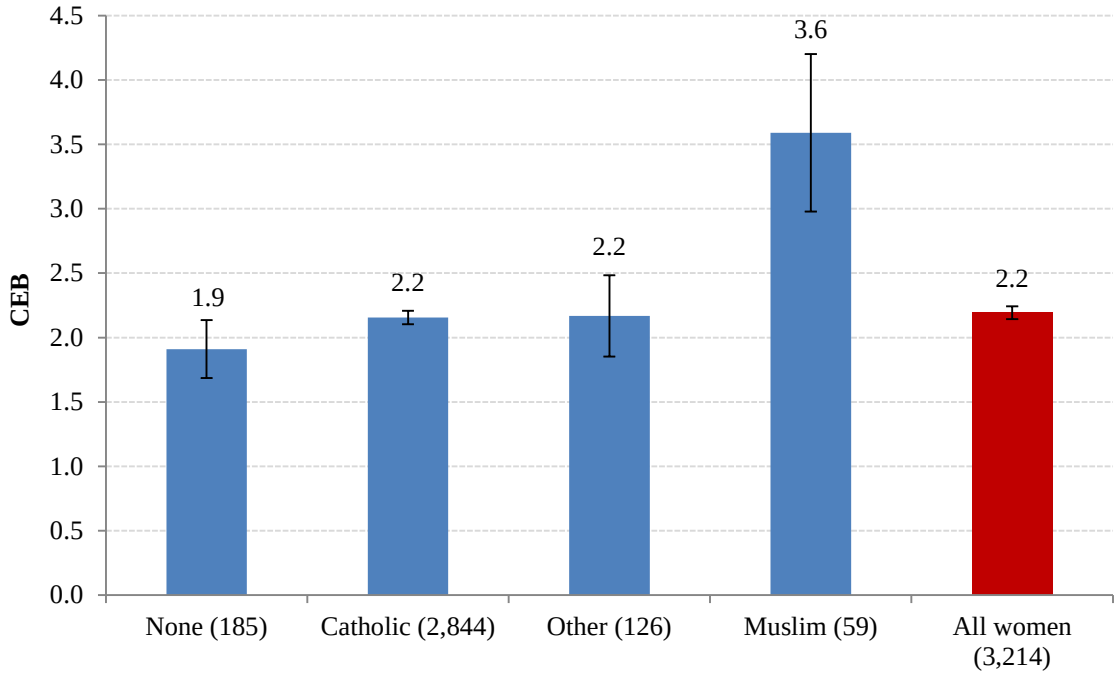
Source: BHPS (2008). Sample size in parentheses.

Figure 3.3.2 Average number of children among women aged 40+ by religious affiliation and practice in Britain



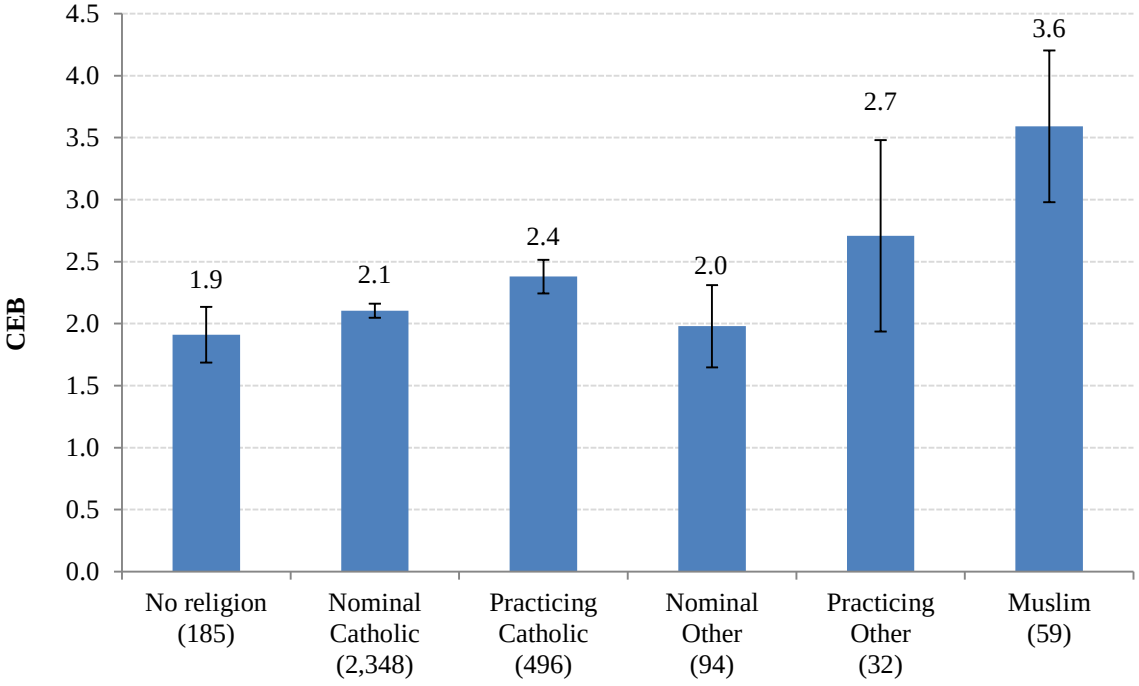
Source: BHPS (2008). Sample size in parentheses.

Figure 3.4.1 Average number of children among women aged 40+ by religious affiliation in France



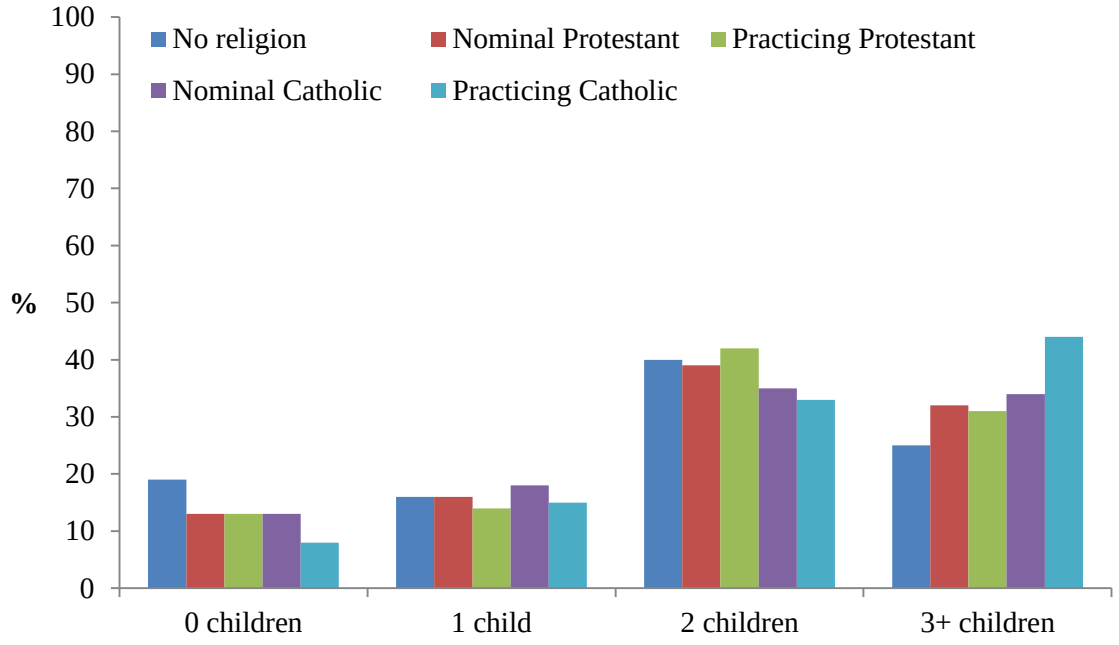
Source: GGP (2005). Sample size in parentheses.

Figure 3.4.2 Average number of children among women aged 40+ by religious affiliation and practice in France



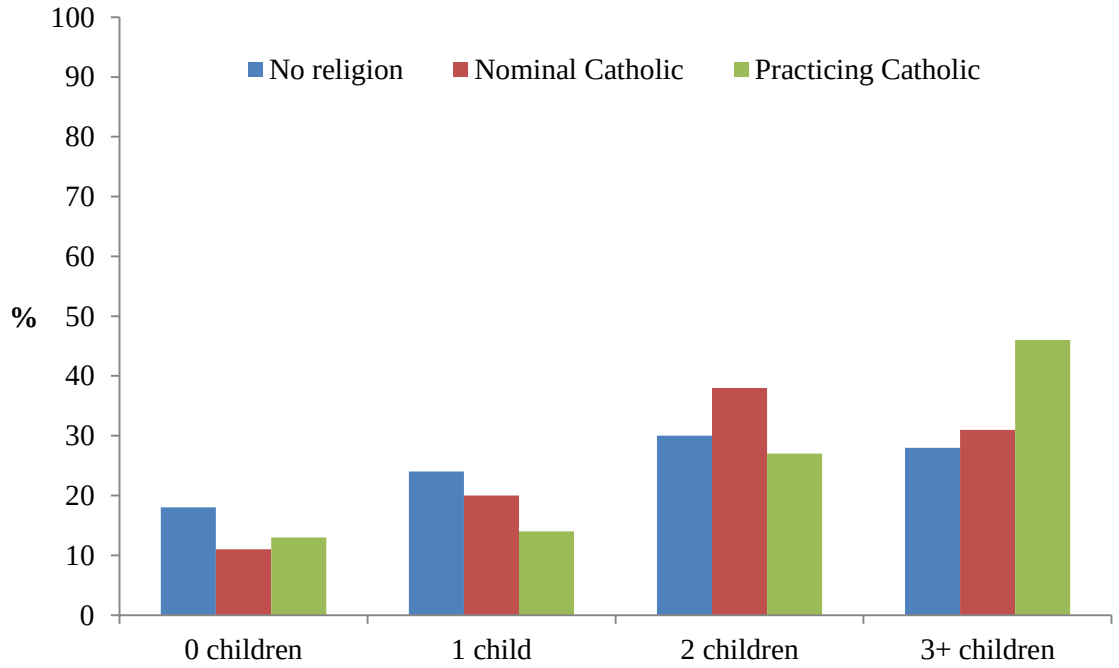
Source: GGP (2005). Sample size in parentheses.

Figure 3.5 Parity distribution by religious group for women aged 40+ in Britain



Source: BHPS (2008)

Figure 3.6 Parity distribution by religious group for women aged 40+ in France



Source: GGP (2005)

Nevertheless, nominal Protestants and Catholics (whether practicing or not) have significantly higher fertility compared to non-affiliated women (Figure 3.3.2).

The findings from France are somewhat similar to those in Britain (Figures 3.4.1 and 3.4.2), though the average number of children for women aged 40 and above is higher, standing at 2.2 children. Here too, the number of children of non-affiliated women (1.9 children) is lower compared to the average. Women who identify as Catholics have an average of 2.2 children per woman, similar to women from other religions (a group that includes Protestants and other small religious groups).

Since Muslims form a relatively large proportion of the minority religions in France, the average fertility of Muslim women is presented separately in this Figure. As indicated in previous studies (e.g. Régnier-Loilier and Prioux, 2008; Westoff and Frejka, 2007) fertility among the Muslim population (3.6 children on average) here is considerably higher compared to the average fertility level in France (although note that sample numbers are very low). As expected, when looking at fertility levels by religious practice in France (Figure 3.4.2)[11], it is shown that religiously practicing Catholic women have significantly higher fertility than nominal Catholics and non-affiliated women. Within other religious groups the difference between practicing and nominally religious women appears to be larger, although the difference is not significant. Thus, as predicted by the second hypothesis, in both countries those who report having no religious affiliation have lower fertility, even compared to nominally religious women. Practicing women have generally higher fertility than non-practicing ones, although these differences are most significant for Catholic women in France.

[11] Due to a small sample size of Muslim women aged 40+ (n=59) and the relatively small share of practicing women amongst them, there is no break down into religious practice for this group.

Figures 3.5 and 3.6 provide further details on parity distribution for the main religious groups in Britain and France. In both countries, the evidence shows that lower fertility among non-affiliated women is the result of both a higher proportion amongst them who remain childless, as well as a lower proportion with a family size of three children or more, compared to other women. Practicing Catholics on the other hand, have the highest proportion of large families in both Britain and France, with over 40% of women within this group having three children or more. While a family of three or more children is most common for practicing Catholic women, the most common family size for all other groups in each country is two children, which is also still the most common family size in most of Europe (Frejka, 2008). These findings however, only provide the average fertility for all women at the age of 40 or above. The next step is to follow trends in fertility levels across successive cohorts.

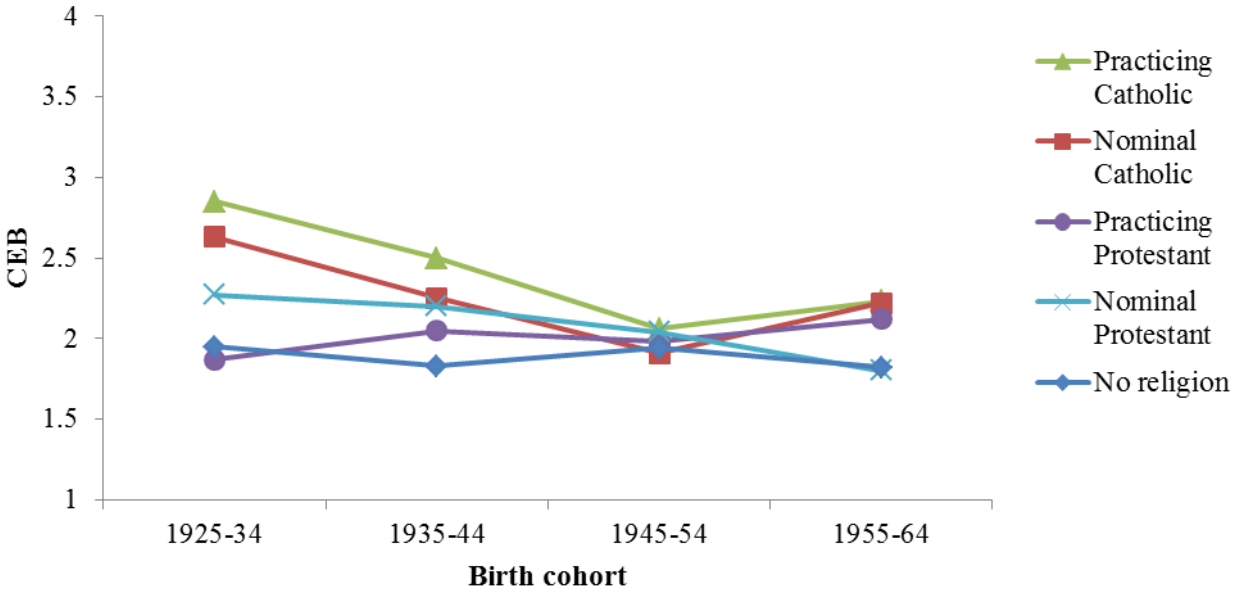
Similar differences in fertility by religious affiliation and practice are also observed across birth cohorts. Figures 3.7 and 3.8 present completed fertility rates for the major religious denominations in each country, distinguishing between practicing and nominally religious women. In both countries it is apparent that women who state they have no religion have the lowest fertility across all birth cohorts, while practicing Catholic women have the highest fertility. In Britain (Figure 3.7), the completed fertility level of non-affiliated women remained roughly stable at around 1.8-1.9 children on average. On the other hand, Catholic women and non-practicing Protestants experienced a decline from earlier to more recent cohorts. The latter group has practically converged with the non-affiliated group. Catholic women, however, after experiencing a decline, showed some resurgence in completed fertility for the most recent birth cohort of 1955-1964, to a level of 2.2 children per woman. Interestingly, practicing Protestant women also showed a slight increase in fertility, from 1.9 to 2.1.

In France (Figure 3.8) the gap between non-affiliated and nominal catholic women has diminished among the cohorts born after the Second World War. Nevertheless, practicing Catholic women have maintained high levels of completed fertility, with a slight increase for the latest cohort of 1955-1964, reaching a level of 2.5. It therefore appears that the fertility gaps between the main groups of nominally religious women in each country (Protestant in Britain and Catholics in France) and their non-affiliated peers are narrowing, while practicing women show further increases in fertility among the most recent cohort, probably reflecting the increasing selectiveness of this group.

These results provide support for the second research hypothesis, which postulates that fertility will be highest among religiously practicing women and lowest among the non-affiliated. This hypothesis is supported both when considering all women aged 40 and above, and through different cohorts.

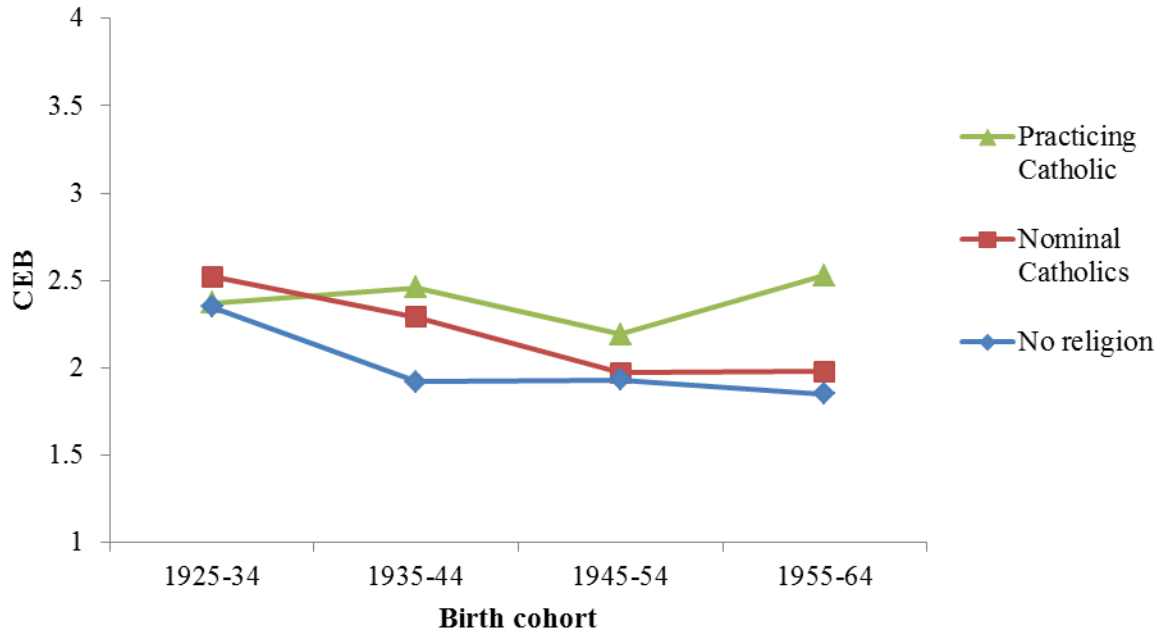
The third hypothesis concerns the widening gap between practicing and nominal (non-practicing) women across cohorts due to the increased selectivity of women who continue to actively participate in religious services. Evidence for an increasing fertility gap is stronger in France, where practicing Catholics have over 0.5 more children than other women in the most recent cohort, while the differences in the oldest cohort are much smaller. In Britain, Catholic women, either practicing or non-practicing, experienced a decline towards convergence with other groups until the cohort born during the 1950s, for whom fertility went up again. Thus, among the most recent birth cohort in Britain observed here, nominal and practicing Catholic women have about 0.4 more children than non-affiliated women. In addition, practicing Protestants have also experienced some increase in fertility, which is in line with the increased selectivity hypothesis.

Figure 3.7 Completed fertility by religious group across birth cohorts of women in Britain



Source: BHPS (2008)

Figure 3.8 Completed fertility by religious group across birth cohorts of women in France



Source: GGP (2005)

In what follows, these differences are tested using an OLS regression on the number of children, including interaction terms between religious groups and birth cohort. The results of the regression analysis are presented in Tables 3.3 and 3.4. The first model of the regression presents the main effects for each covariate, while in the second model the interaction between religious group and birth cohort is introduced, in order to detect changes in the relationships between religion and fertility across cohorts. Based on this analysis, the predicted means of the number of children ever born by birth cohort for the main religious groups in each country were calculated (see Appendix 3.1).

The results for the first model for Britain (Table 3.3) show that both practicing and non-practicing Catholic and Protestant women have significantly higher number of children than women with no religious affiliation. Higher levels of fertility in particular are estimated for practicing Catholic women (0.6 more children than non-affiliated women, significant at $p<0.01$). No significant differences in completed fertility are found among women from the Other religions group, whether they are practicing or not, in comparison to non-affiliated women. This is partly a result of the inclusion of nativity status in the model; when nativity is not included in the model, the coefficient for practicing women from Other religions become positively significant compared to non-affiliated women (not shown here). Indeed, it is shown that women who were born in South Asia for example, have significantly higher fertility than native British women, though this relationship has weakened among the second generation. This group also includes a large proportion of Muslim women (as in the Other religions category), and therefore it is difficult to distinguish the effects of religion from those of migration status. However, these findings may point to higher fertility levels particularly among foreign born Muslim women, as found by Dubuc (2012).

In the second model for Britain (Table 3.3, model 2), a negative interaction effect is found for both practicing and nominal Catholic in the 1945-54 birth cohort, indicating a decreasing

fertility gap between Catholic and non-affiliated women in relation to the 1925-34 cohort. This apparent convergence in fertility patterns may be related to declining adherence among Catholics to Church doctrines about sexuality and procreation (Goldscheider and Mosher, 1991; Hout and Greeley, 1987; Pace 2007). According to Hout and Greeley (1987), the growing dissent to the Catholic Church teachings regarding the ban on premarital sex and the use of modern contraception has also led to a decline in church attendance among Catholics in the US. However, following the convergence in fertility among Catholics and non-affiliated women in Britain, fertility trends appear to diverge again among the most recent cohort of 1955-64 (see Figure 3.7 and the adjusted means for children ever born in Appendix 3.1a). It is possible therefore, that following an initial decline in the proportion of those who identify as Catholics, nominal and practicing Catholics from more recent cohorts form a more selective group in terms of adherence to traditional church proscriptions on sexuality. A similar trend of divergence among the most recent cohort is also found between practicing Protestant and non-affiliated women in Britain (while fertility of nominal Protestants has become similar to that of the latter group). However, although the interaction coefficients for practicing Protestants are positive, and among nominal Protestants the coefficients are negative for the more recent cohorts, these effects are not significant. Among practicing women from Other religions in Britain there is no significant interaction with birth cohort, although a positive interaction effect is found among nominally religious women from this group in the 1945-54 cohort (coefficient of 0.71, significant at $p<0.1$). This may be the result of the increasing proportion of women with migrant origin within that group compared to their proportion in earlier cohorts.

Table 3.3 OLS regression for children ever born to women aged 40+ in Britain

		Model 1	Model 2
Birth cohort	1925-34	Ref	Ref
	1935-44	0.022	-0.053
	1945-54	0.003	0.109
	1956-64	-0.025	0.042
Religious group	None	Ref	Ref
	Practicing Catholic	0.578***	0.938***
	Nominal Catholic	0.315***	0.723**
	Practicing Protestant	0.165*	-0.006
	Nominal Protestant	0.164***	0.297
	Practicing Other	0.189	0.131
	Nominal Other	0.010	-0.457
Education	Lower Secondary	0.472***	0.472***
	Upper Secondary	Ref	Ref
	Tertiary Education	-0.025	-0.057
Nativity	Born in the UK	Ref	Ref
	South Asia 1st Gen	0.718***	0.685***
	South Asia 2nd Gen	1.020*	0.945
	Europe 1st Gen	-0.006	0.003
	Europe 2nd Gen	-0.207	-0.185
	Other 1st Gen	-0.021	-0.081
	Other 2nd Gen	0.424**	0.415**
Region	England	Ref	Ref
	Wales	0.138	0.143
	Scotland	0.138	0.149*
Religious group x Birth Cohort	P Catholic 1935-44		-0.243
	P Catholic 1945-54		-0.703**
	P Catholic 1955-64		-0.421
	Nominal Catholic 1935-44		-0.510
	Nominal Catholic 1945-54		-0.739*
	Nominal Catholic 1955-64		-0.280
	P Protestant 1935-44		0.304
	P Protestant 1945-54		0.152
	P Protestant 1955-64		0.383
	Nominal Prot' 1935-44		0.030
	Nominal Prot' 1945-54		-0.183
	Nominal Prot' 1955-64		-0.275
	P Other 1935-44		0.490
	P Other 1945-54		-0.139
	P Other 1955-64		0.078
	Nominal Other 1935-44		0.523
	Nominal Other 1945-54		0.707*
	Nominal Other 1955-64		0.530
	Constant	1.711***	1.663***
	N	3,060	3,060

*p<0.1, **p<0.05, ***p<0.01

Source: BHPS (2008)

Table 3.4 OLS regression for children ever born for women aged 40+ in France

		Model 1	Model 2
Birth cohort	1925-34	Ref	Ref
	1935-44	-0.057	-0.264
	1945-54	-0.289***	-0.213
	1956-64	-0.209**	-0.325
Religious group	None	Ref	Ref
	Practicing Catholic	0.313**	-0.020
	Nominal Catholic	0.141	0.153
	Practicing Other	1.275***	2.046***
	Nominal Other	0.201	0.828
Education	Lower Secondary	0.427***	0.423***
	Upper Secondary	Ref	Ref
	Tertiary Education	-0.038	-0.054
Nativity	Born in France	Ref	Ref
	Maghreb 1st Gen	0.740***	0.688***
	Maghreb 2nd Gen	-0.062	0.028
	Europe 1st Gen	0.258**	0.241*
	Europe 2nd Gen	-0.246*	-0.266**
	Other 1st Gen	0.784***	0.753***
	Other 2nd Gen	0.199	0.126
Type of settlement	Urban	Ref	Ref
	Rural	0.111*	0.112*
Religious group x Birth Cohort	P Catholic 1935-44		0.508
	P Catholic 1945-54		0.223
	P Catholic 1955-64		0.730*
	Nominal Catholic 1935-44		0.119
	Nominal Catholic 1945-54		-0.157
	Nominal Catholic 1955-64		0.029
	P Other 1935-44		-1.694*
	P Other 1945-54		-0.998
	P Other 1955-64		-0.570
	Nominal Other 1935-44		-0.018
	Nominal Other 1945-54		-0.792
	Nominal Other 1955-64		-0.799
	Constant	1.913***	1.982***
	N	3,060	3,060

*p<0.1, **p<0.05, ***p<0.01

Source: GGP (2005)

In contrast to Britain, the results from France (Table 3.4, model 1) show that only those who actively practice religion have significantly higher fertility than non-affiliated women: Catholic women who attend church at least once a month have 0.3 more children than those stating they have no religion (significant at $p<0.05$). Practicing women from other religious groups have 1.3 more children than non-affiliated women (significant at $p<0.01$). In addition to the positive relationship between religiosity and completed fertility, women in France who were born abroad have significantly higher fertility levels compared to the native population, although among second generation migrants these differences disappear (second generation women from other European countries have significantly lower fertility than native French people).

In the second model for France, a positive interaction effect is found for practicing Catholic for the most recent birth cohort of 1955-1964 (coefficient of 0.73, significant at $p<0.1$), indicating an increasing fertility gap between this group and non-affiliated women. However, no significant interaction effects were found for nominal Catholics. Among women from Other religions in France, whether practicing and nominal, the interaction with birth cohort is negative in general and significant among practicing women from the 1935-44 cohort (coefficient of -1.69, significant at $p<0.1$). This may indicate a diminishing fertility gap between women from minority religions and non-affiliated women in France, although no significant interaction is found for more recent cohorts.

The adjusted means for the number of children ever born by religious group and birth cohort (Appendix 3.1) also show that the fertility gap between religiously active Catholics and non-practicing women in France has increased significantly among the younger cohorts. On the other hand, the fertility gap between nominal Catholic and non-affiliated women has somewhat narrowed among the younger birth cohorts. It should be noted though, that women who stated having no religion in France also form a small minority there (as shown in Figure

2.2), and therefore one might expect this group to show distinctly low fertility levels, especially among the older birth cohorts.

In Britain, although Catholic women experienced a decline in fertility, practicing Catholic women maintained the highest fertility levels (2.4 children on average for the youngest cohort), followed by nominal Catholics and practicing Protestants, with 2.3 children on average. The latter group showed an increase in fertility levels compared to previous cohorts. Nominal Protestants and non-affiliated women of the most recent cohort have considerably lower fertility of 1.9 children. These results give further support to the second hypothesis regarding the fertility differences between non-affiliated, nominally religious and practicing religious women. The third hypothesis, regarding increased selectivity of religiously practicing women is mostly supported for France, as shown by the significantly growing fertility gap between practicing Catholic and non-affiliated women among younger cohorts. However, a trend of increase in fertility is observed among practicing Catholic and Protestant women in Britain from the most recent birth cohort. This may indicate a growing fertility divide between these groups and non-affiliated women, as selection effects come into play.

As predicted by the fourth hypothesis, the diverging fertility trends between practicing and non-practicing Catholic women in France are more pronounced compared to the fertility differences by religious practice among Catholic and Protestant women in Britain. Moreover, among the most recent cohort, the fertility gap between practicing Catholic and non-affiliated women in France is larger than the differences observed between practicing women (either Catholic or Protestant) and non-affiliated women in Britain. Thus, among the younger cohorts, practicing Catholic women in France present particularly distinct fertility patterns, also in comparison to their counterparts in Britain (see Appendix 3.1).

Other findings of interest include the negative coefficient of the two recent birth cohorts (1945-54 and 1955-64) in comparison to the oldest cohort of 1925-34 in France. By contrast, no significant cohort effect is found in Britain. This reflects the relatively stable fertility levels in Britain across these cohorts compared to the significant decline in cohort fertility in France. On the other hand, the effect of education on completed fertility is rather similar in both countries, as women with lower secondary education have larger family sizes compared to those with upper secondary education, while no differences are found between the latter and the highly educated women in both countries.

Discussion

This chapter explored trends in the relationships between religion and fertility over successive birth cohorts in Britain and France. In general, the findings in this chapter support the research hypotheses regarding the relationships between religion and fertility; in both countries under observation, the more religious individuals, in terms of affiliation and practice, ascribe higher importance to having children, even after controlling for other socio-demographic factors. At the same time, the importance attributed to having children is lowest among non-affiliated women in both countries. These findings are in line with previous research on religiosity and attitudes towards family formation and childbearing (Newman and Hugo, 2006; Sweet and Bumpass, 1990). In accordance with this body of research, non-affiliated women in both countries also have the lowest levels of completed fertility, even in comparison to nominally religious women, who are affiliated with a particular religion but do not attend services on a regular basis. Moreover, women who attend services at least once a month show the highest levels of completed fertility both in Britain and in France. These fertility variations are attributed to different levels of

attachment to religious tradition, as well as the extent of emphasis on the value of children in each denomination. Following Glenn (1987), individuals who state they have no religious affiliation are regarded as the least religious compared to all other groups. Therefore, non-affiliated women are least likely to be influenced by religious norms that stress the importance of having children or the fulfilment of traditional family roles. Compared to non-affiliated women, nominally religious women are expected to have some attachment to religious tradition, though they would be less committed to religious doctrines than those who actively practice their religion. Thus, their completed fertility is somewhat higher than that of non-affiliated women, but lower than completed fertility of practicing women.

This chapter has shown that fertility differences on the basis of religious practice are not only persistent across birth cohorts, but in some cases there are signs of a widening gap in completed fertility among practicing and non-practicing women, especially among the most recent birth cohort of women born after the mid-1950s. This is mainly supported by the findings in France, where practicing Catholic women not only maintained high fertility levels across birth cohorts, but their fertility increased in the most recent cohort. In Britain on the other hand, fertility levels of practicing and nominally Catholic women have become closer to those of non-affiliated women, although the gap seems to increase again among the youngest cohort.

As expected, a larger fertility gap is found between practicing Catholics and non-practicing women from younger cohorts in France, compared to the differences on the basis of religious practice in Britain. This can be related to the ongoing conflict between the church and the state in France, which may lead to increasing polarization between regular attendants at religious services and non-practicing individuals. In addition, non-affiliated people in France are also a rather selective group, as they form a relatively small share of the

population, which may also contribute to the stronger fertility divergence between the actively religious and those who are highly secular.

As for changes in the fertility level of nominally religious women, there is no consistent pattern observable. It seems that nominal Catholics in France and nominal Protestants in Britain have further closed the fertility gap between themselves and non-affiliated women. However, this trend is not consistent for non-practicing Catholics in Britain. These differences may be related to the fact that Catholics form a minority group in Britain, where being identified as Catholic may be a more meaningful form of identity. This in turn might have a stronger influence on fertility (McQuillan, 2004). On the other hand, identification with the religion of the majority group, as in the case of Catholics in France and the Church of England in Britain, may act as a marker of national identity, rather than reflect adherence to religious tradition (Day, 2011; Hervieu-Léger, 2000; Pace, 2007; Voas and Bruce, 2004). Therefore, nominally religious people from the majority religious groups may have only weak attachment to religious tradition.

The results for women from the Other religions group were not statistically significant in Britain, while in France, only practicing women from that group had significantly higher fertility compared to non-affiliated women. Nevertheless, as a relatively high proportion of women from that group have a migrant origin, nativity status may be a stronger predictor for the fertility of women from minority religions. For example, a positive effect is found in Britain for women who were born in South Asia, and in France for women born in Northern Africa (Maghreb).

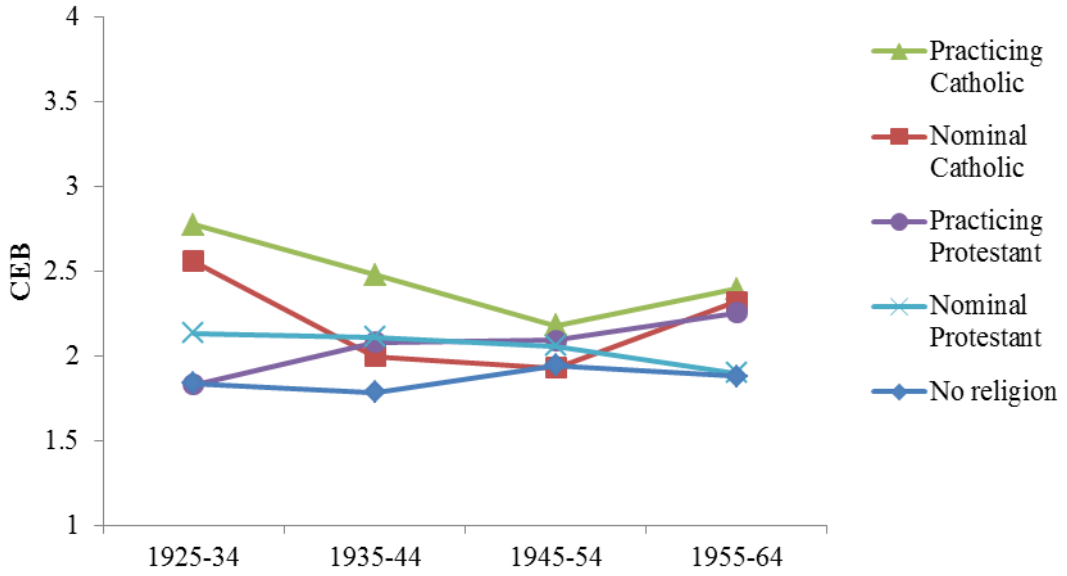
Overall, while non-affiliated women and most nominally religious groups reached completed fertility level at or below replacement level, practicing religious women maintained higher fertility across cohorts. Thus, in contrast to the Second Demographic

Transition theory, which predicts that processes of secularisation and individualization would eventually lead to reduced fertility in society as a whole, there is evidence of increasing polarization between actively religious women and those with lower religious involvement, as the former do not show the same propensity to reduce their family size as non-religious women. These findings are consistent with the argument about the shift in religious practice from obligation to individual choice (Davie, 2007). Thus, as church attendance is increasingly becoming a matter of personal preference, the proportion of religiously practicing people decreases, leaving an increasingly selective group of those who are most committed to religious doctrines who show increasingly divergent fertility behaviour compared to non-practicing individuals.

Nevertheless, the exact mechanism through which religion influences fertility behaviour remains unclear. Religion may affect fertility in a number of ways, through the timing of marriage, differential social capital, gender role attitudes, and the allocation of time to family and work. For example, religious institutions have traditionally encouraged a traditional division of gender, in which men are assumed to be providers and women are responsible for the domestic arena. Thus, religious women may withdraw from labour market activities. Another possible mechanism is that women who are involved in religious communities have a higher likelihood of receiving support in childrearing or other forms of support from their congregation if they wish to expand their family. The following chapters inspect these possible relationships more closely, using both cross-sectional and longitudinal analysis to examine the interrelationships between religion, education, labour force participation and family behaviour.

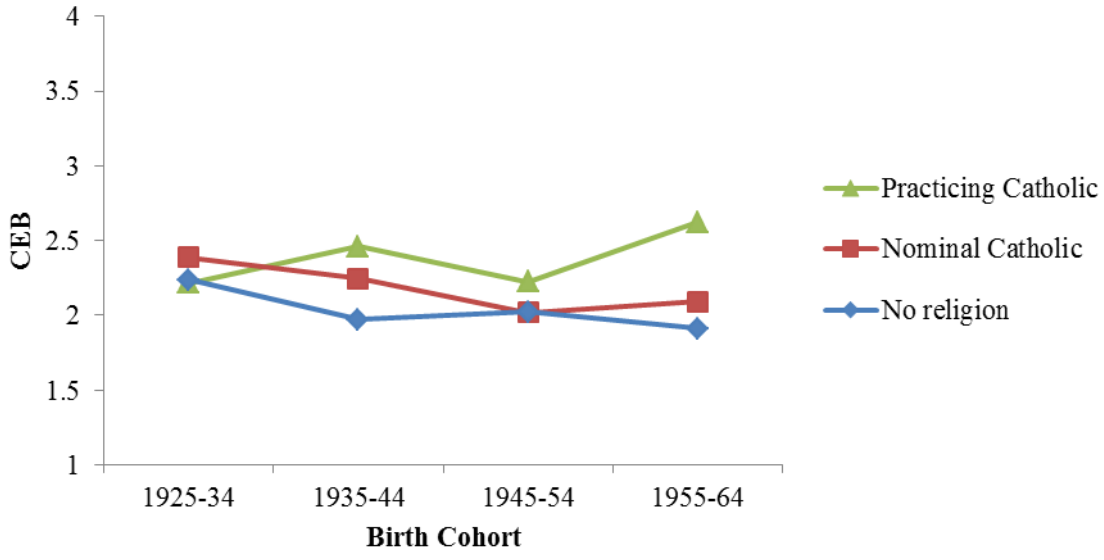
Appendix 3.1: Predicted means of CEB by religious group and birth cohort

3.1a. Britain



Source: BHPS (2008)

3.1b. France



Source: GGP (2005)

4. Religion and Family Formation Patterns: The Role of Education

The previous chapter discussed changes in fertility trends by religious affiliation and practice, showing a consistent positive link between religiosity and completed fertility levels. In addition, this study has found that religious practice is correlated with educational attainment and marital status, factors that are also strongly linked with fertility. In order to better understand the mechanisms involved in the association between religious adherence and family behaviour, the current chapter examines the relationship between religiosity and the timing of first marriage and first birth, with special attention to the role of education. In addition, the interrelationships between religion, education and completed fertility are examined. First, I discuss the link between education and family formation patterns, and the interdependencies between religion, education and family outcomes. I then describe the research hypotheses and the methods used for the analysis, followed by a presentation of the findings of the survival analysis to first marriage and first birth. Finally, an analysis of variance of completed fertility by religion and education is presented.

Education and family formation trends

The relationship between education and family formation patterns has received much scholarly attention. In particular, increased levels of education have often been associated with delayed marriage and first birth (Kohler et al., 2002; Mills et al., 2011). According to Lesthaeghe and Surkyn (1988) the expansion of education has played an important role in the promotion of ideational changes, such as increased individualization and rejection of traditional authorities. These changes are linked to less conformist family behaviours, including non-marital cohabitation and delayed family formation, as these behaviours are increasingly a matter of personal choice (Lesthaeghe, 2010; Van de Kaa, 1993).

Economic theories of the family emphasize the link between education and economic prospects in the labour market as the cause for changes in family formation patterns, including delayed marriage and the rise in marital instability. According to Becker's (1991) theory of the family, the major gains of marriage arise from mutual dependence between spouses, resulting from gender specialization in which the woman invests in domestic production and the man invests in market work. Therefore, as women obtain higher qualifications and become more economically independent, they have less to gain from marriage. Moreover, Becker's theory of the family predicts a lower demand for children as women's education increases, since the opportunity costs of leaving the labour market following childbirth are higher for the better educated (ibid).

Another way in which higher education can lead to delayed marriage and first birth is through prolonged participation in the schooling system. During that period, individuals would tend to delay family formation, either as a result of insufficient resources of time and money, which make it difficult to fulfil student and family roles simultaneously, or due to normative expectations that young people should complete their schooling before they start a family (Blossfeld and Huinink, 1991; Kravdal and Rindfuss, 2008; Ní Bhrolcháin and Beaujouan, 2012). Blossfeld and Huinink (1991) for example, have showed that highly educated women in Germany eventually catch up with their less educated counterparts in the transition to first birth. Thus, they concluded that the postponement of family formation among the more highly educated is a result of the longer stay in the educational system and not due to increased qualifications per se.

Empirical findings on the relationships between education and family formation are mixed. Numerous studies have pointed to a positive effect of schooling on men's likelihood of entering formal union and parenthood, which is explained by the importance of men's financial stability to family formation (Kravdal and Rindfuss, 2008; Musick et al., 2012;

Oppenheimer, 1994; Sweeney, 2002). Among women, although a negative association is expected between educational attainment and family formation, this is not always the case. For example, Sweeney (2002), using longitudinal cohort surveys from the United States, has found that women with higher education (13 or more years of schooling) were more likely to enter marriage than those with 12 years of schooling. Moreover, it has been argued that as a result of changing gender roles during the past decades and the increasing participation of women in the labour force, the importance of women's economic resources to marriage has increased. Hence, women's economic resources are more likely to be positively correlated with marriage among younger cohorts than older ones (Oppenheimer, 1994; Sweeney, 2002). In a study on Dutch and Flemish populations, Liefbroer and Corijn (1999: 71) concluded that "educational attainment postpones family formation rather than precludes it", as the negative effect of education on entering union or parenthood is only evident among teenage and early adult women, and no significant effect is found at later ages (either for men or women). In addition, they found that education has a stronger negative effect on entering parenthood than on entering a union.

It should be noted however, that the investment in human capital, as well as the returns to education in the labour market may also vary within a given cultural context, including variation by religious group affiliation and the level of religious involvement (Berman and Stepanyan, 2003; Read and Oselin, 2008). The next section discusses findings on the relationship between religion and education, and the implications of these relationships on family and fertility behaviours.

Religion, education and family outcomes

The exact nature of the relationship between religion and education is subject to considerable debate. The classic theory of modernization assumes that the expansion of mass education and the advancement of science and technology lead to a decline in the religious worldview (Norris and Inglehart, 2004). However, the idea that increased education leads to erosion in religious belief has been challenged by numerous studies, which have shown that the negative relationship between religiosity and education is not consistent across countries or across denominations, and in some cases education is positively correlated with religious practice (Albrecht and Heaton, 1984; Iannaccone, 1998; Jagodzinski and Manabe, 2009; McFarland et al., 2011; Sacerdote and Glaeser, 2001). In a review of previous research on religion and economics, Iannaccone (1998: 1470) concluded that "religion is not the province of the poor or uninformed", since many studies showed that religious activity and belief do not decline with income, and most measures of religion increase with education.

Other studies found a positive association between religious involvement among high school students and improved educational performance, including heightened educational expectations, better test scores and higher probability of obtaining a high school diploma (Muller and Ellison, 2001; Regnerus, 2000). Lehrer (2009) has suggested that the beneficial influence of religious involvement on school performance as well as on other indicators of well-being is a result of increased social support and integration through religious networks. On the other hand, some religious groups discourage secular intellectual inquiry, as in the case of conservative Protestants in the US (Darnell and Sherkat, 1997; Sherkat and Darnell, 1999).

Several studies have pointed to a variation in the effect of education on fertility among different religions and by level of religiosity (Goldscheider, 2006; Heaton, 2011; Newman

and Hugo, 2006). For example, Newman and Hugo (2006) found that the negative effect of education on fertility is much stronger for non-religious women than among their religious counterparts. It has been argued that people with higher religious involvement are less susceptible to the consequences of social and economic changes on family attitudes and behaviour (Heaton, 2011). This is in line with the theory of the Second Demographic Transition, according to which a change in economic conditions is not sufficient to motivate a behavioural change; rather, a cultural shift in norms and attitudes is also required (Lesthaeghe and Neels, 2002; Lesthaeghe and Wilson, 1986). Thus, while women may experience improved opportunities in education and the labour force, there is little change within the more traditional societies in women's roles as mothers and wives as defined by religious institutions (McDonald, 2002). According to Lehrer (2004b), women with a stronger religious commitment show more traditional family behaviour as well as higher fertility aspirations. For example, they would tend to marry earlier and to prefer marriage over cohabitation, which is considered a less stable form of union. Previous studies have also pointed to a strong interdependency between marriage and first birth (Baizán et al., 2003, 2004; Perelli-Harris et al., 2009). For example, Baizán and colleagues have shown that entering parenthood and forming a union are part of the same process of family building and that they have an independent impact on one other.

The first hypothesis therefore states that religiously practicing women are more likely to enter formal marriage and to experience the transition to marriage earlier than other women, while non-affiliated women are least likely to enter marriage at any given point holding all other factors constant[12].

[12] It should be stressed that the hypotheses described here merely refer to an association between religiosity and family formation patterns, rather than implying a causal relationship.

As described in the first chapter, Britain and France differ in terms of family formation patterns; for example, non-marital cohabitation is more widespread in France than in Britain, and a larger proportion of women in France remain within cohabitation after the first childbirth (Kiernan, 2000; Perelli-Harris et al., 2009). Thus, while the general marriage rate in France has markedly declined throughout the past decades, more religious women there continue to have a relatively high marriage rate (Régnier-Loilier and Prioux, 2008). Against this background, *the second hypothesis contends that religious differences in the transition to marriage would be more pronounced in France than in Britain*.

As a result of the strong resilience of traditional family values among religious communities, the relationship between education and family behaviours is expected to vary by level of religiosity. While higher education is on the average associated with delayed marriage and first birth, women with greater religious involvement are likely to maintain traditional family behaviours, even when gaining higher qualifications (Heaton, 2011; McDonald, 2002). It should be noted though, that the negative relationship between education and the transition to marriage may be the result of the prolonged time spent in education (Blossfeld and Huinink, 1991), while in some cases, women's higher qualifications, which form a proxy for their earnings potential, may be positively related to marriage (Sweeney, 2002). As higher religiosity is expected to counter the negative effect of higher education on family formation, *the third hypothesis states that higher education is more likely to be positively correlated with the transition to marriage among nominal and practicing religious women than among non-affiliated women.*

In this context, as most religions emphasize the importance, following marriage, of having children and women's role as mothers (Chatters and Taylor, 2005; Inglehart and Norris, 2003; Sweet and Bumpass, 1990), more religious women would be more likely to enter motherhood compared to other women. Thus, *the fourth hypothesis postulates that*

religiously practicing women are more likely to experience the transition to first birth compared to women with a weaker adherence to religion, and that non-affiliated women would be least likely to experience a first birth. Furthermore, while the rate of childlessness increases for women with higher education (Kneale and Joshi, 2008; Rendall et al., 2005), this is less likely to be the case among women with stronger attachment to religion. Thus, *the fifth hypothesis contends that the negative relationship between higher education and experiencing a first birth is weaker for nominal and practicing religious women than among non-affiliated women.*

The varying relationship between education and family behaviours among different religious groups may also be the result of differential support in childrearing; since frequent attendance at religious services is related to increased social capital, religious women may be better supported, emotionally or tangibly, when they wish to expand their family (Chatters and Taylor, 2005; Newman and Hugo, 2006; Philipov and Berghammer, 2007). In this way, women with higher religious involvement may perceive the opportunity costs of children as lower than those with lower levels of religious involvement and would be less inclined to reduce their completed fertility, even when obtaining higher levels of education. Thus, *according to the sixth hypothesis, the completed fertility gradient by education is less likely to be negative among nominal and practicing religious women compared to their non-affiliated counterparts.*

Methodology

As in previous chapters, the data used for Britain are based on the last wave of the BHPS from 2008 and the parallel data for France are taken from the GGP French survey from 2005. The first part of the analysis shows the distribution of educational attainment by religious

group (combined affiliation and practice), in order to detect correlations between religiosity and education within different denominations. Then, in order to examine hypotheses 1 to 5 about religious differences in the transition to marriage and first birth, the second part includes a survival analysis for the transition to first marriage[13] and first birth for women aged 17 to 50 in Britain and France. For Britain, the timing of first marriage and first birth (year and month) were derived from the consolidated file of union and births histories. This information was matched with each respondent from the last wave of the BHPS data. The GGP survey from France also contains the timing by year and month of each union and childbirth for every respondent. The survival curve for the transition to first marriage is displayed as well as summary statistics of the median age at first marriage and the proportion ever married by age 50 for the main religious groups are presented in order to track religious differences in the timing and the occurrence of marriage. In a similar fashion, the survival curve for first birth alongside details on median age at first birth and the proportion of women who remain childless by religious group are also presented.

Then, a discrete-time hazard model is used in order to estimate the likelihood of entering each one of these life-cycle events (marriage and first birth). The main advantage of using discrete-time methods is that it is easy to incorporate time-varying explanatory variables in these models. Moreover, this method is particularly good in handling censored cases, i.e. individuals who have not experienced the event in question before the end of the observed period (Allison, 1982, 2014). In this case, the model is based on pooled observations of women-months from the age of 17 through 50. In the survival analysis to first marriage, the observations of women who were never married by the time of the last interview were (right) censored. Similarly, in the survival analysis to first birth, the observations of women who did not experience the transition to motherhood by the time of the last interview were

[13] In both countries marriage also includes civil partnership.

censored. However, the women-months in which these respondents were at risk of experiencing these events are still included in the model.

Discrete-hazard models are most commonly analysed using a logistic regression (Allison, 1982). In this case, the dependent variable is the log of the odds for entry to first marriage/first birth in a given month. The model can be formalized as follows:

$$\log\left[\frac{P(y=1)}{1-P(y=1)}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 \ldots + \beta_k x_k$$

Where log[P(y=1)/1-P(y=1)] denotes the log of the odds for the occurrence of the event, as a function of parameters $\beta_1 \ldots \beta_k$.

This model incorporates both fixed and time-varying independent variables. The fixed variables include religious group, nativity status, place of residence and highest achieved level of education. Since higher education in particular is expected to influence the timing of entry to marriage and first birth (Balbo et al., 2013; Smith and Ratcliffe, 2009) and due to the relatively small number of cases of women aged 17-50 with lower secondary education in both countries, the categories of lower and upper secondary education were collapsed, so that the education variable is dichotomized into two groups: those with tertiary education and those with upper-secondary or lower levels of education.

The time of completion of education is also expected to have an effect on the timing of entering marriage and the first birth (Blossfeld and Huinink, 1991; Kravdal and Rindfuss, 2008; Ní Bhrolcháin and Beaujouan, 2012). Therefore, in addition to the level of education, the model includes a time varying dummy variable to indicate whether a woman is currently enrolled in education or not. Other time-varying variables include woman's age and the squared age term as well as time period in five year intervals to control for potential period effects on family formation.

As previous studies show, the timing of entering motherhood is closely linked with the timing of marriage (Baizán et al., 2003, 2004). Moreover, in Britain and France, as in most other countries in Europe, the highest share of first births occur within marriage, although the transition to parenthood among cohabiting couples is much more prevalent in France (Perelli-Harris et al., 2009). Therefore, the survival analysis for the timing of first birth also includes a time-varying marital status variable, indicating whether the respondent is single, cohabiting, married or divorced/separated/widowed. This variable is based on information about the start and end time of each form of union.

The models for the transition to marriage and first birth also include an interaction term between religious group and higher education, to examine whether the relationship between education and family formation varies for different religious groups. Based on these models, predicted probabilities are derived in order to compare the likelihood of marriage/ first birth among women from different religious groups with tertiary or less than tertiary education, adjusting for all other covariates.

Having explored the timing of first union and first birth in the survival and logistic regression analyses, the final section explores the sixth hypothesis on differences in the fertility gradient by education among religious groups. This section includes an analysis of variance of completed fertility of women aged 40 and above by religion and education. Since the purpose is to analyse differences in the fertility gradient by education, the education variable in this analysis is divided into three categories: lower secondary (low), upper secondary (medium) and tertiary (high). This analysis also controls for age and whether the respondent is foreign born. Based on the ANOVA models, the predicted means for the number of children are calculated for each religious group at different levels of education to allow comparison between the different groups.

Findings

Distribution of educational attainment by religious group

Tables 4.1-4.2 show the distribution of educational attainment by religious group in Britain and in France. As a whole, these findings are in accordance with the results from previous chapters, indicating a positive correlation between religious practice and education. In both countries, a higher proportion of religiously active Christian women are educated to tertiary level than among non-practicing women. In Britain, around 40 percent of women aged 25-50 with no religious affiliation, as well as non-practicing Catholics and Protestants, had attained tertiary-level education. In comparison, about half of practicing Catholic and two thirds of practicing Protestant women are educated to tertiary level. The proportion of highly educated women among other religions in Britain is also high compared to those with no religious affiliation. Among the least educated women with low-secondary education, differences between religious groups are smaller, except for practicing Protestant group, where only 2 percent of them have lower secondary education compared to over 10 percent among other women.

In France, only a third of women with no religious preference are educated to tertiary level, while the proportion of highly educated among non-practicing Catholic women in France is 41 percent. The highest proportion of women with tertiary education is found for the practicing Catholic group (46%). In contrast to Britain, the 'other' group in France does not have a higher share of highly educated women compared to non-affiliated ones. Moreover, about a third of nominal and practicing women from other religions have obtained lower secondary education compared to the average proportion of 19 among all women in France. This could be attributed to the large proportion of Muslim women among the 'Other' group in France, who have relatively lower levels of education (Adida et al., 2010; Maillard, 2005).

Thus, as previous studies have shown, in many cases attendance at religious services is positively correlated with higher education, although this relationship may vary among different religions. The next section explores the role of education in explaining religious differences in family formation patterns.

Table 4.1 Educational attainment by religious group for women aged 25-50 in Britain

Religious Group	% Lower Secondary	% Upper Secondary	% Tertiary	Total %	N
No religion	15	46	39	**100**	**1298**
Nominal Protestant	12	47	41	**100**	**682**
Practicing Protestant	2	29	69	**100**	**141**
Nominal Catholic	14	47	39	**100**	**157**
Practicing Catholic	12	35	53	**100**	**78**
Nominal Other	14	36	50	**100**	**183**
Practicing Other	14	35	51	**100**	**97**
Total %	**13**	**44**	**43**	**100**	**2636**
N	**351**	**1159**	**1126**	**2636**	

Source: BHPS (2008)

Table 4.2 Educational attainment by religious group for women aged 25-50 in France

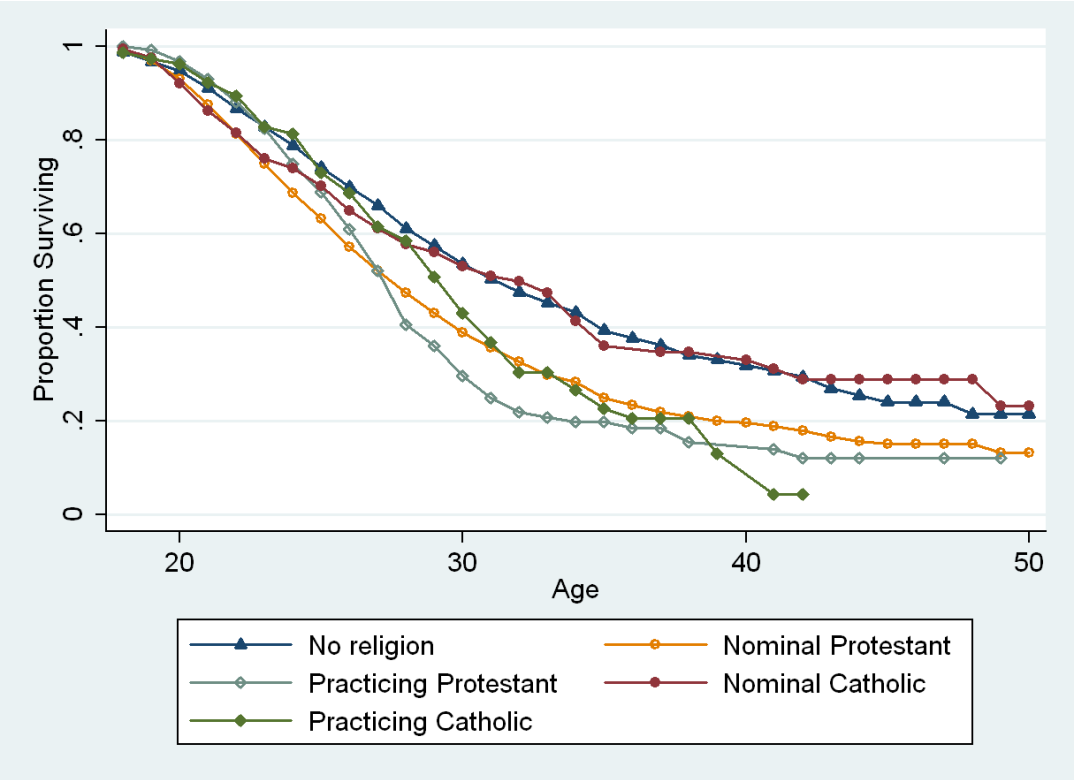
Religious Group	% Lower Secondary	% Upper Secondary	% Tertiary	Total %	N
No religion	23	44	33	**100**	**305**
Nominal Catholic	17	42	41	**100**	**1719**
Practicing Catholic	17	37	46	**100**	**178**
Nominal Other	34	34	32	**100**	**185**
Practicing Other	31	41	28	**100**	**43**
Total %	**19**	**41**	**40**	**100**	**2430**
N	**468**	**1001**	**961**	**2430**	

Source: GGP (2005)

Survival analysis for the transition to first marriage

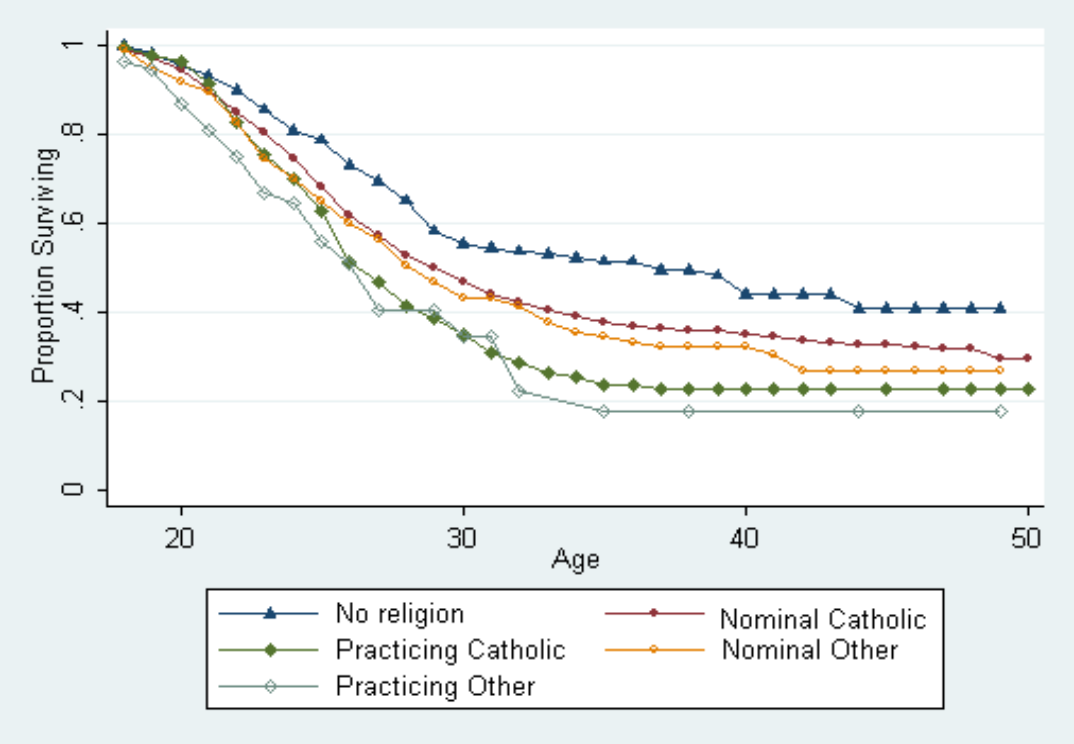
As proposed by the first hypothesis, religiously observant individuals are expected to demonstrate more traditional family behaviours, and therefore would be both more likely to enter formal marriage, and to experience this transition earlier than those who have weaker attachment to religion. This hypothesis is generally supported by the results; the survival curve for first marriage by religious group in Britain and France (Figures 4.1 and 4.2) shows that women who attend religious services on a regular basis are most likely to enter formal marriage, while those with no religion are least likely to get married over the observed period. The survival curve for nominally religious women is somewhere in between those actively practicing religion and the non-affiliated. The only exception to this is non-practicing Catholic women in Britain, who show a pattern of transition to marriage which is similar to non-affiliated women. Additionally, in both groups, the median age at first marriage is relatively high (31 years) with above one fifth having never entered a marital union (see Table 4.3). It is also evident from Table 4.3 that British Protestants tend to marry earlier than Catholic women. This pattern was evident in previous research from the United States (Lehrer, 2000; Mosher et al., 1992). The later entry to formal marriage among Catholics may be an indirect consequence of the anti-divorce doctrine of the Catholic Church (McQuillan, 2004; Pearce and Thornton, 2007). Lehrer (2000) has suggested that since the cost of marital dissolution within this group is especially high, the search for a spouse will be longer than in other denominations. However, although Catholic women enter marriage later than Protestants, nearly all practicing Catholic women eventually get married (only 4% have never married by age 50).

Figure 4.1 Survival curve for the transition to first marriage in Britain (women aged 17-50)



Source: BHPS (2008)

Figure 4.2 Survival curve for the transition to first marriage in France (women aged 17-50)



Source: GGP (2005)

Table 4.3 Median age at first marriage and proportion of never married in Britain (women aged 17-50)

Religious group	Median age at first marriage	Never Married (by age 50)
No religion	31	21%
Nominal Catholic	31	23%
Practicing Catholic	29	4%
Nominal Protestants	27	13%
Practicing Protestants	27	12%
Nominal Other	29	21%
Practicing Other	25	7%
All women	**29**	**17%**

Source: BHPS (2008)

Table 4.4 Median age at first marriage and proportion of never married in France (women aged 17-50)

Religious group	Median age at first marriage	Never Married (by age 50)
No religion	36	41%
Nominal Catholic	28	30%
Practicing Catholic	26	23%
Nominal Other	28	27%
Practicing Other	26	18%
All women	**28**	**31%**

Source: GGP (2005)

For purposes of simplicity, women from minority religions in Britain are not included in Figure 4.1. However, in Table 4.3 it is shown that women in the Other religions group also have relatively earlier entry to marriage (median age at first marriage is 29 among nominally religious and 25 among practicing religious women from the Other group compared to non-affiliated women whose median age of entering marriage is 31). Moreover, only 7% of practicing women from this group remain unmarried, compared to 21% of non-affiliated women, while no difference in the proportion that remain single is found between nominal Other and non-affiliated women.

In France, marriage rates are considerably lower than in Britain (Figure 4.2, Table 4.4). As mentioned above, the pattern of union formation in France is characterized by a higher proportion of cohabitation and a lower propensity among cohabiting couples to marry compared to other European countries, including Britain (Kiernan, 2000). The lower marriage rates in France are evident across the different religious groups, although in both countries, religiously practicing women are more likely to enter formal marriage compared to non-practicing women.

In Table 4.4 it is shown that the median age at first marriage among non-affiliated women is 36. Thus, women from this group enter marriage considerably later than all other religious groups. Among nominal and practicing Catholics the age at first marriage is 28 and 26 respectively and similar figures are found among nominal and practicing women who are members of other religions. In addition, over 40 percent of non-affiliated women remain single at the age of 50, compared to 30 percent of nominal Catholic and 23 percent of practicing Catholic women. The parallel figures among nominally and practicing women from other religions are slightly lower (27 and 18 percent respectively remain single).

Thus, as predicted by the first hypothesis, practicing religious women are more likely to enter a marriage union and to do so at an earlier age compared to less religious women. In general, non-affiliated women are more likely to remain single and to marry at a later age compared to other women, although no great differences are found between non-affiliated and nominal Catholics or nominal women from other religions in Britain. Compared to Britain, the proportion ever married in France is lower for all religious groups, although differences in marriage by religious affiliation and practice are more pronounced, especially in relation to the timing of first marriage. These findings therefore also support the second hypothesis about the greater religious differences in entry to marriage in France than in Britain. The following analysis examines whether these differences remain stable when other factors are taken into consideration.

Tables 4.5 and 4.6 (Model 1) present the results from the logistic regressions estimating the likelihood of entering formal marriage. The results of the multivariate regression analysis give further support to the descriptive findings on the transition to first marriage. In Britain, the odds for nominal Protestant women to enter marriage are 30% higher than for non-affiliated women (the reference group). Among practicing Protestant women the odds of entering marriage are almost 60% higher than for non-affiliated women. These results are significant at $p<0.01$. No significant difference is found between nominal Catholic and non-affiliated women in Britain, although practicing Catholic women are significantly more likely to enter marriage than their non-affiliated counterparts (OR of 1.518, significant at $p<0.01$). Among women from other religions, only actively practicing ones are significantly more likely to marry compared to non-affiliated women (OR of 1.682, significant at $p<0.01$).

In France (Table 4.6, Model 1), all religious groups show a significantly higher likelihood of entering marriage compared to non-affiliated women. For example, the odds of marriage among nominal Catholics are 32% higher than the odds among non-affiliated women. For

practicing Catholics, the odds are 82% higher than the odds for non-affiliated women (both results are significant at $p<0.01$). The parallel odds ratios for nominal and practicing women from the Other religions group to enter the state of marriage in relation to non-affiliated women are 1.354 (significant at $p<0.05$) and 2.152 (significant at $p<0.01$) respectively.

These findings give further support for the first hypothesis, as practicing women in both countries have a higher likelihood of entering marriage than non-affiliated ones. Women who are nominally affiliated with a particular religion also have a generally higher likelihood of entering marriage compared to those with no religious affiliation, though these differences are smaller and not always significant in the case of Britain. These results also provide further support for the second hypothesis, as religious differences in entry to marriage appear to be more significant in France than in Britain.

The second model in Tables 4.5 and 4.6 introduces an interaction term between religious group and higher education, in order to explore whether the relationship between education and the transition to marriage varies by religious group. In Britain, the interaction term for practicing Protestant women with tertiary education is significantly positive (OR of 1.534, significant at $p<0.1$), while the interactions of higher education with all other religious groups are not significant. The meaning of this interaction can be more fully understood by comparing the predicted probabilities for the transition to marriage by religion and education. These predicted probabilities are based on the models in Tables 4.5 and 4.6 and display the average predicted probability of entering marriage in a given month for women aged 17-50 in each religious and education group, after adjusting for all other variables. A Bonferroni multiple comparison test is used in order to verify the robustness of the differences in the predicted probabilities across educational and religious groups (see Appendices 4.1.1-4.1.2).

Table 4.5 Odds Ratios for the transition to first marriage for women aged 17-50 in Britain

		Model 1	Model 2
Age	Age	1.659***	1.659***
	Age squared	0.992***	0.992***
Religious group	No religion	1.000	1.000
	Nominal Protestant	1.302***	1.237**
	Practicing Protestant	1.563***	1.201
	Nominal Catholic	1.058	0.951
	Practicing Catholic	1.518***	1.241
	Nominal Other	1.199	1.066
	Practicing Other	1.682***	1.672**
Enrolment	Enrolled in education	0.371***	0.371***
Education	Low-Upper Secondary	1.000	1.000
	Tertiary Education	1.128**	1.012
Nativity	Born in the UK	1.000	1.000
	South Asia 1st Gen	1.409	1.346
	South Asia 2nd Gen	1.970***	2.010***
	Europe 1st Gen	0.819	0.801
	Europe 2nd Gen	0.663**	0.668**
	Other 1st Gen	1.294	1.274
	Other 2nd Gen	0.796	0.789
Country	England	1.000	1.000
	Wales	0.787***	0.789***
	Scotland	0.860**	0.858**
Religious group*Higher education	Nominal Prot*Tertiary		1.137
	Practicing Prot*Tertiary		1.534*
	Nominal Catholic*Tertiary		1.317
	Practicing Catholic*Tertiary		1.479
	Nominal Other*Tertiary		1.301
	Practicing Other*Tertiary		1.052
N	Number of women-months	344,909	

*p<0.1, **p<0.05, ***p<0.01

Source: BHPS (2008). The model also controls for period in years (not shown here).

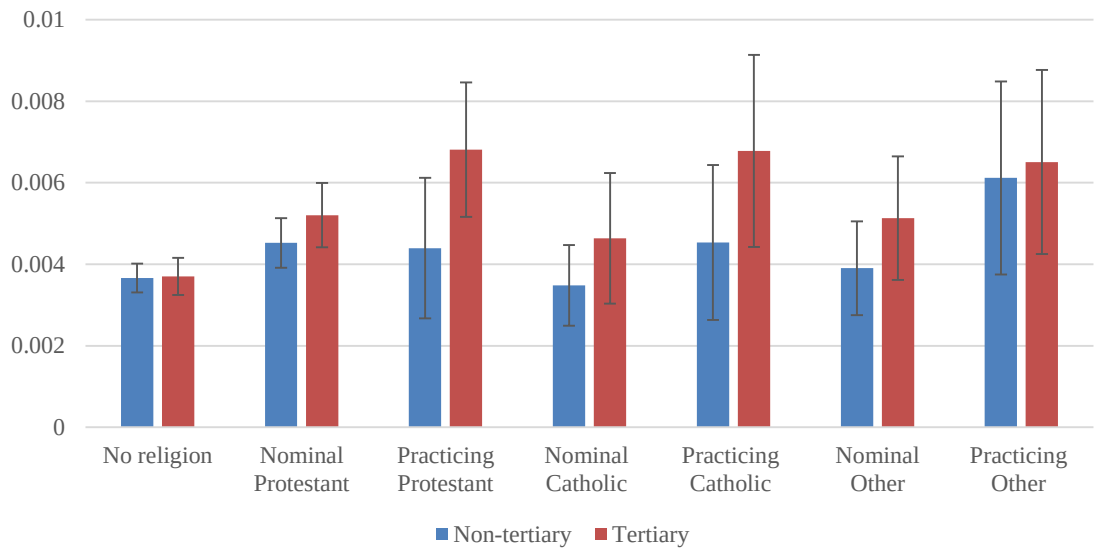
Table 4.6 Odds Ratios for the transition to first marriage for women aged 17-50 in France

		Model 1	Model 2
Age	Age	2.089***	2.087***
	Age squared	0.986***	0.986***
Religious group	No religion	1.000	1.000
	Nominal Catholic	1.308***	1.270**
	Practicing Catholic	1.815***	1.519**
	Nominal Other	1.354**	1.494**
	Practicing Other	2.152***	2.076***
Enrolment	Enrolled in education	0.333***	0.333***
Education	Low-Upper Secondary	1.000	1.000
	Tertiary Education	0.968	0.882
Nativity	Born in France	1.000	1.000
	Maghreb 1st Gen	1.259	1.246
	Maghreb 2nd Gen	1.323*	1.332*
	Europe 1st Gen	1.029	1.077
	Europe 2nd Gen	0.807	0.815
	Other 1st Gen	1.023	1.016
	Other 2nd Gen	0.918	0.902
Type of settlement	Urban	1.000	1.000
	Rural	1.380***	1.385***
Religious group*Higher education	Nominal Cath'*Tertiary		1.105
	Practicing Cath'*Tertiary		1.500
	Nominal Other*Tertiary		0.714
	Practicing Other*Tertiary		1.126
N	Number of women-months	361,662	

*p<0.1, **p<0.05, ***p<0.01

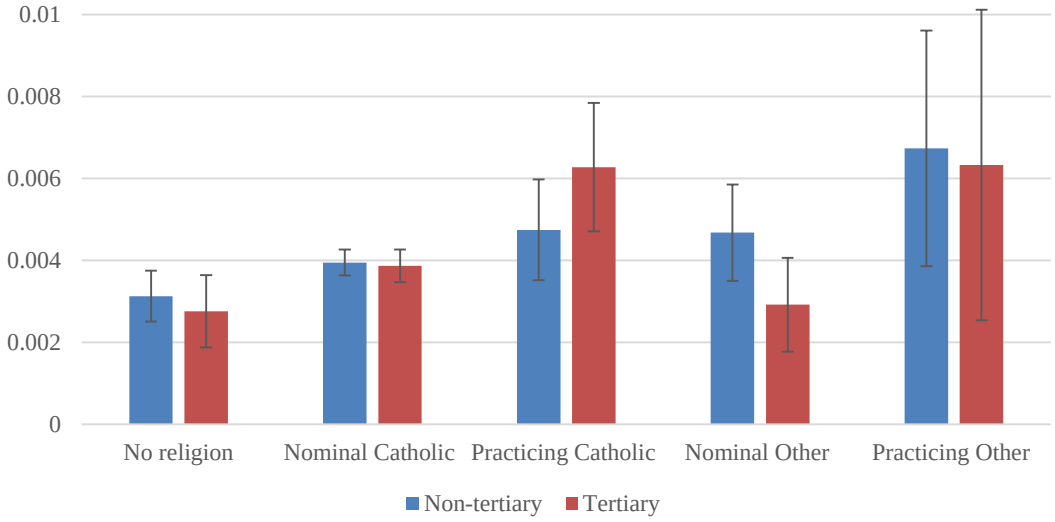
Source: GGP (2005). The model also controls for period in years (not shown here).

Figure 4.3 Predicted probabilities for the transition to first marriage by religious group and education for women aged 17-50 in Britain



Source: BHPS (2008)

Figure 4.4 Predicted probabilities for the transition to first marriage by religious group and education for women aged 17-50 in France



Source: GGP (2005)

In the comparison of the predicted probabilities for the transition to marriage in Britain (Figure 4.3), it seems that highly educated practicing Protestant and Catholic women are more likely to enter marriage than their less educated counterparts, although these differences are not statistically significant. However, when comparing highly educated women from different religious groups, practicing Protestant women are significantly more likely to enter marriage compared to non-affiliated women, while no differences in entry to marriage are found between non-affiliated and practicing Protestant women at lower levels of education.

In France, none of the interaction terms for religious group and higher education are significant (Table 4.6, Model 2). This may be partly due to the non-significant correlation between higher education and the transition to marriage in France, as opposed to the positive correlation found in Britain. However, the predicted probabilities displayed in Figure 4.4 show that the probability of entering marriage for highly educated practicing Catholic women is significantly higher than that for non-affiliated women, whether highly educated or not (Figure 4.4, and Appendix 4.1.2). No evidence of an interaction effect with education is found among other religious groups. The predicted probabilities for women from all other groups however, are not statistically different from non-affiliated women. Overall, the findings from Britain and France provide only weak support for the third hypothesis which states that *higher education is more likely to be positively correlated with the transition to marriage among nominal and practicing religious women than among non-affiliated women.*

The differences in the relationship between educational qualifications and marriage in Britain and France may be the result of the differential marriage behaviours and attitudes in these countries. As non-marital cohabitation is more widespread in France than in Britain, rejection of marriage for ideological reasons is expected to be more common in the former

(Hiekel et al., 2014), while in Britain, socioeconomic status may play a more important role in explaining differences in the transition to marriage. Thus, those with improved economic prospects are more likely to experience the transition to marriage in Britain, while in France, it is more common to remain in non-marital cohabitation regardless of one's socioeconomic status. Nonetheless, being enrolled in education is associated with a lower likelihood of entering marriage in both countries, as women tend to delay family formation until after the completion of education (Blossfeld and Huinink, 1991; Ní Bhrolcháin and Beaujouan, 2012).

Another important finding is the positive correlation between ethnic origin and the likelihood of entering marriage: in Britain, second generation migrants from South Asia are significantly more likely to enter a marriage union compared to women with British origin. On the other hand, second generation migrants from Europe have a lower likelihood of getting married, perhaps due to relatively lower rates of marriage in some of the European countries of origin. Similarly in France, women who are second generation migrants from Northern Africa (Maghreb) are more likely to marry than those with French origin. This is expected, since a large proportion of migrants from South Asia in the UK and from Northern Africa in France come from predominantly Muslim countries (Davie, 2007), where more traditional family behaviours prevail and appear to persist among second generation migrants. The reason for not finding a significant effect on marriage among first generation migrants is likely to be due to disruption and postponement of union formation as a result of the immigration process (Dubuc, 2012).

The next section of this chapter focuses on the differential effect of education on the transition to first birth among women from different religious groups.

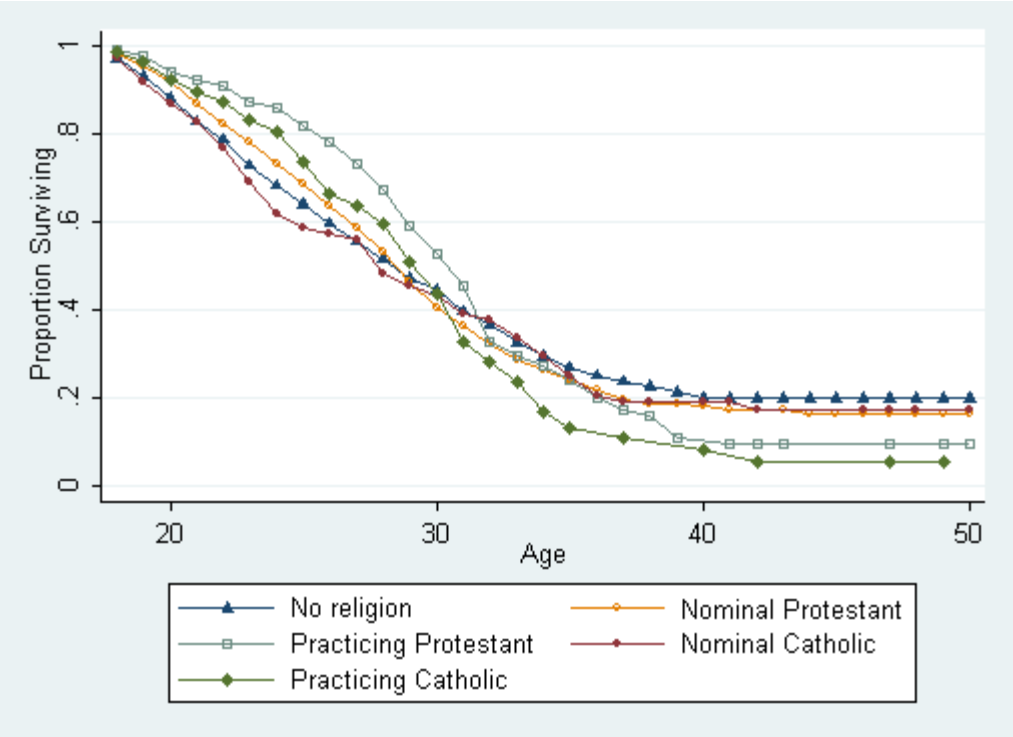
Survival analysis for the transition to first birth

The survival curves for the transition to first birth (Figures 4.3 and 4.4) show, as expected, that practicing religious women have a higher likelihood of becoming mothers compared to non-practicing ones, especially compared to non-affiliated women. Thus, practicing women, who have the highest commitment to religion, are not only more likely to enter formal marriage, but also least likely to remain childless compared to other women.

Interestingly, practicing Catholics and Protestants in Britain have later entry to motherhood compared to other women, though they are least likely to remain childless: only 5% of practicing Catholics and 9% of practicing Protestants remain childless at age 50 compared to a fifth of women with no religious affiliation (see Table 4.7). The proportion childless among nominal Catholic and Protestant women is only slightly lower (17%) than that of non-affiliated women. Among women from Other religions in Britain differences in the transition to first birth are more modest: 21% of nominal and 16% of practicing women from this group remain childless.

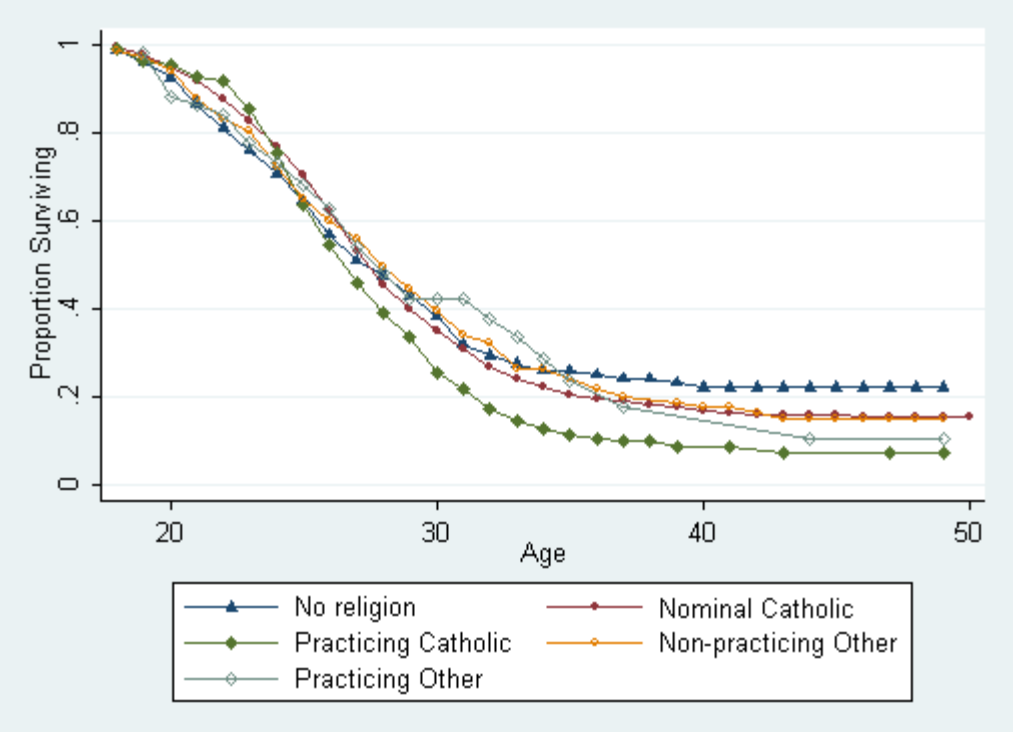
The later entry to motherhood among practicing Catholics and Protestants in comparison to non-affiliated women may be a result of the delay of first birth until after formal marriage among religiously practicing women, as they are less likely to give birth outside of wedlock compared to women with lower attachment to religion (Berghammer, 2012; Régnier-Loilier and Prioux, 2008). In France however, practicing Catholic women enter motherhood early in relation to their British counterparts (the median age at first birth for these groups is the same as the median age at first marriage: 26 in France and 29 in Britain). However, they show a similarly low proportion of childlessness (only 7% of practicing Catholic women remain childless, see Table 4.8).

Figure 4.5 Survival curve for the transition to first birth in Britain (women aged 17-50)



Source: BHPS (2008)

Figure 4.6 Survival curve for the transition to first birth in France (women aged 17-50)



Source: GGP (2005)

Table 4.7 Median age at first birth and proportion of childless women in Britain

Religious group	Median age at first birth	Proportion childless at age 50
No religion	28	20%
Nominal Catholic	27	17%
Practicing Catholic	29	5%
Nominal Protestants	28	17%
Practicing Protestants	30	9%
Nominal Other	30	21%
Practicing Other	27	16%
All women	**28**	**17%**

Source: BHPS (2008)

Table 4.8 Median age at first birth and proportion of childless women in France

Religious group	Median age at first birth	Proportion childless at age 50
No religion	27	22%
Nominal Catholic	27	16%
Practicing Catholic	26	7%
Nominal Other	27	15%
Practicing Other	27	11%
All women	**27**	**16%**

Source: GGP (2005)

Among nominally religious women in France, about 15-16 percent remain childless at age 50, compared to 22 percent of the non-affiliated. Compared to non-affiliated women in France, nominal and practicing women from other religions also have a lower proportion of childlessness (15% and 11% respectively). These findings support the fourth hypothesis, as in both countries religiously practicing women have the lowest proportion of childlessness while the proportion of childless women among those with no religious affiliation is the highest. Nominally religious women are found in between these two extremes. The exception to this are nominal women from Other religions, who have a similarly high childlessness rate as non-affiliated women. Among practicing religious women from the Other group the proportion of childlessness is also higher compared to Catholic and Protestant practicing women. However, these findings do not control for other socio-demographic factors, such as marital status, education and ethnicity.

Tables 4.9 and 4.10 present the results from logistic regressions estimating the likelihood of the transition to first birth in Britain and in France. In Britain, the results show no significant differences among religious groups in the transition to first birth, whether marital status was included in the model or not (Table 4.9, Models 1-2). This may be due to the conflicting trends of later entry to motherhood on the one hand and the higher likelihood of giving birth among more religious women.

In France on the other hand, practicing Catholic women show a higher likelihood of experiencing the transition to first birth compared to women stating they have no religion (odds ratio of 1.236, significant at 10%, Table 4.10, Model 1). Nevertheless, this relationship is not significant in the second model which also controls for marital status. It is possible therefore that the higher likelihood of practicing Catholic women in France to have a first birth compared to non-affiliated women is mediated by their relatively higher marriage rates.

Table 4.9 Odds Ratios for the transition to first birth among women aged 17-50 in Britain

		Model 1	Model 2	Model 3
Age	Age	1.576***	1.057	1.058
	Age squared	0.992***	0.998***	0.998***
Marital status	Single		0.071***	0.071***
	Cohabiting		0.373***	0.372***
	Married		1.000	1.000
	Separated/ Divorced/ Widowed		0.147***	0.146***
Religious group	No religion	1.000	1.000	1.000
	Nominal Protestant	1.019	0.914	0.796***
	Practicing Protestant	1.027	0.924	0.740
	Nominal Catholic	1.073	1.073	0.895
	Practicing Catholic	1.236	1.058	0.810
Enrolment	Enrolled in education	0.608***	0.827**	0.840*
Education	Lower Secondary	1.000	1.000	1.000
	Tertiary Education	0.629***	0.641***	0.523***
Nativity	Born in France	1.000	1.000	1.000
	South Asia 1st Gen	1.942***	1.770**	1.765**
	South Asia 2nd Gen	1.163	1.097	1.126
	Europe 1st Gen	0.870	1.039	1.034
	Europe 2nd Gen	0.855	0.950	0.922
	Other 1st Gen	0.682	0.657	0.687
	Other 2nd Gen	0.886	1.068	1.084
Country	England	1.000	1.000	1.000
	Wales	1.275***	1.416***	1.414***
	Scotland	1.146**	1.288***	1.292***
Religious group*education	Nominal Prot*Tertiary			1.467***
	Practicing Prot*Tertiary			1.541*
	Nominal Cath* Tertiary			1.745**
	Practicing Cath*Tertiary			1.838**
N	Number of women-months		325,040	

*p<0.1, **p<0.05, ***p<0.01
Source: BHPS (2008). The model also controls for period in five years intervals (not shown here). Non-practicing and practicing 'other' were not significant and therefore are not shown here.

Table 4.10 Odds Ratios for the transition to first birth among women aged 17-50 in France

		Model 1	Model 2	Model 3
Age	Age	2.727***	1.551***	1.563***
	Age squared	0.983***	0.992***	0.992***
Marital status	Single		0.030***	0.030***
	Cohabiting		0.321***	0.322***
	Married		1.000	1.000
	Separated/ Divorced/ Widowed		0.077***	0.078***
Religious group	No Religion	1.000	1.000	1.000
	Nominal Catholic	0.977	1.003	0.900
	Practicing Catholic	1.236*	1.156	0.855
	Nominal Other	0.936	0.861	0.827
	Practicing Other	0.942	0.877	0.780
Enrolment	Enrolled in education	0.398***	0.626***	0.635***
Education	Low-Upper Secondary	1.000	1.000	1.000
	Tertiary Education	0.609***	0.716***	0.469***
Nativity	Born in France	1.000	1.000	1.000
	Maghreb 1st Gen	0.919	1.307	1.288
	Maghreb 2nd Gen	1.090	1.106	1.105
	Europe 1st Gen	1.344**	1.262	1.349*
	Europe 2nd Gen	0.920	1.002	1.030
	Other 1st Gen	1.316*	1.327*	1.298
	Other 2nd Gen	1.232	1.083	1.061
Type of settlement	Urban	1.000	1.000	1.000
	Rural	1.306***	1.056	1.053
Religious group*education	Nominal Cath* Tertiary			1.547**
	Practicing Cath*Tertiary			2.411***
	Nominal Other*Tertiary			1.210
	Practicing Other*Tertiary			1.581
N	Number of women-months		334,114	

*p<0.1, **p<0.05, ***p<0.01
Source: GGP (2005). The model also controls for period in five years intervals (not shown here).

Marital status (added in Model 2 of Tables 4.9 and 4.10) is indeed a strong predictor of the likelihood of having a first birth; married women are significantly more likely to enter motherhood compared to women in any other status. For example, the odds for cohabiting women to experience the transition to first birth are around 60% lower than the odds for married women in Britain. In France the odds for cohabiting women are 70% lower than those for married ones. Among single women without a co-resident partner, the odds of giving birth are lower by more than 90% compared to married women in both countries. Thus, while the descriptive findings are in line with the fourth hypothesis about higher transition rates to first birth among more religious women, there is not much support for this hypothesis in the multivariate logistic regression model for Britain and France.

Other noteworthy findings are that first generation migrants in Britain from South Asia display a higher likelihood of transition to first birth. A similar positive relationship is found in France for first generation migrants from Europe and from other countries. However, no significant effect is found for second generation migrants. These findings are in line with previous research showing a trend towards fertility convergence between second generation migrants and the native population (Dubuc, 2012).

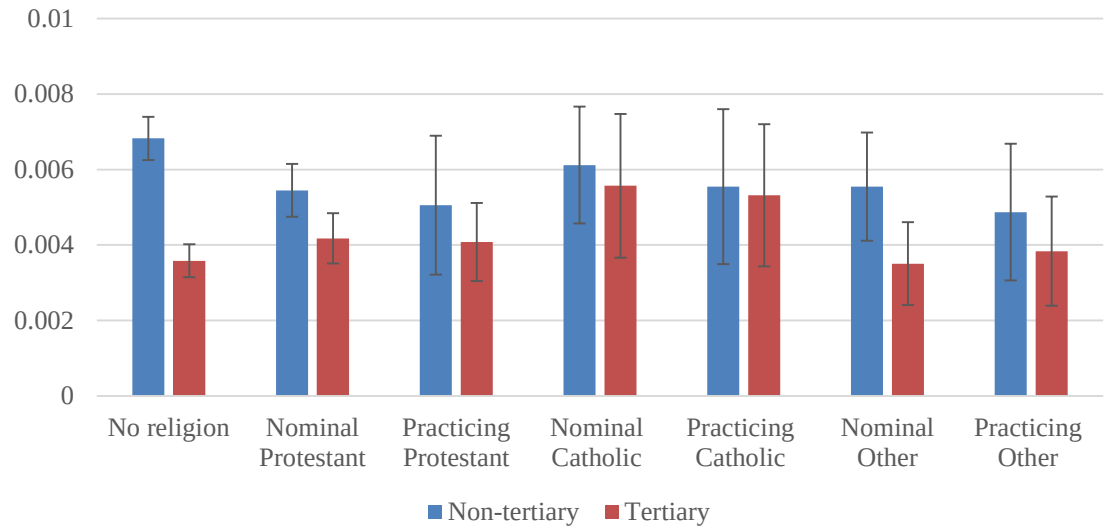
In accordance with previous research (Blossfeld and Huinink, 1991; Ní Bhrolcháin and Beaujouan, 2012), the results indicate that being enrolled in education significantly reduces the likelihood of entering motherhood in both countries. Furthermore, achieving a higher level of education in itself is negatively related to the transition to first birth: when all other factors are held constant (see Tables 4.9-4.10, Model 2), the odds of experiencing first birth among women with tertiary education are around 30% lower compared to the odds among less educated women in Britain and in France (odds ratios are 0.641 and 0.716 respectively, both significant at $p<0.01$).

However, the relationship between higher education and the transition to first birth varies among religious groups in both countries. The interaction between higher education and religious group is significantly positive for both nominally and practicing religious individuals (Tables 4.9-4.10, model 3). This however does not apply to women from Other religions, which may be due to their small sample size.

The nature of these interactions is better understood by looking at the predicted probabilities for the transition to first birth by religious group and education (Figures 4.7 and 4.8), derived from the logistic regression model. In both Britain and France, it is shown that non-affiliated women with secondary or lower level of education have the highest probability of entering motherhood, although this difference is not significant in comparison to women from other religious groups with the same level of education. Previous studies have shown that low educated women are at higher risk of having a first birth while being single (Perelli-harris et al., 2010) and in particular, a higher risk of becoming teenage mothers (Smith and Ratcliffe, 2009). However, more religious women may be at lower risk of early transition to first birth as they are more likely to oppose premarital sex (McQuillan, 2004; Robbins and Francis, 2010). Other studies from the US have also confirmed that higher religiosity and conservative attitudes about sex are linked to a delayed sexual debut (Bearman and Bruckner, 2001; Meier, 2003).

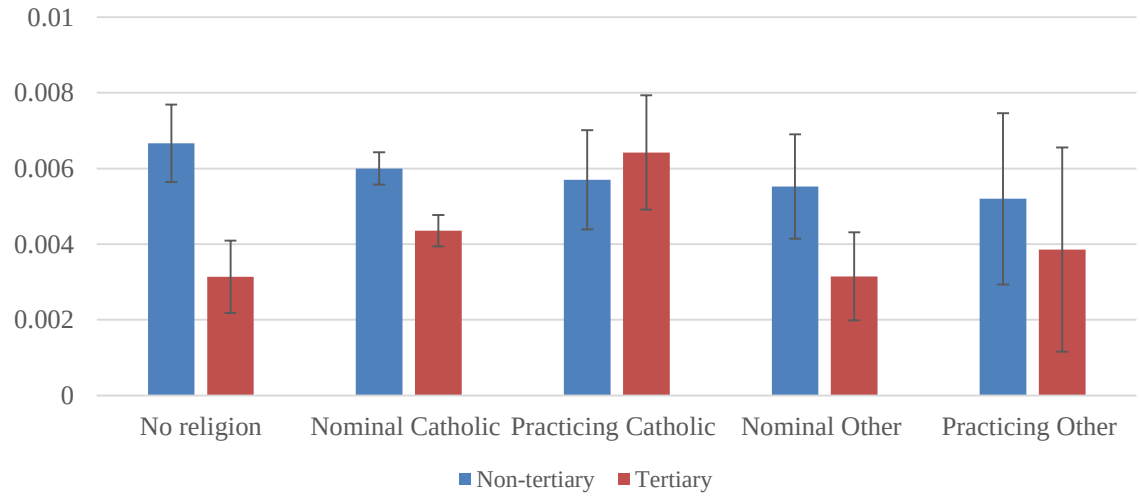
Nonetheless, the probability of first birth sharply declines for non-affiliated women with tertiary education. This differential in first birth rates is considerably larger than for all other religious groups in Britain and France. In the case of Britain, only among non-affiliated women is there a significant difference in the probability of entering motherhood between women with tertiary education and those with lower educational levels. By contrast, higher education appears to have a much weaker effect on the transition to first birth among more religious women (Figures 4.7, and Appendix 4.2.1).

Figure 4.7 Predicted probabilities for the transition to first birth by religious group and education for women aged 17-50 in Britain



Source: BHPS (2008)

Figure 4.8 Predicted probabilities for the transition to first birth by religious group and education for women aged 17-50 in France



Source: GGP (2005)

In the case of France, the probability of first birth is significantly lower for non-affiliated and nominal Catholic women with higher education in comparison to their less educated peers. The difference in the probability of first birth by education is less pronounced for nominal Catholic women, although still significant, and no other religious group shows any significant difference by education. Furthermore, while no significant differences in the transition to first birth are found between religious groups with lower education in France, it is found that practicing Catholic women who are highly educated are significantly more likely to enter parenthood than non-affiliated women who are educated to the same level (Figure 4.8, and Appendix 4.2.2).

Thus, as predicted by the fifth hypothesis, the relationship between education and the transition to first birth varies by religiosity, as non-affiliated women display the sharpest decline in the transition to first birth between those with lower and higher levels of education. On the other hand, the relationship between education and the transition to first birth is much weaker among more religious women. These results suggest that religiosity alleviates the negative effect of education on entering motherhood.

Differences in the timing of first birth and the proportion of childless women with varying levels of religious commitment may also account for some of the variation in completed fertility levels among these groups. The final section of the chapter, therefore, examines whether the predicted family size for women from each religious group varies by level of education.

Completed fertility gradient by educational attainment among religious groups

While the previous part of this chapter focused on the differential effect of education on entry into marriage and first birth among women from different religious groups, this section examines the interaction between education, religion and completed fertility levels. Since religiosity is related to a higher value ascribed to children and the prioritization of women's family roles over other endeavours, increased levels of education are assumed to have a weaker negative effect on completed fertility levels among more religious women.

To test this, an analysis of variance for completed fertility as a function of religion and education was conducted for women aged 40 and above in Britain and France (Tables 4.11 and 4.12). These models also include the age of respondents in years and whether the respondent was born abroad. In addition, an interaction term between religious group and educational level was added.

The results from Table 4.11 show that in Britain, although religious group and level of education were both found to have a significant effect on completed fertility, the interaction between religious group and education is not statistically significant. In France on the other hand, the interaction effect between religious group and education appeared to be much stronger, and statistically significant (Table 4.12). Based on these models, the adjusted means of children ever born were produced for each country as shown in Figures 4.9 and 4.10. These figures show how the completed fertility gradient by education varies by religious group.

Table 4.11 Analysis of variance for children ever born by religious group in Britain

Number of obs = 3,746 R-squared = 0.0517
Root MSE = 1.316 Adj R-squared = 0.0461

Source	Partial SS	df	MS	F	Prob > F
Model	351.3	22	16.0	9.22	0.000
Religious group	70.6	6	11.8	6.79	0.000
Level of education	119.8	2	59.9	34.58	0.000
Religious group*education	31.1	12	2.6	1.5	0.118
Age	0.4	1	0.4	0.24	0.628
Foreign born	3.1	1	3.1	1.78	0.182
Residual	6447.5	3723	1.7		
Total	6798.8	3745	1.8		

Source: BHPS (2008)

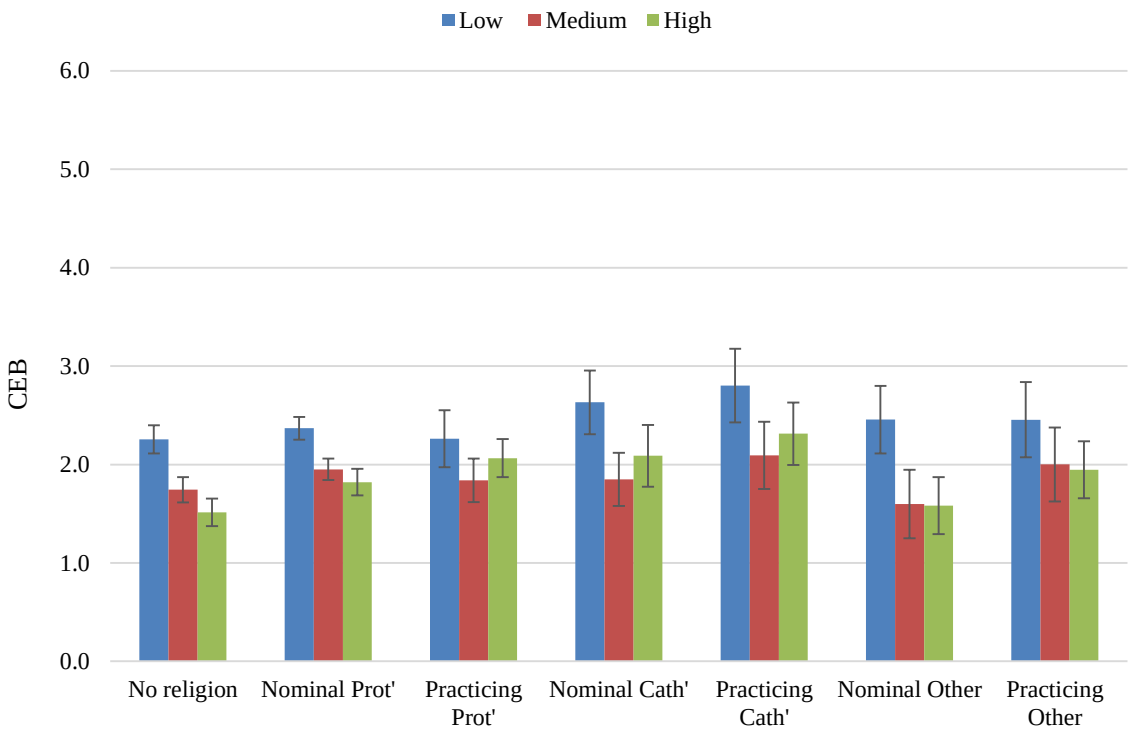
Table 4.12 Analysis of variance for children ever born by religious group in France

Number of obs = 3,271 R-squared = 0.0865
Root MSE = 1.420 Adj R-squared = 0.0821

Source	Partial SS	df	MS	F	Prob > F
Model	621.7	16	38.9	19.3	0.000
Religious group	87.8	4	21.9	10.9	0.000
Level of education	247.7	2	123.8	61.4	0.000
Religious group*education	201.8	8	25.2	12.5	0.000
Age	27.8	1	27.8	13.8	0.000
Foreign born	38.0	1	38.0	18.9	0.000
Residual	6561.0	3254	2.0		
Total	7182.6	3270	2.2		

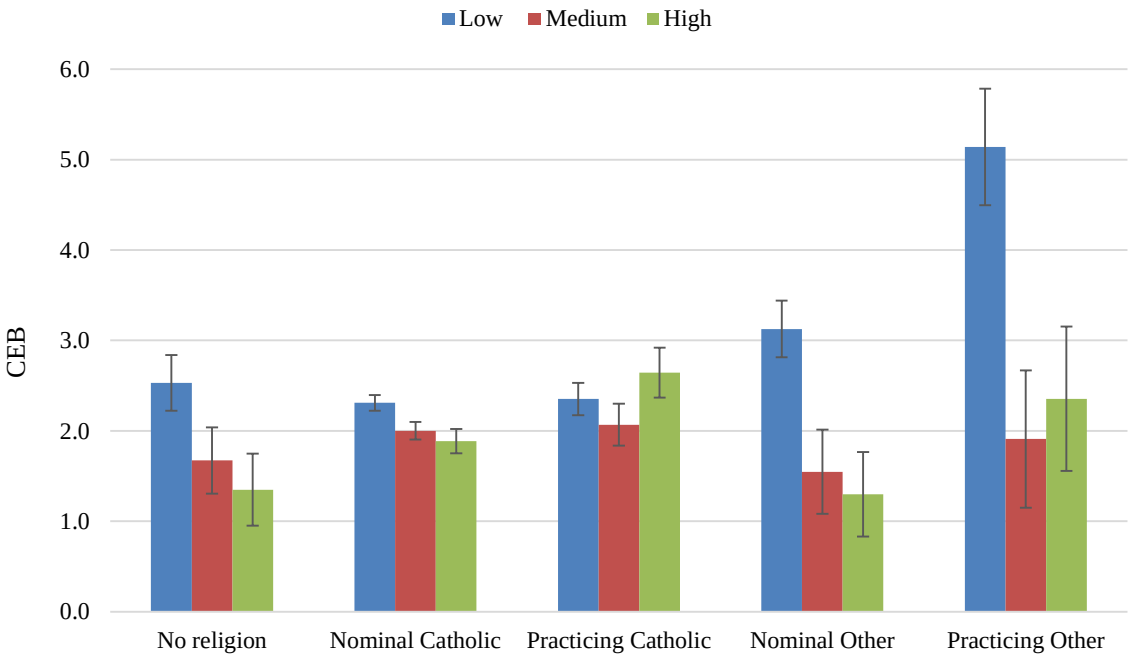
Source: GGP (2005)

Figure 4.9 Adjusted means of children ever born by religious group and level of education (UK born women aged 40+) in Britain



Source: BHPS (2008)

Figure 4.10 Adjusted means of children ever born by religious group and level of education (French born women aged 40+) in France



Source: GGP (2005)

In Britain (Figure 4.9), the non-affiliated women show a linear decline in completed fertility as education increases (from 2.3 children for the least educated women, to 1.7 at the medium level of education, to 1.5 children among the highly educated). Nominally Protestant women have a slightly more moderate fertility gradient, though it is also negatively linear (the average number of children is 2.4, 1.9 and 1.8 at the low, medium and high level of education respectively). However, among practicing Protestants and nominally and practicing Catholics there is a U-shaped fertility curve, as the least educated have the highest completed fertility with a decline for the medium level of education and then it rises again for those with higher education. Moreover, differences in completed fertility between non-affiliated women and their Protestant and Catholic counterparts are more pronounced at higher education. Nevertheless, among women from other religions there is a relatively sharp decline in fertility from low to higher levels of education.

In France, there is also evidence of a U-shaped fertility gradient by education for practicing Catholic women (Figure 4.10), as highly educated women in this group also have the largest family size; 2.6 children on average compared to 2.4 children for the least educated and 2 children for those with medium level of education. On the other hand, among non-affiliated and nominally Catholic women fertility declines with education, though differences in completed fertility by educational level are much smaller among the latter: among non-affiliated women fertility declines from 2.5 at low education to 1.7 at medium education and 1.4 at higher education. The parallel figures for nominal Catholic women are: 2.3, 2.0 and 1.9).

Among women from other religions in France there is a sharp drop in fertility from the least educated to those with higher levels of education, with a small increase evident from medium to high education among practicing women. These differences may be due to greater heterogeneity within this group, as it combines different religious traditions. For

example, Muslim women, who have considerably higher fertility rates, are also over-represented among the low educated group.

Thus, in both Britain and France the largest differences in completed fertility by religious group appear among highly educated women with the exception of 'other' religions. Therefore, these findings give partial support for the sixth hypothesis, as higher education appears to have a stronger negative influence on the completed fertility of women with a lower attachment to religion, i.e., those who are not affiliated with any religion or do not attend services on a regular basis. Among religiously active women on the other hand (and nominal Catholic women in Britain), fertility decreases at the medium level of education, but then rises again for those with higher education. It should be noted though that the interaction between education and religion is more significant in France than in Britain.

Discussion

This chapter examined the relationships between religious adherence and family formation patterns as well as the interaction between religion and education and its implications for the transition to first marriage, first birth and completed fertility. The findings presented here shed some light on the mechanisms linking religiosity with patterns of family formation and fertility. Women with higher religious involvement are significantly more likely to enter formal marriage union, though the transition to first birth is not necessarily earlier than among less religious women. This is most likely due to the tendency of the more religious to have children only within formal marriage compared to persons with lower religious commitment (Surkyn and Lesthaeghe, 2004). This supposition is also supported by the comparison of median age at first marriage and first birth among the different religious groups (see Tables 4.3-4.4 and 4.7-4.8), showing that for practicing religious women the

median age at first marriage is either lower or equal to the median age at first birth, while this is not always the case for women from the other groups.

As predicted by the first hypothesis, the higher likelihood of more religious women entering first marriage is confirmed in the logistic regression analysis for the transition to first marriage when other variables are held constant. In addition, as postulated by the second hypothesis, religious differences in the transition to marriage are more pronounced in France than in Britain, as there is a significant positive association between both nominal affiliation and active religious participation and entry to marriage (compared to non-affiliated women) in France. In Britain on the other hand, the positive association is mainly evident among practicing religious women and no significant differences in the transition to marriage are found among nominal Catholic or nominal women from minority religions in comparison to non-affiliated ones (although a significant difference is found between nominal Protestant and non-affiliated women). This could be attributed to the higher general marriage rates in Britain compared to France, and that marriage are still relatively common in Britain, also among non-affiliated women.

The third hypothesis about religious differences in the relationship between education and the transition to marriage did not receive much support from the findings. This could be due to the ambiguous relationship between education and marriage. As shown by the multivariate logistic model of the transition to first marriage (Tables 4.5-4.6), the negative effect of education on marriage can be attributed to enrolment in education, while the highest level of education achieved is either positively correlated with marriage (in Britain) or has no relationship with marriage (in France).

The fourth hypothesis, predicting the higher likelihood of religiously observant women experiencing the transition to first birth, received partial support. The survival curve for the

transition to first birth shows that practicing women are least likely to remain childless compared to other groups. However, the results of the multivariate regression model in Britain are not significant, and in France, the higher likelihood of practicing Catholic women entering motherhood is no longer significant after controlling for marital status. These results can be attributed to religious differences in the timing of first birth as opposed to its occurrence, as non-affiliated women tend to have their first birth at a relatively younger age compared to more religious women.

A comparison of first birth probabilities by religious group and education reveals that among lower educated women, non-affiliated women have a relatively higher risk of entering first birth compared to more religious women. This difference may be the result of more conservative attitudes about sex and a delayed sexual debut among more religious women that influence the relationship between low education and early transition to first birth. On the other hand, the likelihood of entering first birth decreases sharply for non-affiliated women with tertiary education, while childlessness is less likely to increase at higher education among women with a stronger attachment to religion. Thus, as predicted by the fifth hypothesis, educational differences in the transition to first birth are less pronounced for more religious women. It should be noted though, that this interaction effect is not significant among women from minority religions.

The interaction between education and religious group is also evident in relation to completed fertility. In line with the sixth hypothesis, more religious women, who tend to hold more traditional family values, are less likely to reduce their fertility when obtaining higher qualifications (with the exception of women from minority religions), while women with weaker religious orientation experience a sharper decline in fertility with rising levels of education. It should be noted though, that this interpretation is based on the assumption that the measures of women's religiosity are stable over time and are not strongly influenced

by marriage or childbearing. While previous literature supports this suggestion, and, in the British case, there is also support for it from the analyses in Chapter Two, there must remain a question mark over the relationship between religiosity and life-cycle events in France.

The increasing fertility gap among religious groups at higher levels of education may point to differences in the perceived opportunity costs of children among women with different levels of religiosity. According to Lehrer (2004a), religious involvement may affect the perceived costs and benefits of having a large family, through social rewards in the form of approval and social status to those who conform to the prescribed family norms. Thus, more religious women may perceive the opportunity costs of children as lower compared to less religious ones, or at least perceive higher benefits accruing from having children. Moreover, women who attend services on a regular basis are also more likely to receive emotional or practical support, which may help dealing with the competing responsibilities of family and paid work (Chatters and Taylor, 2005).

The U-shaped relationship between education and fertility among the more religious women may reflect a greater ability of the highly educated to overcome barriers in expanding their family. Highly educated women usually enjoy more flexibility in the labour market and are more likely to be able to afford high-quality childcare (Joshi, 2002; Klein and Eckhard, 2007). Hence, it is possible then that the combination of high fertility aspirations and improved social and financial resources lead to this particular U-shaped fertility curve. For non-religious women on the other hand, the opportunity cost for children may be perceived as higher. Additionally, the value of children for this group may not be perceived as highly as among the more religious women. Thus, better educated women from this group might be less inclined to invest in family production and may choose to divert their time into other endeavours.

Up to this point, patterns of women's employment have not been directly incorporated into the analysis. However, in order to reach a better understanding of the interdependencies between religion, education and fertility, factors relating to the gender division of labour should also be part of the picture. Becker's theory of the family predicts a reduced demand for children as women's education increases, due to an increase in forgone earnings when leaving the labour market to take care of children (Becker, 1991). However, the negative influence of education on fertility would only apply for those who translate their qualifications to full-time employment (Goldscheider, 2006). Thus, the final two chapters focus on differences in work and family orientations and practices by level of religiosity, and on the effects of labour force participation on the transition to first and higher order births among religious groups.

Appendix 4.1.1: Predicted probabilities for the transition to first marriage by religious group and education in Britain with Bonferroni multiple comparison test[14]

	Margin	SE	Bonferroni (groups)
No religion low	0.0037	0.0002	A
No religion high	0.0037	0.0002	AB
Nominal Prot' low	0.0045	0.0003	ABC
Nominal Prot' high	0.0052	0.0004	BC
Practicing Prot' low	0.0044	0.0009	ABC
Practicing Prot' high	0.0068	0.0008	C
Nominal Catholic low	0.0035	0.0005	ABC
Nominal Catholic high	0.0046	0.0008	ABC
Practicing Catholic low	0.0045	0.0010	ABC
Practicing Catholic high	0.0068	0.0012	ABC
Nominal Other low	0.0039	0.0006	ABC
Nominal Other high	0.0051	0.0008	ABC
Practicing Other low	0.0061	0.0012	ABC
Practicing Other high	0.0065	0.0012	ABC

Source: BHPS (2008). Based on the logistic regression model in Table 4.5.

Appendix 4.1.2: Predicted probabilities for the transition to first marriage by religious group and education in France with Bonferroni multiple comparison test

	Margin	SE	Bonferroni (groups)
No religion low	0.0031	0.0003	A
No religion high	0.0028	0.0005	A
Nominal Catholic low	0.0039	0.0002	AB
Nominal Catholic high	0.0039	0.0002	AB
Practicing Catholic low	0.0047	0.0006	AB
Practicing Catholic high	0.0063	0.0008	B
Nominal Other low	0.0047	0.0006	AB
Nominal Other high	0.0029	0.0006	A
Practicing Other low	0.0067	0.0015	AB
Practicing Other high	0.0063	0.0019	AB

Source: GGP (2005). Based on the logistic regression model in Table 4.6.

[14] The Bonferroni method adjusts for multiple comparisons between the predicted probabilities (margins), so that the alpha for significance level of each comparison will not exceed 5%. For simplicity, the results of the Bonferroni test are summarized in group codes; religious groups that share a letter are not significantly different at the 5% level (Mitchell, 2012).

Appendix 4.2.1: Predicted probabilities for the transition to first birth by religious group and education in Britain with Bonferroni multiple comparison test[15]

	Margin	SE	Bonferroni (groups)
No religion low	0.0068	0.0003	C
No religion high	0.0036	0.0002	A
Nominal Prot' low	0.0054	0.0004	BC
Nominal Prot' high	0.0042	0.0003	AB
Practicing Prot' low	0.0051	0.0009	ABC
Practicing Prot' high	0.0041	0.0005	AB
Nominal Catholic low	0.0061	0.0008	ABC
Nominal Catholic high	0.0056	0.0010	ABC
Practicing Catholic low	0.0055	0.0010	ABC
Practicing Catholic high	0.0053	0.0010	ABC
Nominal Other low	0.0055	0.0007	ABC
Nominal Other high	0.0035	0.0006	AB
Practicing Other low	0.0049	0.0009	ABC
Practicing Other high	0.0038	0.0007	AB

Source: BHPS (2008). Based on the logistic regression model in Table 4.9.

Appendix 4.2.2: Predicted probabilities for the transition to first birth by religious group and education in France with Bonferroni multiple comparison test

	Margin	SE	Bonferroni (groups)
No religion low	0.0067	0.0005	C
No religion high	0.0031	0.0005	A
Nominal Catholic low	0.0060	0.0002	C
Nominal Catholic high	0.0044	0.0002	AB
Practicing Catholic low	0.0057	0.0007	ABC
Practicing Catholic high	0.0064	0.0008	BC
Nominal Other low	0.0055	0.0007	ABC
Nominal Other high	0.0031	0.0006	A
Practicing Other low	0.0052	0.0012	ABC
Practicing Other high	0.0039	0.0014	ABC

Source: GGP (2005). Based on the logistic regression model in Table 4.10.

[15] See previous comment.

5. Religious Differences in Family-Work Attitudes and Practices

The previous chapters described the complex relationships between religiosity, educational attainment, marriage and fertility. It was found that women with a stronger religious adherence are more likely to marry and have a larger family size. In addition, women attending religious services regularly are more likely to be highly educated, while maintaining high fertility levels. The differential effect of higher education on the fertility of religious and non-religious women may be related both to differences in gender role attitudes towards the division of labour and to the practices of the allocation of time to family and work within each group.

There are several mechanisms through which religious adherence can influence women's labour force attitudes and activity. First, religious institutions are considered to support patriarchal gender roles and to endorse a traditional division of labour, in which men are prescribed the role of providers and women are assumed to be responsible for the home and for childrearing. Second, different family structures among religiously adherent individuals may account for the variation in women's labour market activity. For example, having a large family of three children or more substantially reduces employment rates for women (Lewis et al., 2008a).

In this chapter, I explore differences in attitudes towards gender roles and maternal employment among religious groups in Britain and France. I then examine religious differences in labour force participation by family structure – i.e. marital status, number of children and the presence of pre-school children in the household - in order to gain a better understanding of the way religion and fertility patterns are related to employment. In what follows, I review previous research on the relationships between the gendered division of labour and fertility, and the influence of religion on attitudes towards gendered roles and the

allocation of women's time to family and work. I start with an examination of the association between national macro-level indicators of female labour force participation and trends in fertility.

Female labour force participation and fertility trends in the UK and France

Since the mid-1960s, practically all European countries have experienced the parallel phenomena of increasing participation of women in the labour force and declining fertility rates (Bernhardt, 1993; Fagnani, 2007). As a result, the traditional male breadwinner model of the family has been greatly eroded (Esping-Andersen, 2009; Lewis, 2001). However, there are major differences across countries in the levels of women's participation in the workforce and the extent to which fertility has declined (Chesnais, 1996; Esping-Andersen, 2009; Fagnani, 2007; Lewis et al., 2008a; Thévenon, 2009).

According to New Home Economics theory, an increase in female labour force participation would have a negative effect on fertility levels, since an increase in women's earning power raises the opportunity cost of time allocated to childbearing and childrearing. Thus, as women's wage increases, the demand for children is expected to decrease (Becker, 1991). This effect is assumed to be stronger for women in higher socio-occupational groups and among career oriented women who may choose to limit their fertility in order to devote themselves more fully to their working life (Ekert-Jaffé et al., 2002). In Europe, for several decades there has been a negative correlation between women's labour force participation and fertility across countries. However, this correlation has become positive and weaker after mid-1980s, due to the fact that low fertility countries in Southern Europe, such as Greece, Italy and Spain, also experience low female participation rates, whereas Northern European countries have both high participation and relatively higher fertility (Arpino et al.

2013; Del Boca et al., 2005). These differences can in part be attributed to varying family policies, which affect the ability of women to reconcile family responsibilities and paid work. Government support to families and family-friendly work environments reduce the costs of children and contribute both to higher fertility and to increased women's labour supply (Del Boca et al., 2005; Ermisch, 1989; Thévenon and Gauthier, 2011). Moreover, in recent years there has been a growing attention to the effect of gender equity on women's ability to combine family and work (McDonald, 2013; Mills et al., 2008; Oláh, 2003). According to McDonald (2000, 2006, 2013), low fertility results from incoherence between the levels of gender equity within different social institutions; so while in most advanced countries women are educated to the same standard of men (or even higher) and have improved opportunities in the labour force, family-oriented institutions are much slower in adapting to the changes in women's roles. Therefore, in countries where attitudes to the family have remained closer to the male breadwinner model, and mothers' employment is severely restricted by having children, women react by having fewer children (ibid). Conversely, greater gender equity in social and economic institutions and within partnerships would improve the reconciliation between work and family and reduce constraints to higher fertility (Arpino et al., 2013; Chesnais, 1996; McDonald, 2000).

Several studies have examined the impact of the division of household labour on fertility (Cooke, 2004, 2009; de Laat and Sevilla-Sanz, 2011; Miller Torr and Short, 2004; Oláh, 2003; Sullivan et al., 2014). For example, a greater contribution by fathers to childcare has been found to attenuate the negative effect of women's employment on the odds of having a second birth in Germany (Cooke, 2004) and in Italy (Cooke, 2009). Similarly, Oláh (2003) has found that a more equal share of family responsibilities accelerates the transition to a second birth in Sweden and in Hungary. On the other hand, Miller Torr and Short (2004) found a U-shaped effect of the division of housework on the progression to second birth;

their findings indicate that both "modern couples" (where women do less than 54 percent of the housework) and "traditional couples" (where women do more than 84 percent of the housework), had a higher likelihood of proceeding to second birth. Moreover, in a study encompassing eleven OECD countries, de Laat and Sevilla-Sanz (2011), showed that although in countries where men contribute more to housework women are better able to combine childrearing with labour market activity, when looking at the household level, women who are expected to do most of the caring and household tasks have higher fertility and a lower probability of participating in the labour market. Thus, it appears that both family policies and the level of gender equity at the individual and the aggregate level influence women's careers and reproductive behaviours.

Historically, in the UK there has been little public commitment to childcare provision, and a stronger attachment to the male breadwinner family model, providing support for women mainly as wives (Fagnani, 2007; Lewis et al., 2008b). From the late 1990s, under the new Labour government, several changes in family policy were introduced, which included the expansion of childcare (especially for children aged 3-4 years old), extension of maternity leave and introduction of paternity leave as well as the right to request flexible working (Daly, 2010). Nonetheless, provision is still lacking, at least for children under age three, and the option of purchasing childcare is out of reach for mothers in the lower-income group (Fagnani, 2007). Therefore, the most available solution for mothers in the UK is part-time employment (Baizán, 2007; Del Boca et al., 2005). Thus, while in the UK there is a relatively high female employment rate (around 67 percent of women aged 15-64), nearly 40 percent of all employed women work in a part-time job. By comparison, in France, the employment rate for women of the same age is approximately 60 percent, but less than a quarter of all employed women work part-time (Lewis et al., 2008a: 23).

Unlike the UK, France is known for a relatively progressive family policy that aims to support dual-earners families through the availability of public childcare services for children under age six, allowances to reduce the costs of childcare, extended parental leave and childrearing benefits (Fine-Davis et al., 2004). Additionally, in the year 2000, the French government adopted the law of reduced working hours, introducing a 35 hours working week (Le Feuvre and Lemarchant, 2007). Nevertheless, there is still some inconsistency between family-friendly policy and social practices in France, as the employment rate for mothers is lower than in Nordic countries (66% of mothers aged 20-49 in France are employed compared to 72% in Finland and 80% in Denmark) and only slightly higher than in the UK, where employment rates for mothers in the same age range stands at 62% (Lewis et al., 2008a: 24).

Indeed, previous studies have shown that the effect of public policies on work and family behaviour is limited (Lewis et al., 2008a; Thévenon and Gauthier, 2011) as these practices are shaped by a set of complex factors - including labour market conditions, social class and specific cultural contexts, such as gender norms (Lück, 2006; Saraceno, 2011; Sullivan et al., 2009). According to Lück (2006), cultural heritage in different societies and religious traditions plays a particularly important role in affecting women's decisions about the allocation of time to family and work. This may be done by setting norms about appropriate behaviour of men and women or by influencing value beliefs and preferences about the desirability of a certain career path (ibid). The next section focuses on the relationships between religion and gender attitudes, including reference to previous studies on religion and the division of domestic and paid work.

Religion and the gendered division of labour

Religion is considered to be a major barrier to gender equality, in both the public and the private spheres. The link between religion and traditional gender role attitudes has been depicted in numerous studies, which point to the patriarchal and hierarchical character of the major religions' institutions and theological scripts (Heaton and Cornwall, 1989; Inglehart and Norris, 2003; Norris and Inglehart, 2004; Peek et al., 1991; Putnam and Campbell, 2010; Sherkat, 2000). Putnam and Campbell (2010: 236) for instance, describe how sacred texts portray women as subordinate to men: from the biblical story of how God formed Eve from the rib of Adam[16] to the New Testament's advice to women to be silent and submit to their husbands[17].

According to McQuillan (2004), most major religions have paid special attention to issues of the place of family in society, and provide moral codes for the appropriate behaviour for men and women. Inglehart and Norris (2003: 68) describe religious institutions as highly resilient to the rise in gender equality and as having a continuous influence on gender norms in post-industrial societies: "traditional religious values and religious laws have played an important role in reinforcing social norms of a separate and subordinate role for women as homemakers and mothers and a role for men as patriarchs within the family and primary breadwinners in the paid workforce."

The emphasis on women's domestic roles within religious discourse may discourage them from investment in human capital and developing a career. In addition, childbearing and rearing requires a substantial amount of time, drawing women from economic roles. In this way, religion contributes to the continued economic dependence of women and to the perpetuation of gender inequality (Heaton and Cornwall, 1989). This happens either directly,

[16] See: Genesis 2:22
[17]See: 1 Corinthians 14:34-35, 1 Timothy 2:11-12, Titus 2: 3-5.

through religious values about the appropriate gender division of labour, or indirectly, as a result of the differential family formation patterns of religious and non-religious women, which have consequences for their level of attachment to the labour force (Lehrer, 1995; Lehrer, 2004a). It should be noted however, that religious commitment may also have a positive influence on women's labour force participation; for example, religious organizations were found to promote the formation of social networks, which provide different types of support (i.e. informational, emotional or tangible) in respect to family life and childrearing (Chatters and Taylor, 2005; Philipov and Berghammer, 2007). This in turn may reduce the pressure involving conflicting responsibilities of family and work and contribute to higher maternal employment among religious women.

Another channel through which religion has been considered to have a positive effect on labour force participation is through the link between religious ideologies and work ethic. This line of inquiry has been influenced by the work of Max Weber, and particularly, his essay on "The Protestant Ethic and the Spirit of Capitalism" (Weber, [1905]1958). According to Weber, the belief among reformed Protestant groups that worldly work achievement is a sign of salvation created an ethic that places high value on hard work and productivity, and eventually, resulted in the development of capitalism in the West. Previous studies have found evidence for Protestant work ethic characteristics, not only among Protestants, but also among other denominations, including Catholics and Muslims (Arslan, 2001; Höpfl, 2007). Similarly, religions may promote certain traits that could contribute to work productivity, such as discipline, determination and a low value being put on leisure activities (Ewing, 2000; H'madoun, 2007). Affiliation with a particular religion may in some circumstances therefore signal to employers that a person has desirable labour market characteristics (Ewing, 2000). However, the positive effects of these relationships may not apply to religious women, as they are likely to be countered by more powerful religious

gender norms that endorse traditional division of labour between the sexes (Newman and Hugo, 2006).

As the major religious traditions tend to prioritize women's role as wives and mothers and to endorse a traditional gender division of labour, it is expected that people with greater religious commitment would display more conservative family orientations about the division of labour between men and women. Moreover, the importance of women fulfilling their role as the primary carer may be especially emphasized in regard to mothers of young children. Both the BHPS and the GGP surveys include the statement "A pre-school child is likely to suffer if his or her mother works", where an agreement with this statement is taken to indicate support for a more segregated division of labour. *Thus, the first hypothesis postulates that more religious individuals are more likely to agree that a preschool child is likely to suffer if his/her mother works.*

However, since the above hypothesis may capture not only gender role attitudes, but also views about the mother-child connection and its psychological consequences for young children, an additional, more general, hypothesis that expresses the relationship between religion and attitudes towards the gendered division of labour is also posited. *The second hypothesis, then, contends that more religious individuals are more likely to concur with the traditional male-breadwinner female-caretaker model of the division of labour*.

Numerous empirical studies on religious adherence and women's labour supply have found a generally lower attachment to the labour force among women who are identified with a religious group compared to women with no religious affiliation, and that this effect is stronger for denominations with stricter views on traditional gender roles (Heineck, 2004; Heaton and Cornwall, 1989; Lehrer, 1995; Maneschiöld and Haraldsson, 2007; Read, 2004). For example, in a study from Canada, Heaton and Cornwall (1989) showed that among

religions with a strong emphasis on family roles, women were particularly disadvantaged in relation to men in terms of educational attainment, employment rates and income. The smaller and more conservative Christian denominations (e.g. Jehovah's Witnesses, Reformed Bodies, Hutterites, Mennonites and Mormons) exhibited the greatest inequality. At the same time, mainline Protestants and Roman Catholics had more moderate levels of inequality while those with no religion had the lowest inequality. In addition, studies from Germany (Heineck, 2004) and Sweden (Maneschiöld and Haraldsson, 2007) showed that the intensity of religious beliefs has a negative effect on women's labour supply.

Several studies from the US have pointed to the importance of family structure in explaining religious differentials in women's labour force participation; for example, Read (2004) has showed that the effect of religiosity on employment is conditional on the number of children women have. Additionally, Lehrer (1995) has found that religious differences in women's labour supply are significant when young children are present in the household. The explanation for this concerns the higher priority that is given to women's familial obligations over economic endeavours among all major monotheistic traditions - Christianity, Islam and Judaism.

Glass and Nath (2006), on the other hand, found inconsistencies in the relationship between religious adherence and the labour market behaviour of married women in the US. They argued that although individuals in conservative religious groups tend to hold more traditional attitudes towards gender, women in these groups often find creative ways to reconcile their own work aspirations with religious teachings about the primacy of motherhood and male family leadership. Thus, religious conservatism may affect women's market behaviour through the move to less demanding jobs with reduced working hours and lower wages following marriage and childbirth, rather than by limiting their labour force participation altogether.

These findings receive further support in Edgell's (2006) study of religious communities in upstate New York. This research showed that religious involvement affects both men and women's management of time spent with the family or at work, as a result of the general criticism within religious congregations of careerism and consumerism that may interfere with family life. Thus, married men who attended church regularly were more likely to reduce or restructure the time they spent at work in order to spend more time with the family. However, these men reported spending less time in performing household tasks compared to other men who are not church attenders. Among women, those attending church regularly were more likely to work part-time (as opposed to full-time) and spend more time on housework. Interestingly, these women were also more likely to state that household tasks were divided fairly.

Thus, the promotion of segregated gender roles and emphasis on women's traditional family roles by religious institutions is expected to have a negative effect on women's attachment to the labour force. *The third hypothesis therefore states that women with higher religious commitment would tend to work in part-time rather than full-time jobs or forgo labour market activity altogether in comparison to women with no religious affiliation. In addition, these differences are expected to remain when family structure variables are held constant.*

Data and Methodology

The first part of the chapter analyses differences in attitudes towards the gendered division of labour among religious groups, while the second part focuses on women's labour force participation as a function of religious factors and household composition. The data for France are taken from the Generations and Gender Survey from 2005, while the data for Britain are based on the 17th wave of the BHPS, which was conducted in 2007 and contains

questions on gender attitudes. The subsample for the analysis is restricted to respondents aged 24-55, as these are the primary ages of labour force activity (see: EUROSTAT, 2013). Thus, the sub-sample for Britain includes 3,291 women and 2,762 men, while the parallel numbers for France are 3,126 women and 2,335 men. All descriptive statistics were calculated using a country specific cross-sectional population weight.

The analysis of gender role attitudes (relating to Hypotheses 1 and 2) was conducted separately for men and women, as there may be gender differences in the impact of religion on these attitudes. These attitudes were explored by the level of agreement with statements regarding maternal employment and division of labour. The first statement - "A pre-school child is likely to suffer if his or her mother works" - has the same phrasing in both the GGP survey and the BHPS, enabling exact comparison. The other statements in each survey were phrased differently, though each of them measures views regarding gender role segregation; the statement used in Britain was: "A husband's job is to earn money; a wife's job is to look after the home and family", while the statement used in France was: "When jobs are scarce, men should have more right to a job than women". For each statement there are five response categories representing the level of agreement: "Strongly disagree", "Disagree", "Neither agree nor disagree", "Agree" and "Strongly agree".

First, the proportion of men and women from each religious group who either agreed or strongly agreed with the statements is presented. Nevertheless, views on gender role attitudes are closely related to other socioeconomic circumstances and may also be influenced by the current employment status of the respondents and their partners (Schober and Scott, 2012). Therefore, the level of agreement with each statement is modelled with a set of socio-demographic independent variables. The dependent variable in this model is

level of agreement with each statement on a scale of 1 to 5[18]. Since this is an ordinal variable, an ordered logistic regression was employed, using the latent variable approach. This approach assumes an underlying continuous latent variable *y** that represents the observed response (Powers and Xie, 2008). Therefore, the probability of observing outcome *i* is written as:

$$\Pr(y_j = i) = \Pr(k_{i-1} < \beta_1 x_{1j} + \beta_2 x_{2j} + \cdots + \beta_k x_{kj} + u_j \leq k_i)$$

The coefficients $\beta_1, \beta_2,\ldots,\beta_k$ are estimated together with the cut points $k_1, k_2,\ldots,k_k$ where *k* is the number of possible outcomes. Since there are five answer categories, there are four cut points in the model that specify the intercept for each level of the dependent variable (except the lowest). Thus, the probability of observing a particular outcome is determined by the location of the latent variable *y** in relation to the cut points. While it is possible to convert the coefficients of the ordered logistic regression into odds ratios, the cut points remain in the log odds scale, and therefore the model presented here is also in the log scale.

The independent variables include religious group as defined in previous chapters. Since Muslims in France have higher representation in the 24-55 age groups (as opposed to age 40+ necessary for the analysis of completed fertility) it was possible to include them as a separate category. However, due to the relatively small number of Muslim women attending the Mosque on a regular basis, there is no distinction between practicing and nominal Muslims. In Britain, this group was excluded from the analysis due to small sample size.

Since there were no questions on affiliation or religious participation included in wave 17 of the BHPS, the information on religious affiliation was derived from wave 14 of the panel,

[18] In the original order of categories a higher score represents stronger disagreement. However, the order of categories is reversed here, so that a higher score represents stronger agreement in order to simplify the interpretation of results from the ordered logistic regression.

which is the most recent wave where this question was asked (before being asked again in wave 18, which does not contain the question on gender role attitudes). The question on religious participation was asked in wave 16, and this information was matched with the data on affiliation to create the religious group categories using the personal cross-wave identification number of each respondent. Since past religious practice is found to be a good proxy for current practice using this data (as shown in Chapter 2) this should not cause any major bias in the results. Other independent variables in the model include age, education (using a measure based on the ISCED scale as defined in previous chapters) and employment status, divided into three categories: full-time work, part-time work and not employed. The model also controls for partner's employment status (partner currently in employment, not employed, or no cohabiting partner). Additional family structure variables are added to indicate whether the respondent is legally married, the number of children under age 16 in the house and whether there are children under the age of 5 in the household. A binary variable indicating whether the respondent was not born in the country of interview is also included. The sample characteristics for Britain and France are detailed in Tables 5.1 and 5.2.

In order to investigate Hypothesis 3, which relates to labour market practices rather than family role attitudes, the distribution of employment status is calculated for women from different religious groups and the same is done when the sample is restricted to women with at least one child under the age of 5 in each country. Then, a multinomial regression analysis is employed to estimate the likelihood of women from different religious groups to be working full-time, part-time or to be out of the labour force. Unemployed women were excluded from the analysis, since their number in Britain was too small to permit their inclusion as a separate category (about 2.5% compared to 10% in France), and in order to distinguish between women who are not in the labour force and the unemployed who are

actively searching for a job. Students, retired and disabled people were also excluded. Since there are three possible categories for the dependent variable of employment status, the probabilities for each category are written as follows:

$$\Pr(y_i = 1|x_i) = \frac{1}{1 + \exp(x_i\beta_2) + \exp(x_i\beta_3)}$$

$$\Pr(y_i = 2|x_i) = \frac{\exp(x_i\beta_2)}{1 + \exp(x_i\beta_2) + \exp(x_i\beta_3)}$$

$$\Pr(y_i = 3|x_i) = \frac{\exp(x_i\beta_3)}{1 + \exp(x_i\beta_2) + \exp(x_i\beta_3)}$$

Where β_2 and β_3 denote the covariate effects specific to the second and third response categories with the first category as the reference.

The multinomial analysis includes four nested models, with family variables gradually added to each model in order to track the effects of different variables on the religious group coefficients. This enables to explore whether family structure variables, such as marital status, number of children or the presence of preschool children in the house are responsible for the low labour supply among more religious women. Since women's labour market activity is highly related to their partners' employment status, separate models are presented for all women, regardless of their marital status, and for partnered women only.

Table 5.1 Sample Characteristics for Women in Britain and France

	British women aged 24-55[a]		French women aged 24-55[b]	
	Mean (SD)	N	Mean (SD)	N
Age	40 (8.73)	3,291	40 (9.08)	3,126
No religion	0.50	1,638	0.12	362
Nominal Protestant	0.27	878	-	-
Practicing Protestant	0.06	193	-	-
Nominal Catholic	0.06	189	0.73	2,277
Practicing Catholic	0.04	119	0.07	224
Nominal other	0.05	170	0.03	85
Practicing other	0.03	104	0.01	36
Muslim	-	-	0.05	142
Married	0.59	1,936	0.50	1,572
# Children under 16 in HH	0.89 (1.03)	3,291	0.91 (1.07)	3,126
Children under 5 in HH	0.19	627	0.22	675
Lower Secondary education	0.15	465	0.22	673
Upper Secondary education	0.44	1,343	0.41	1,268
Tertiary education	0.41	1,274	0.38	1,185
Working full-time	0.50	1,614	0.60	1,758
Working part-time	0.26	840	0.22	646
Not employed	0.24	780	0.18	543

[a]*Source: BHPS (2007)*
[b]*Source: GGP (2005)*

Table 5.2 Sample Characteristics for Men in Britain and France

	British men aged 24-55[a]		French men aged24-55[b]	
	Mean (SD)	N	Mean (SD)	N
Age	40 (8.79)	2,762	40 (8.80)	2,335
No religion	0.63	1,728	0.14	324
Nominal Protestant	0.20	548	-	-
Practicing Protestant	0.03	95	-	-
Nominal Catholic	0.06	152	0.73	1,695
Practicing Catholic	0.02	50	0.04	85
Nominal other	0.05	129	0.03	76
Practicing other	0.02	60	0.01	29
Muslim	-	-	0.05	126
Married	0.58	1,601	0.49	1,155
# Children under 16 in HH	0.77 (1.01)	2,762	0.84 (1.07)	2,335
Children under 5 in HH	0.18	498	0.21	501
Lower Secondary education	0.15	390	0.21	493
Upper Secondary education	0.45	1,151	0.49	1,141
Tertiary education	0.40	1,043	0.30	701
Working full-time	0.86	2,319	0.87	1,925
Working part-time	0.04	102	0.04	85
Not employed	0.10	281	0.09	197

[a]*Source: BHPS (2007)*
[b]*Source: GGP (2005)*

Findings

Gender role attitudes by religious group

The first part of the results presents the proportion of men and women within each religious group who expressed agreement with statements supporting a traditional gender role division (Hypotheses 1 and 2). As shown in Table 5.3, the proportion of people who either agree or strongly agree with the statement "a preschool child is likely to suffer if his/her mother works" is markedly higher in France than in Britain: nearly half of men and slightly less than half of French women expressed agreement with the statement, compared to only a third of men and a fifth of women in Britain.

Table 5.3 Proportion agreeing that 'a preschool child is likely to suffer if his/her mother works' by religious group (in %)[a]

		Britain[b]		France[c]	
		Men	Women	Men	Women
No religion		31	19	38	35
Protestants:	Nominal	34	19	-	-
	Practicing	36	29	-	-
Catholic:	Nominal	35	20	46	42
	Practicing	36	27	62	51
Other:	Nominal	32	27	55	49
	Practicing	55	32	64	68
Muslim		-	-	72	68
All respondents		**33**	**21**	**48**	**44**

[a]A country specific cross-sectional weight has been used for descriptive statistics in Britain and France.
[b]*Source: BHPS (2007)*
[c]*Source: GGP (2005)*

At first glance, these results may seem to be at odds with the better provision of childcare and the higher proportion of working mothers in France. On the other hand, family policies in France have been criticized for being based on the motivation to encourage larger families

rather than on the promotion of gender equality and the reconciliation of paid and unpaid work (Hantrais, 1999). For example, the provision of extended periods of paid parental leave (allocation parental d'éducation, APE) to families with two children or more in France[19] has encouraged the exit of young mothers from the labour market, especially if they are low paid (Hantrais, 1999; Lewis et al., 2008b; Thévenon and Gauthier, 2011). Moreover, the question focuses on consequences for children rather than whether mothers should work or not. Thus, some respondents may agree with the importance of women's participation in the labour force, but still believe it has negative consequences for young children. In addition, these differences may also reflect an ex-post-facto rationalisation of women's employment patterns in each country, as mothers of young children in France are most likely to work full-time, while their counterparts in Britain tend to work in part-time jobs. Nevertheless, Arpino and colleagues (2013) who compared gender attitudes across countries with different welfare regimes, have shown that Britain, along with other Anglo-Saxon countries, is ranked closer to Nordic countries, which are at the higher end of the gender equity scale. In France on the other hand, although there has been a recent increase in gender equity levels, it is still ranked lower than Britain with similar levels to that of other continental European countries such as Germany and Spain, which are characterized by low levels of de-familialization[20].

In terms of differences based on denomination and religious practice, in both countries non-affiliated men and women show the lowest level of agreement with the statement (31 and 19 percent in Britain and 38 and 35 percent in France respectively), although the gap between the non-affiliated and those who identify with a religion is greater in France. In both countries, however, people who actively participate in religious services show a higher

[19] Until 1994 this policy applied only to families with three children, and from that year the benefit was extended to families from the second child (Hantrais, 1999).
[20] De-familialization refers to the extent to which state policies help externalize family caring burdens (Esping-Andersen, 1990, 1999).

level of agreement with the negative effects of maternal employment on young children. Interestingly, no major differences are found between Catholics and Protestants in Britain in this regard. In France, Muslims and individuals from other religions expressed stronger agreement with the statement compared to Catholics. Thus, people of minority religions in France are more likely to hold traditional views on gender roles. It should be noted though that these differences may also reflect other cultural influences, including country of origin.

These findings provide support to the first hypothesis, as a higher proportion of more religious individuals express agreement with the statement on child's suffering as a result of maternal employment. However, as referred to above, responses to this question may be influenced not only by views on gender, but also by social and cultural perceptions about children's welfare. The BHPS also includes a question that directly inquires about agreement with the male-breadwinner/female carer model: "A husband's job is to earn money; a wife's job is to look after the home and family". The distribution of agreement with the statement by religious group is presented in Table 5.4. Religious differences in gender attitudes to this statement in Britain appear to vary by gender; while women who identify as Catholics show the lowest agreement with the male-breadwinner model (only 5-6 percent), Catholic men show the highest level of agreement (17 percent). However, practicing women in the Protestant or Other religions have higher levels of agreement compared to all women (10 and 16 percent respectively, compared to 8 percent).

The alternative question that was used in France to estimate religious differences in gender role attitudes refers to the level of agreement with the statement "When jobs are scarce, men should have more right to a job than women". The results in Table 5.5, show an overall proportion of 19 percent who agree with the statement, with no difference between men and women. Thus, nearly one fifth of men and women in France feel that men ought to have priority in the job market in difficult times.

Table 5.4 Proportion agreeing that 'A husband's job is to earn money; a wife's job is to look after the home and family' by religious group in Britain (in %)

		Men	Women
No religion		11	7
Protestants:	Nominal	12	8
	Practicing	13	10
Catholic:	Nominal	17	6
	Practicing	17	5
Other:	Nominal	8	5
	Practicing	12	16
All respondents		**11**	**8**

Source: BHPS (2007)

Table 5.5 Proportion agreeing that 'When jobs are scarce, men should have more right to a job than women' by religious group in France (in %)

		Men	Women
No religion		15	15
Catholic:	Nominal	17	17
	Practicing	29	32
Other:	Nominal	16	19
	Practicing	31	23
Muslim		48	36
All respondents		**19**	**19**

Source: GGP (2005)

These results are very similar to the findings of Arpino et al (2013), who used data from the World Values Survey to measure response to the same statement as an indicator of gender equity. A considerably higher proportion of practicing Catholics in France agree with the statement (29 and 32 percent for men and women respectively, compared to 17 percent among nominal Catholics and 15 percent for the non-affiliated). Practicing men and women from the Other religions category also show higher agreement with the statement, while the highest agreement - as in the case of attitudes towards working mothers with young children is found amongst Muslim men and women (48 and 36 percent respectively). Thus, in general, the non-affiliated are the least likely to support the idea that men should take priority in the job market, indicating a less traditional attitude to the division of labour between men and women, while the practicing religious and those who identify as Muslim are most likely to express agreement, reflecting more traditional attitudes to the gender division of labour. These results provide general support to the second hypothesis, which postulates that more religious individuals would express higher agreement with the traditional male-breadwinner female-caretaker model of the division of labour. However, in both countries the differences in agreement are more pronounced between non-affiliated and practicing religious individuals, with the exception of Catholic women in Britain who do not show higher agreement. It should be noted, though, that these findings do not control for other socioeconomic factors, which are taken into account in the ordered logistic regression model below.

The results of the ordered logistic model for agreement with these statements are presented in Tables 5.6 and 5.7. The findings for British men show that compared to those with no religious affiliation, only practicing men from the "Other religions" category are significantly more likely to agree either with the statement on preschool children suffering from maternal employment, or the statement describing the traditional male-breadwinner

model compared to men with no religious affiliation (estimated logits are 0.862 and 0.715 with significance level of 1%). Among British women, practicing Protestants and practicing members of the "Other religions" category are significantly more likely to agree with both statements, in relation to women with no religious affiliation (logits of 0.312 and 0.353 for practicing Protestants, significant at 5%, and 0.626 and 0.599 for practicing Other religions, with significance level of 1%). Women who are nominally affiliated with the Other religions group are also more likely to agree with the statement on children's suffering from maternal employment (logit of 0.442, significant at 1%). However, as in the case for men, the coefficients for nominal Protestant women and Catholic women (whether nominal or practicing) are not significant in Britain.

In France, men and women from all religious groups show significantly higher likelihood of agreeing with the statements about pre-school children suffering from maternal employment in comparison to those with no religious affiliation (except for nominal Catholic men). As for the second statement on giving men priority when hiring for jobs, men from all religious groups (except nominal Other) show higher likelihood of agreement compared to non-affiliated men. Among women, practicing Catholics, those practicing Other religions and Muslims show significantly higher likelihood of agreeing that men have more right to a job than women when jobs are scarce compared to the non-affiliated (logits of 0.762, 0.914 and 0.533 respectively, the first two significant at 1% and the latter significant at 5%). However, the results for nominal Catholic women and women nominally affiliated with Other religions are not significant. Therefore, these findings provide partial support to the first and second hypotheses, as the higher agreement with each of the statements is significant among some religious groups but not for others.

Table 5.6 Ordered logit estimates for agreement with gender role statements in Britain

	Men		Women	
	Child suffers[a]	Male-breadwinner[b]	Child suffers[a]	Male-breadwinner[b]
No religion	Ref.	Ref.	Ref.	Ref.
Nominal Protestants	0.144	0.148	0.081	0.084
Practicing Protestants	0.125	0.144	0.312**	0.353**
Nominal Catholics	0.143	0.240	-0.092	0.133
Practicing Catholics	0.134	-0.120	0.127	0.100
Nominal other	0.298	0.193	0.442***	0.004
Practicing other	0.862***	0.715***	0.626***	0.599***
Lower Secondary education	Ref.	Ref.	Ref.	Ref.
Upper Secondary education	-0.035	-0.329***	-0.036	-0.397***
Tertiary education	-0.011	-0.780***	-0.028	-0.933***
Age	0.027***	0.028***	0.015***	0.016***
Married	-0.020	-0.029	-0.047	0.277***
# Children under 16 in HH	-0.080*	0.086*	-0.117***	-0.059
Children under 5 in HH	-0.225*	0.083	-0.364***	-0.002
Foreign born	-0.207	-0.099	0.596***	0.331*
FT employment	Ref.	Ref.	Ref.	Ref.
PT employment	0.115	-0.194	0.544***	0.669***
Not employed	-0.007	0.396***	1.063***	1.064***
Partner is employed	Ref.	Ref.	Ref.	Ref.
Partner not employed	0.832***	0.999***	-0.084	0.129
No partner	0.400***	0.549***	-0.103	0.154
England	Ref.	Ref.	Ref.	Ref.
Wales	0.113	0.140	0.137	0.026
Scotland	-0.171*	0.113	-0.006	-0.048
Cut1	-1.796	-0.715	-1.246	-0.527
Cut2	0.415	1.474	0.737	1.583
Cut3	1.982	3.394	2.265	3.431
Cut4	4.209	5.381	4.329	5.331
N	**2,488**	**2,492**	**2,992**	**2,990**

*p<0.1, **p<0.05, ***p<0.01

Source: BHPS (2007)

[a] 'A preschool child is likely to suffer if his/her mother works'

[b] 'A husband's job is to earn money; a wife's job is to look after the home and family'

Table 5.7 Ordered logit estimates for agreement with gender role statements in France

	Men		Women	
	Child suffers[a]	Men's priority for jobs[b]	Child suffers[a]	Men's priority for jobs[b]
No religion	Ref.	Ref.	Ref.	Ref.
Nominal Catholics	0.069	0.361***	0.220**	0.145
Practicing Catholics	0.547**	0.782***	0.515***	0.762***
Nominal other	0.484**	0.334	0.481**	0.280
Practicing other	1.052***	0.747**	1.274***	0.914***
Muslim	1.363***	1.674***	0.811***	0.533**
Lower Secondary education	Ref.	Ref.	Ref.	Ref.
Upper Secondary education	-0.092	-0.250**	-0.528***	-0.688***
Tertiary education	-0.307***	-0.776***	-1.021***	-1.206***
Age	0.031***	0.027***	0.009**	0.013***
Married	-0.045	0.139	-0.132	0.228**
# Children under 16 in HH	-0.072	-0.016	0.010	0.105**
Children under 5 in HH	-0.224**	-0.069	-0.027	-0.015
Foreign born	0.030	-0.028	0.291**	0.214
FT employment	Ref.	Ref.	Ref.	Ref.
PT employment	-0.026	-0.085	0.193**	0.173*
Not employed	-0.008	0.099	0.390***	0.354***
Partner is employed	Ref.	Ref.	Ref.	Ref.
Partner not employed	0.586***	0.331***	0.077	-0.038
No partner	0.047	0.110	-0.157*	-0.167
Rural	-0.060	-0.112	0.022	0.019
Cut1	-0.194	1.368	-1.099	0.720
Cut2	0.707	1.953	-0.224	1.338
Cut3	1.323	2.783	0.372	1.954
Cut4	2.663	3.479	1.658	2.729
N	**2,323**	**2,328**	**3,104**	**3,120**

*p<0.1, **p<0.05, ***p<0.01

Source: GGP (2005)

[a] 'A preschool child is likely to suffer if his/her mother works'

[b] 'When jobs are scarce, men should have more right to a job than women'

In France, both hypotheses receive stronger support, as most religious groups show significantly higher agreement with each statement, although results are more significant for practicing religious individuals and those identified as Muslims than among nominally religious individuals.

In respect of the control variables; in line with previous research (for example: Lesthaeghe and Surkyn, 1988; Surkyn and Lesthaeghe, 2004), traditional views on gender roles appear to rise with age and married people are also more conservative in this regard than unmarried ones. However, the findings from Britain and France show that only among women is there a correlation between being married and holding non-egalitarian attitudes. In Britain, married women were more likely to approve the male-breadwinner family model (logit of 0.277, significant at 1%), and married women in France were more likely to agree that men should be given priority over women in the job market (logit of 0.228, significant at 5%). These patterns may be related to the higher likelihood of married women fulfilling traditional family roles, or alternatively, that women who hold more traditional family attitudes may be more inclined to enter formal marriage.

Having children under age five in the household appears to be negatively correlated with the view that a preschool child will suffer when his or her mother works. This however, may be the result of a dissonance between family attitudes and actual behaviour among families with young children where the mother is employed. Previous studies have shown that gender role attitudes may change when there is inconsistency between attitudes towards women's employment and mothers' labour market participation (Berrington et al., 2008; Himmelweit and Sigala, 2004; Schober and Scott, 2012). For example, a change towards more egalitarian gender attitudes is more likely in couples where the mother's employment after childbirth contradicts the traditional attitudes the couple held prior to having children (Schober and Scott, 2012). In accordance with this, the results indicate that women who work part-time

or not employed are more likely to agree with both statements designed to measure attitudes towards the gender division of labour than women who are in full-time employment. As expected, the more educated are less likely to express agreement with traditional gender ascriptions, although in Britain there is no significant correlation between education and the view that preschool children would suffer if their mother works.

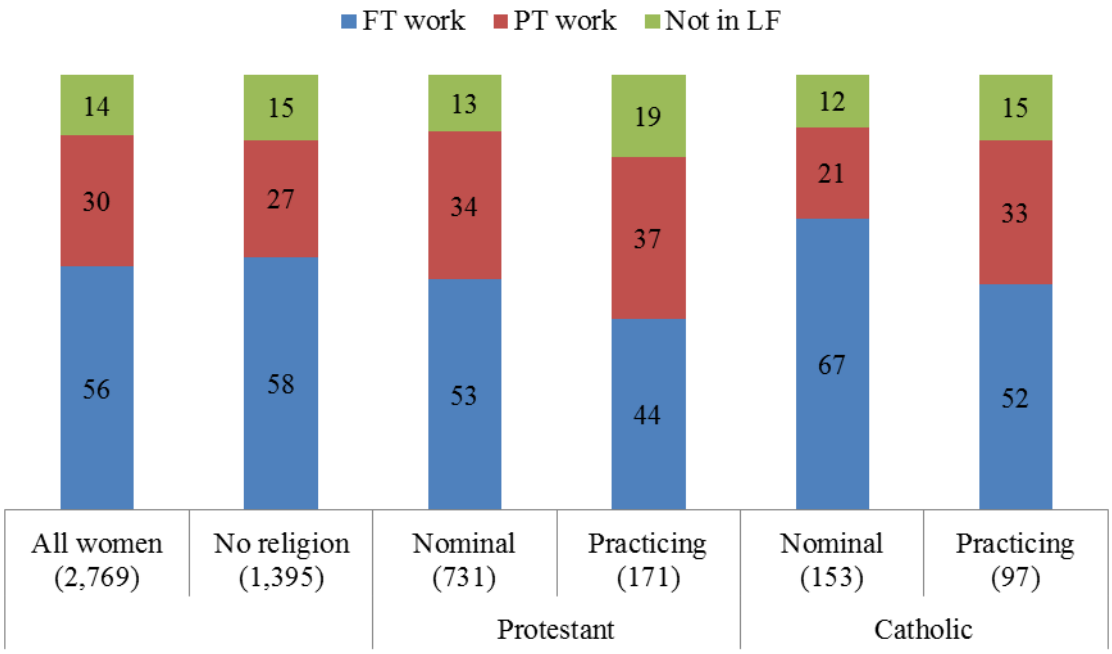
In the next section, I explore the ways in which religious differences in gender role attitudes are reflected in employment behaviour among women from different religious groups.

Religious differences in women's employment status

Figures 5.1.1-5.2.2 show the weighted proportion of women aged 24-55 within the main religious groups in Britain and France who are either in full-time or part-time employment or not in the labour force. In Britain (Figure 5.1.1) it is apparent that there is a relatively lower proportion of women in full-time work among practicing Protestants (44% compared to 56% for all women), as well as lower participation in general (19% are not in the labour force compared to the average proportion of 14% for all women). Nominal Catholics are the group with the highest proportion of women working full-time (67%). A similar pattern is found among women who are nominally affiliated with other religions, with 62 percent working full-time, while only 47 percent of practicing women in this category engage in full-time work (not shown).

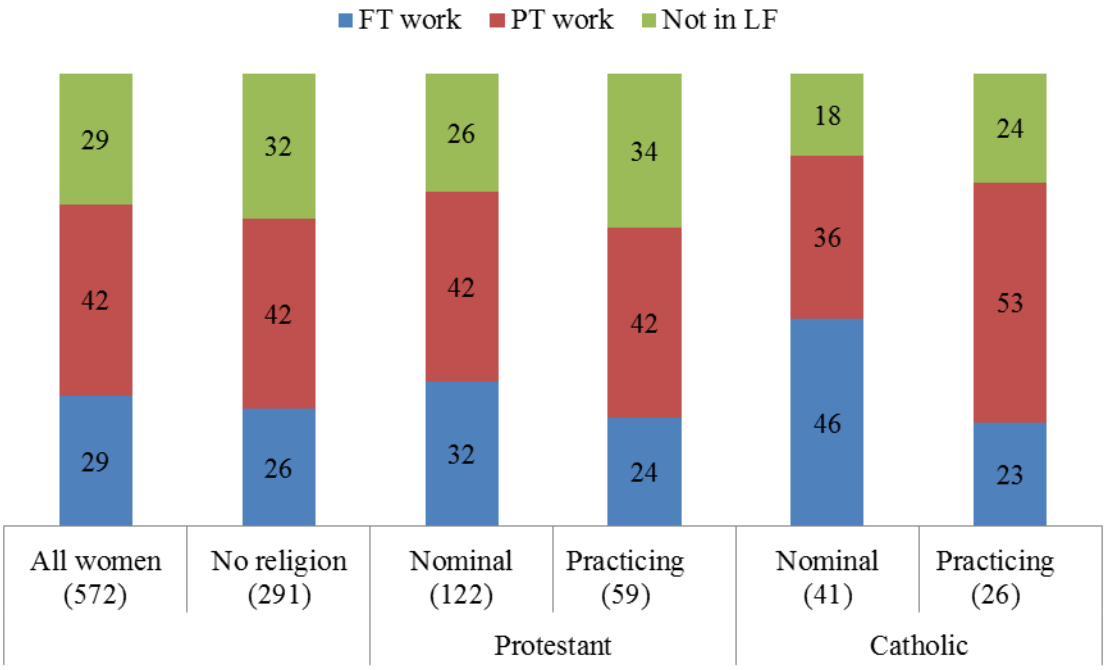
When comparing employment patterns among women with preschool aged children in the house (Figure 5.1.2), the gap between nominal Catholic and non-affiliated women in Britain increases further: 46% of nominal Catholic women with preschool children in the house work full-time compared to 26% among non-affiliated ones.

Figure 5.1.1 Employment status by religious group among women in Britain (in %)[a]



Source: BHPS (2007)

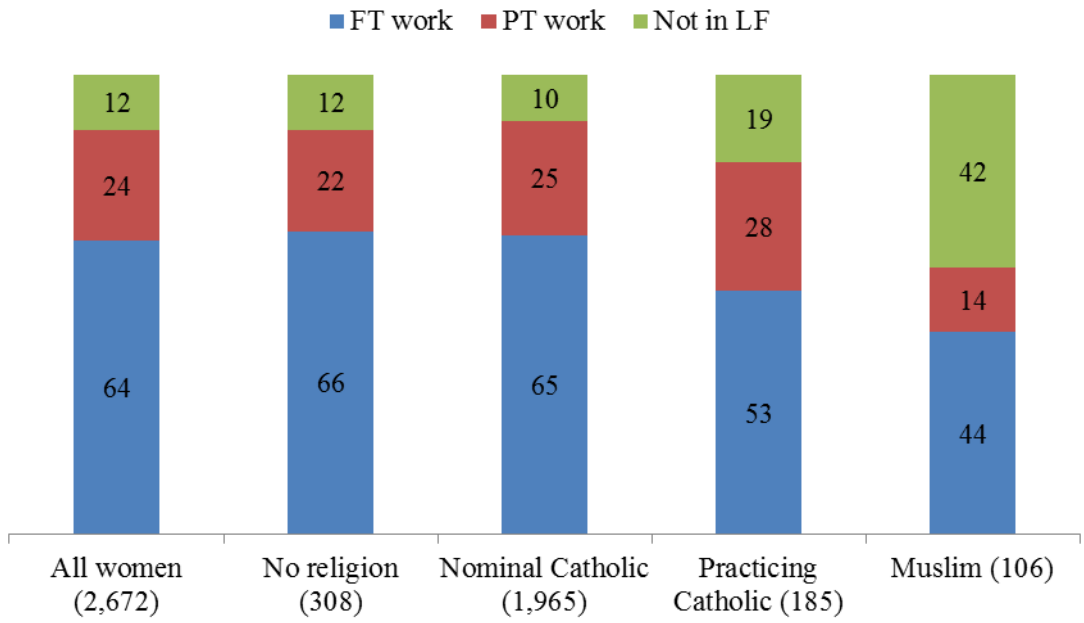
Figure 5.1.2 Employment status by religious group among women with at least one child under age 5 in Britain (in %)[a]



Source: BHPS (2007)

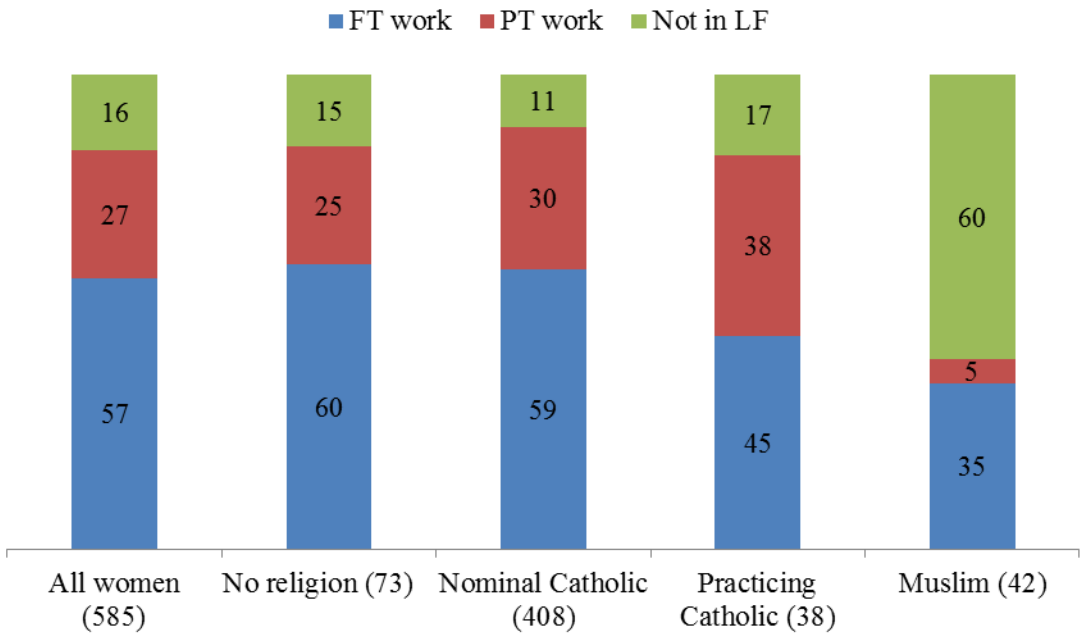
[a]Sample size in parentheses

Figure 5.2.1 Employment status by religious group among women in France (in %)[a]



Source: GGP(2005)

Figure 5.2.2 Employment status by religious group among women with at least one child under age 5 in France (in %)[a]



Source: GGP(2005)
[a]Sample size in parentheses

Moreover, the proportion of nominal Catholic women who withdraw from the labour force when having young children in the house is considerably smaller than among their non-affiliated peers (18% compared to 32% respectively).

Practicing Catholic women with young children in Britain also maintain higher employment rates compared to non-affiliated women, though most are employed part-time. Furthermore, when preschool children are present, the proportion of unaffiliated women in full-time work falls to similar levels of those found among practicing Protestant and Catholic women (26, 24 and 23 percent respectively). Thus, contrary to the prediction of the third hypothesis, when young children are present in the household, nominal and practicing Catholic women in Britain have higher rates of labour force participation compared to non-affiliated women.

In France, a larger proportion of women engage in full-time work compared to Britain (see Figure 5.2.1). Moreover, the majority of women continue to work full-time when young children are present in the house (see Figure 5.2.2). The exception to this is practicing Catholics and Muslim women (practicing and nominal combined). Only 45 percent of practicing Catholics remain in full-time work when children under age five are present in the household, compared to 57 percent among all French women. Nevertheless, a large proportion of practicing Catholic women work part-time during that stage, and therefore, their overall participation rate is not very different than that of all other women.

Among Muslim women, the employment rate is considerably lower than in all other groups, with 42 percent of Muslim women aged 24-55 out of the labour force (Figure 5.2.1), a proportion that rises to 60 percent among those with young children (Figure 5.2.2). In addition, only a very small proportion of Muslim women work in part-time jobs, which may be due to lack of opportunities for flexible working hours, since women in this group tend to have lower qualifications (H'madoun, 2007). In sum, with the exception of Muslim

women, it seems that the main differences in women's employment patterns between the various religious groups involves the proportion working part-time versus full-time, rather than the overall participation rate.

The next section describes results from a multinomial regression analysis for women's employment status, which incorporates additional determinants of labour force participation, such as educational attainment and partner's employment among all women and partnered women only.

The first model in the multinomial regression for Britain (Table 5.8) shows that practicing Protestant women are more likely to be out of the labour force or to work reduced hours rather than working full-time, in comparison to non-affiliated women (logit for non-employment vs Full-time work is 0.938 and for part-time vs full-time work is 0.652, both significant at $p<0.01$). However, this effect is no longer significant when controlling for the presence of children under the age of five (Table 5.8, Model 4). Practicing women from minority religions are also more likely to work in part-time rather than full-time employment (logit of part-time vs full-time work is 0.650, significant at $p<0.05$), although this relationship becomes less significant after controlling for the number of children and the presence of young children in the household. Nominal Catholics, on the other hand, show stronger attachment to the labour force than women stating they have no religion, as they are significantly less likely to work in a part-time rather than in a full-time job when all other things are held constant (logit of -0.591, significant at $p<0.05$, see Table 5.8, Model 4). The results of the model also indicate a lower likelihood for nominal Catholics to be out of the labour force, though this effect is not statistically significant.

Table 5.8 Multinomial logit model for employment status among women in Britain

	Model 1	Model 2	Model 3	Model 4
Part-time vs. full-time work				
Nominal Protestants	0.060	0.020	0.005	0.003
Practicing Protestants	0.652***	0.567***	0.353*	0.274
Nominal Catholics	-0.458**	-0.462**	-0.525**	-0.591**
Practicing Catholics	0.353	0.259	-0.127	-0.135
Nominal other	-0.003	-0.037	-0.040	-0.043
Practicing other	0.650**	0.565**	0.440	0.497*
Upper Secondary education	-0.505***	-0.521***	-0.502***	-0.484***
Tertiary education	-0.834***	-0.859***	-0.841***	-0.859***
Foreign born	-0.192	-0.205	-0.277	-0.289
Partner not employed	-0.297	-0.254	-0.176	-0.150
No co-resident partner	-0.586***	-0.207	-0.107	-0.065
Legally married		0.515***	0.281**	0.253*
# Children under 16 in HH			0.901***	0.808***
Children under 5 in HH				0.675***
Non-employment vs. full-time work				
Nominal Protestants	-0.009	-0.059	-0.090	-0.102
Practicing Protestants	0.938***	0.833***	0.525**	0.392
Nominal Catholics	-0.085	-0.097	-0.241	-0.368
Practicing Catholics	0.371	0.253	-0.296	-0.328
Nominal other	0.104	0.047	0.011	-0.002
Practicing other	0.303	0.196	0.032	0.142
Upper Secondary education	-1.340***	-1.361***	-1.279***	-1.261***
Tertiary education	-2.103***	-2.130***	-2.037***	-2.098***
Foreign born	-0.092	-0.118	-0.185	-0.228
Partner not employed	1.170***	1.225***	1.291***	1.365***
No co-resident partner	-0.430***	0.001	0.134	0.209
Legally married		0.609***	0.341*	0.279
# children under 16 in HH			1.215***	1.072***
Children under 5 in HH				1.218***
Pseudo R^2	**0.06**	**0.06**	**0.14**	**0.15**
N			**2,724**	

Source: BHPS (2007)

Reference categories: No religion, lower secondary education, partner is employed, not married (single/ in cohabitation/ divorced/ widowed). The model also controls for age, age squared and geographical region (England, Wales and Scotland).

*p<0.1, **p<0.05, ***p<0.01

Table 5.9 Multinomial logit model for employment status among women in France

	Model 1	Model 2	Model 3	Model 4
Part-time vs. full-time work				
Nominal Catholics	0.036	-0.017	-0.014	-0.017
Practicing Catholics	0.530**	0.401*	0.243	0.251
Nominal other	-0.261	-0.320	-0.326	-0.334
Practicing other	1.141***	0.995**	1.117**	1.127**
Muslim	-0.253	-0.364	-0.531	-0.528
Upper Secondary education	-0.360***	-0.368***	-0.355***	-0.356***
Tertiary education	-0.577***	-0.550***	-0.506***	-0.511***
Foreign born	-0.085	-0.104	-0.139	-0.143
Partner not employed	0.102	0.142	0.183	0.184
No co-resident partner	-0.672***	-0.224	-0.185	-0.181
Legally married		0.681***	0.485***	0.479***
# Children under 16 in HH			0.483***	0.461***
Children under 5 in HH				0.116
Non-employment vs. full-time work				
Nominal Catholics	-0.383*	-0.469**	-0.437*	-0.449**
Practicing Catholics	0.613**	0.426	0.146	0.158
Nominal other	-0.694	-0.775	-0.800	-0.831
Practicing other	0.830	0.631	0.800	0.815
Muslim	0.833**	0.638*	0.236	0.228
Upper Secondary education	-1.134***	-1.145***	-1.127***	-1.131***
Tertiary education	-1.658***	-1.614***	-1.571***	-1.582***
Foreign born	0.581**	0.535**	0.494**	0.486**
Partner not employed	0.181	0.247	0.261	0.256
No co-resident partner	-1.244***	-0.445*	-0.494*	-0.486*
Legally married		1.118***	0.845***	0.837***
# children under 16 in HH			0.866***	0.830***
Children under 5 in HH				0.227
Pseudo R^2	**0.06**	**0.08**	**0.11**	**0.11**
N			**2,672**	

Source: GGP (2005)

Reference categories: No religion, lower secondary education, partner is employed, not married (single/ in cohabitation/ divorced/ widowed). The model also controls for age, age squared and geographical region (rural/urban).

*p<0.1, **p<0.05, ***p<0.01

The stronger attachment of nominal Catholic women to the labour force is also evident in the data from France, as they are significantly less likely to be out of the labour force rather than in full-time work in relation to non-affiliated women when all other variables are held constant (logit of -0.449, significant at $p<0.05$, see Table 5.9, Model 4).

For practicing Catholic women, the evidence shows significantly lower attachment to the labour market compared to the non-affiliated in the first model (logits are 0.530 for part-time vs full-time work and 0.613 for non-employment vs full-time work compared to full-time work, both significant at 5%). However, these correlations become insignificant once the family variables of marital status and presence of dependent children are introduced into the model. The same is true among Muslim women, who show a higher likelihood of being out of the labour force compared to the no religion group only when the number of children is not controlled. Nonetheless, practicing women in France from the Other religions group are more likely to work part-time than full-time, and this relationship is significant in all four models.

On the whole, these findings do not coincide with the third hypothesis that predicts a negative association between religious adherence and women's employment. Instead, the findings indicate that lower labour market activity among practicing religious women is mediated by the number of children they have and the presence of young children in the household.

Other covariates in the model are correlated with employment as expected; in both countries, education has a direct relationship with employment, as the more educated are more likely to work full-time than part-time or being out of the labour force. Being married, on the other hand, is negatively correlated with employment, though this effect appears to be more significant in France than in Britain. This may be due to the fact that cohabitation is more

widespread in the former than the latter (Perelli-Harris et al., 2010), and therefore, with a growing proportion of couples living together without being formally married, couples who do marry may hold more traditional family norms.

Another interesting finding is that in Britain both the number of children and the presence of children under age five is strongly correlated with lower participation in the labour market, while in France, only the number of children was found to have a statistically significant effect on women's labour supply. This may be due to the different family policies in each country and the fact that most women with young children in France continue to work full-time, while their British counterparts are much more likely to work in part-time jobs (Fine-Davis et al., 2004; Lewis et al., 2008a). According to expectations, in both countries education is strongly correlated with working full-time as opposed to part-time or non-employment. In addition, foreign born women in France are significantly more likely to be unemployed rather than working full-time. However, this effect is not significant in Britain.

Since women's employment is highly dependent on household arrangements and partner's characteristics, the analyses were repeated for partnered women, who are either married or cohabiting (see Tables 5.10 and 5.11). The findings for partnered women in Britain and France give further support to the employment patterns shown in the model for all women; while the first model shows a higher likelihood among practicing Protestant women in Britain and practicing Catholic women in France of working part-time or being a homemaker rather than working full-time, this relationship becomes insignificant when controlling for the number of children in the household. Practicing women from the Other group are more likely to work part time in both countries when all things are held constant.

Table 5.10 Multinomial logit model for employment status among partnered women in Britain

	Model 1		Model 2		Model 3	
	PT vs. FT work	**Family care vs. FT work**	**PT vs. FT work**	**Family care vs. FT work**	**PT vs. FT work**	**Family care vs. FT work**
Nominal Protestants	0.022	-0.131	0.052	-0.104	0.036	-0.130
Practicing Protestants	0.552**	0.371	0.457	0.278	0.377	0.154
Nominal Catholics	-0.446	-0.239	-0.525*	-0.342	-0.664**	-0.544
Practicing Catholics	0.158	-0.308	-0.261	-0.783	-0.282	-0.847
Nominal other	0.203	0.314	0.294	0.364	0.304	0.367
Practicing other	1.056***	0.472	1.011**	0.407	1.053**	0.453
Upper Secondary education	-0.402*	-1.240***	-0.466**	-1.299***	-0.446**	-1.286***
Tertiary education	-0.614***	-1.603***	-0.754***	-1.752***	-0.799***	-1.830***
Foreign born	-0.317	-0.592	-0.360	-0.640	-0.383	-0.676
Partner is employed	0.500*	-0.973***	0.494	-0.969***	0.478	-0.998***
Same religion as partner (nominal)	-0.255	-0.181	-0.366*	-0.296	-0.356*	-0.283
Different religion from partner (nominal)	0.072	-0.192	0.073	-0.207	0.120	-0.142
Same religion as partner (practicing)	-0.137	0.360	-0.205	0.290	-0.175	0.338
Different religion from partner (practicing)	0.153	0.213	-0.114	-0.107	-0.158	-0.145
Legally married	0.422**	0.328	0.188	0.081	0.159	0.045
# Children under 16 in HH			0.890***	1.045***	0.793***	0.926***
Children under 5 in HH					0.975***	1.327***
Pseudo R^2	**0.04**		**0.11**		**0.12**	
N	**1,406**					

Source: BHPS (2007).

Reference categories: No religion, lower secondary education, partner has no religion. The model also controls for age, age squared and geographical region (England, Wales and Scotland).

*p<0.1, **p<0.05, ***p<0.01

Table 5.11 Multinomial logit model for employment status among partnered women in France

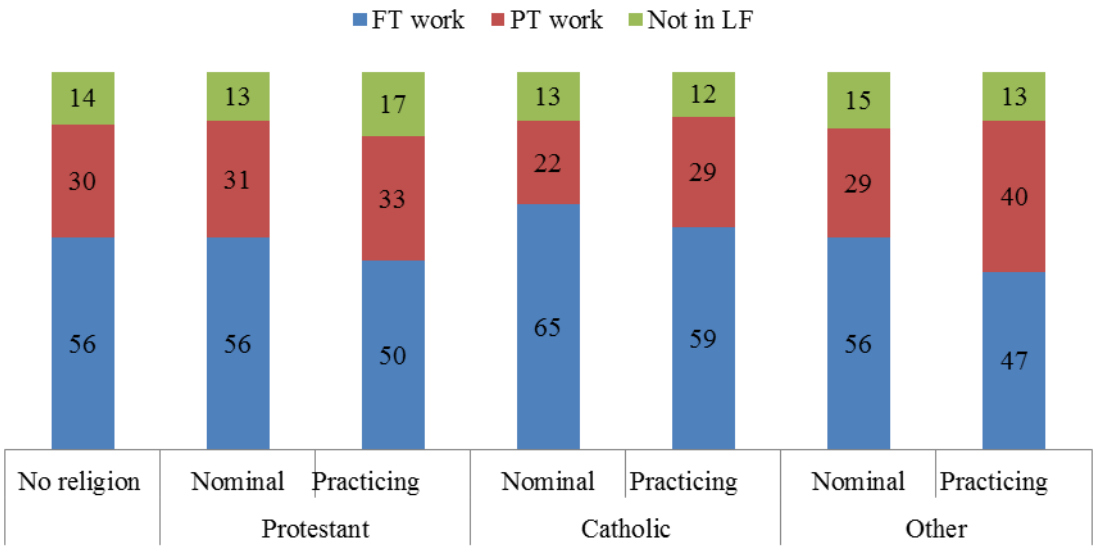
	Model 1		Model 2		Model 3	
	PT vs. FT work	**Family care vs. FT work**	**PT vs. FT work**	**Family care vs. FT work**	**PT vs. FT work**	**Family care vs. FT work**
Nominal Catholics	0.084	-0.183	0.079	-0.175	0.065	-0.179
Practicing Catholics	0.456*	0.733**	0.248	0.465	0.277	0.478
Nominal other	-0.696	-0.679	-0.675	-0.663	-0.714	-0.678
Practicing other	1.055*	0.971	1.155**	1.067	1.206**	1.093
Muslim	-0.809	0.631	-1.094**	0.178	-1.118**	0.174
Upper Secondary education	-0.292*	-0.987***	-0.324**	-1.034***	-0.329**	-1.034***
Tertiary education	-0.348**	-1.227***	-0.368**	-1.258***	-0.393**	-1.265***
Foreign born	-0.260	0.715***	-0.283	0.690**	-0.292	0.686**
Partner is employed	0.396	-0.585*	0.319	-0.653*	0.318	-0.655*
Legally married	0.677***	0.925***	0.536***	0.767***	0.523***	0.762***
# Children under 16 in HH			0.497***	0.709***	0.446***	0.686***
Children under 5 in HH					0.309*	0.123
Pseudo R2	**0.06**		**0.09**		**0.09**	
N	**1,738**					

Source: GGP (2005)

Reference categories: No religion, lower secondary education. The model also controls for age, age squared and geographical region (rural/urban).

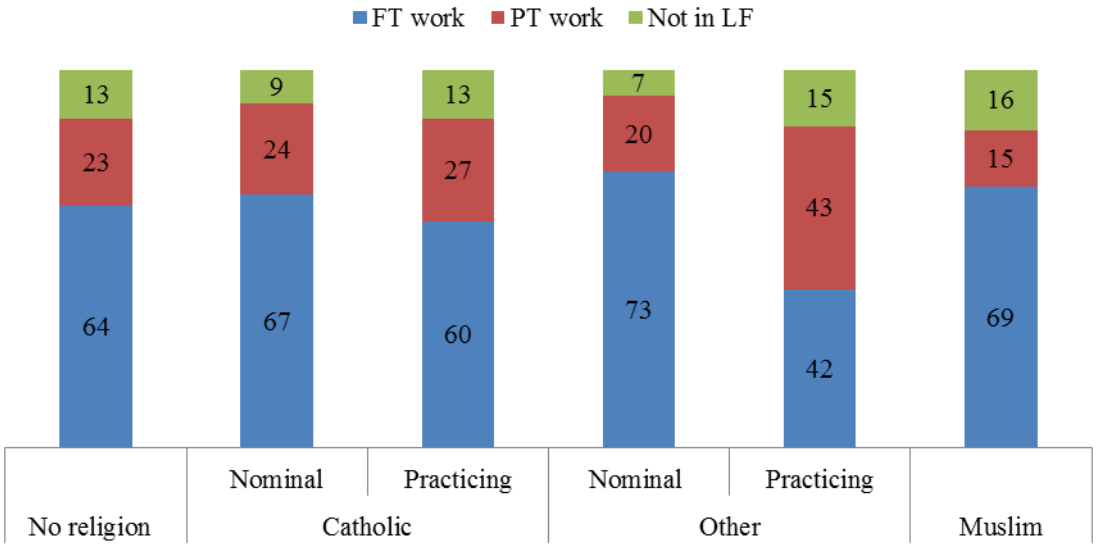
*p<0.1, **p<0.05, ***p<0.01

Figure 5.3 Predicted probabilities of employment status for women in Britain



Source: BHPS (2007)

Figure 5.4 Predicted probabilities of employment status for women in France



Source: GGP (2005)

One of the main differences between the models for partnered and all women is found among nominally Catholic women in France: when the sample is restricted to partnered women only, there is no indication of a relationship between nominal Catholic identification and full-time employment rather than non-employment (Table 5.11), contrary to the case for the model for all women (Table 5.9). On the other hand, in Britain, the group of Nominally Catholic women still show higher likelihood of working full-time rather than part-time when all else is equal (logit of -0.664, significant at $p<0.05$, see Table 5.10, Model 3). Another difference that is found when restricting the model to partnered women only is among Muslim women in France; when the model includes partnered women only, Muslim women show higher likelihood of working in full-time rather than in part-time jobs when controlling for family structure variables (logit of -1.118, significant at $p<0.05$, see Table 5.11, Model 3). As shown in the descriptive data (Figure 5.2.1) a relatively small proportion of Muslim women work in part-time jobs, which may also indicate lack of opportunities of flexible work among this group.

In order to simplify the interpretation of the multinomial regression, the predicted probabilities of employment status were derived from the full model for all women in Britain and France (see Figures 5.3 and 5.4). These figures show that when adjusting for socioeconomic differences and family structure, there are no major differences in the overall participation rate among religious groups, and in some cases, participation is higher for more religious women. For example, there is a higher proportion of women working full-time among those identifying but not practicing as Catholics in Britain than among the non-affiliated (65% compared to 56% respectively). Moreover, most practicing women in Britain and France maintain high rates of labour force participation by opting for part-time jobs rather than leaving the labour market altogether.

Muslim women in France show a considerably higher probability of working full-time when family variables are controlled for (compared to the proportion shown in the descriptive statistics in Figure 5.2.1), meaning that the lower labour supply of Muslim women can be attributed to their differential fertility patterns.

On the whole, the third hypothesis, regarding the lower attachment of more religious women to the labour market did not receive much support from the findings. In most cases, the negative relationship between religious adherence and labour force participation is mediated by family structure and, in particular, the number of children in the household. Thus, there is no evidence that a stronger attachment to religion by itself is associated with lower labour force participation among women. Rather, the indication is that differences in family structure, i.e. the larger family size of more religious women, are mainly responsible for the lower labour supply of women in some religious groups.

Discussion

This chapter examined differences in family and work attitudes as well as patterns of women's employment by religious group and religious participation. It was hypothesized that, since the major religious traditions emphasize women's familial responsibilities and endorse norms of a traditional gender role division, individuals with a stronger religious attachment would hold more conservative attitudes concerning women's employment, particularly about employment among mothers of young children. These hypotheses were generally supported by the descriptive statistics and the ordered logit model, showing that the highest level of agreement with traditional gender role attitudes is amongst individuals with active religious participation, who attend religious services at least once a month. However, Catholics in Britain are the exception to this rule, since neither nominal nor

practicing Catholics were significantly different from the non-affiliated in terms of gender role attitudes. This may be attributed to the relatively high rate of labour force participation of Catholic women in Britain, as found in the second part of the chapter.

The results for religious differences in the labour supply of women indicate that the relationship between religious adherence and women's work is rather complex and varies by religious denomination; while women who attend religious services on a regular basis are less likely to work full-time compared to non-affiliated women, these differences appear to be mediated by the number of children and the presence of children aged under five in the house. In both countries, only the group of practicing women from the Other religious group are significantly more likely to work reduced hours after family characteristics are taken into account.

Furthermore, when the number of children is held constant, none of the religiously affiliated groups show a higher likelihood of being out of the labour force compared to those who profess no religion. Moreover, women who are defined as nominal Catholics, showed stronger attachment to the labour force compared to their non-affiliated counterparts, (although in France this effect was not significant when constraining the sample to partnered women only).

There may be several explanations for the higher labour supply of Catholic women; some studies have pointed to a relationship between Catholicism - including being raised as Catholic - and the acquirement of traits that are desirable in the labour market, such as a strong work ethic, discipline, high productivity and a lower value placed upon leisure (Arslan, 2001; Ewing, 2000; Höpfl, 2007). Although this set of attributes may be a broad generalization, some of these traits may contribute to the observed reconciliation between family responsibilities and paid work. This idea is supported by the findings on partnered

women in Britain, as the likelihood for nominal Catholics to be in full-time work compared to non-affiliated women is most significant when both the number of children and the presence of children under five in household are included in the model (see Table 5.10). In other words, when household composition is held constant, nominal Catholic women are more likely to work full-time (as opposed to part-time) compared to their non-affiliated peers.

There is also evidence that practicing religious women employ strategies of reconciliation between family roles and labour market participation, as a higher proportion of them are working in part-time jobs, while maintaining a participation rate that is similar to that of non-affiliated women. This finding supports the argument made by Glass and Nath (2006), according to which more religious women often reconcile paid work with religious norms about traditional family roles by moving to more flexible and reduced hours jobs, rather than completely withdrawing from the labour market. Therefore, although people with a higher commitment to religion tend to hold more conservative gender role attitudes, women affiliated with a particular religion or attending religious services regularly do not necessarily have lower labour supply than non-affiliated women. Rather, in some cases, labour force participation may actually increase among more religious women.

Finally, there are limitations to this analysis, since it compares women's employment status in a given point in time. This may not present the complete picture, as decisions about desired family size and career development are often taken simultaneously, and may influence one another throughout the life course. Thus, in order to gain a better understanding on the ways in which religion influences both employment patterns and reproductive behaviour, the next chapter presents a longitudinal analysis, exploring women's attachment to the labour market over the life course and the likelihood of proceeding to a second or third birth when past employment is held constant.

6. Women's Employment and Parity Progression among Religious Groups: A Longitudinal Approach

The previous chapter presented a cross-sectional analysis of the relationships between religion and women's employment status, showing that lower labour market activity among more religious women could be explained by differences in family composition. However, this analysis was limited to a single point in time, without taking into account the dynamic character of work and family trajectories, and the interactions between them. As shown in previous research, decisions about family and work are interdependent, and both are shaped by personal preferences as well as the constraints and opportunities in a given social context (Desai and Waite, 1991; Drobnič et al., 1999; Hakim, 2000; Han and Moen, 1999; Hynes and Clarkberg, 2005; Voydanoff, 2002; Willekens, 1991).

The interdependency between life-cycle events - such as marriage and childbirth - and employment trajectories is especially pronounced for women, since in general, women still take the main responsibility for childrearing and other household tasks (Bukodi et al., 2009; Drobnič et al., 1999; Sullivan, 2000). Thus, difficulties in combining paid work with family responsibilities are likely to affect the time women spend in paid employment and their employment mobility. According to Bernhardt (1993), while childbirth is likely to have a negative effect on women's labour force participation, this effect tends to be temporary and to decrease as children grow older. In other cases, women may be self-selected at an early stage into jobs that are more compatible with family life (Desai and Waite, 1991).

For these reasons, it is difficult to draw conclusions about these relationships when using only cross-sectional analysis. By contrast, longitudinal analysis enables a better understanding of the determinants of childbearing and paid work and the interaction between them, as it follows these parallel processes over the life course (Hynes and Clarkberg, 2005).

To date, only a few studies have employed longitudinal analysis to explore the influence of religion on career trajectories over time (e.g. Glass and Nath, 2006; Heineck, 2004; Sherkat, 2000). The current chapter therefore incorporates panel data analysis and retrospective work histories to examine differences among religious groups in women's attachment to the labour force over time. In addition, longitudinal data from Britain and France are used in order to explore religious differences in the probability of progressing to second and third birth, controlling for employment status. While employment and childbearing are highly interrelated, this analysis aims to explore whether religious differences in fertility are consistent when employment status in the time preceding the transition to higher parity is held constant. Moreover, the use of longitudinal data enables the use of religiosity measures that were recorded prior to the event of transition to second or third birth.

In what follows, I discuss the interrelationships between religion and women's employment and reproductive careers and define the research hypotheses. This is followed by a description of the data and methods. The first part of the results focuses on the differences in employment patterns by religion over the life-course, and the second part analyses the likelihood of progressing to second and third birth among women from different religious groups, controlling for employment status and income level (including partner's income). The final section includes a discussion and interpretation of findings.

Religious differences in women's work and family trajectories

Women's reproductive and employment career paths may be influenced by a set of institutional, structural and individual factors that affect the reconciliation of the conflicting requirements of family and work. These include family policies, employment conditions and the availability of childcare, as well as spousal earnings and division of labour at the

household level (Bernhardt, 1993; Hofmeister et al., 2006; Hynes and Clarkberg, 2005; Willekens, 1991). In addition, some scholars have emphasized the role of preferences and self-selection of women into jobs that may be more or less compatible with family life (Desai and Waite, 1991; Hakim, 2000). These preferences may be shaped by gendered norms and attitudes regarding the appropriate career trajectories for women and men. In this context, religious traditions play an important role in structuring norms of the gendered division of labour (Lück, 2006).

Since the major religious traditions often promote a traditional division of labour between men and women and prioritize women's family roles over economic endeavours (Heaton and Cornwall, 1989; Fortin, 2005; Inglehart and Norris, 2003; Norris and Inglehart, 2004; Read, 2004; Read and Oselin, 2008; Sherkat, 2000), women who adhere to religious doctrines are expected to show lower attachment to the labour market and higher investment in home production (Lehrer, 2004a). Several studies have indicated that this is indeed the case (Lehrer, 1995; Maneschiöld and Haraldsson, 2007; Read, 2004). However, some longitudinal studies have pointed to a more complex relationship between religiosity and paid work. For example, in a study from the US that examined the effect of religious conservatism on female labour force behaviour following marriage and childbirth, Glass and Nath (2006) revealed a differential effect of affiliation with a conservative denomination for women of different ethnic backgrounds. Among white American women, it was found that affiliation with a conservative denomination is associated with reduced labour supply following marital childbirth, while African American women who were affiliated with a conservative denomination were more likely to increase their attachment to the labour force following childbirth. These findings were interpreted as adaptation of religious beliefs to structural pressures, such as the need for additional household income. Another US based longitudinal study has found that although Christian women with a religious fundamentalist

background are more likely to become homemakers in their early life course, they have higher likelihood of re-entering the workforce when their children are older (Sherkat, 2000).

Thus, more religious women may be inclined to decrease their labour market activity following the birth of a child, however, employment levels may increase afterwards. In addition, religious women, who adhere to more traditional family norms, may increase their labour market attachment by turning to jobs that are more flexible and hence more compatible with raising a larger family (Glass and Nath, 2006). Therefore, *the first hypothesis asserts that more religious women are more likely to reduce their labour supply during the main childbearing years (ages 25-35), while maintaining similar (or higher) levels of attachment to the labour market as non-affiliated women throughout the life-course.*

As mentioned earlier, career trajectories may be influenced not only by personal preferences, but also by other external incentives or constraints. Since Britain and France greatly differ from one another in terms of welfare policy and labour market conditions, these differences may affect the allocation of time to family and work among religious groups in each country. While most mothers in France continue to work full-time following childbirth, mothers in Britain most commonly work in part-time employment (Lewis et al., 2008a). Since part-time work is more compatible with family responsibilities, actively religious women in Britain may choose this type of employment as a way of achieving their high fertility aspirations while remaining in the labour force. By contrast, in France, part-time work is less abundant. Furthermore, the relatively high and universal child benefits that are provided by the French government may encourage mothers, especially those with a large family to stay at home as working becomes less critical financially (Fine-Davis et al., 2004; Hantrais, 1999). Therefore, more religious women in France, particularly those who are actively religious and have relatively higher fertility, may show a greater tendency to withdraw

completely from the labour market than non-affiliated women. Thus, *the second hypothesis contends that over the life course, practicing religious women in France would be more likely to drop out of the labour force than non-affiliated women, while these differences would be smaller in Britain.*

In contrast to studies on the effect of religion on labour market behaviour, findings on the effect of religion on parity progression appear to be more consistent; as demonstrated in previous chapters, women with higher religious involvement have more children overall. In line with these findings, other studies have shown that the more religious individuals have a higher likelihood of progressing to second and third births (Berghammer, 2009; Hoem et al., 2001; Pikálková, 2003; Prskawetz and Zagaglia, 2005). Berghammer (2009) for example, found that church attendance and father's religious affiliation when the respondent was 15 years old have a strong impact on the transition to third birth among women in the Netherlands. A positive effect of religious service attendance on the transition to third birth was also found among women in the Czech Republic, where the risk for a third birth was twice as high for women who participated in religious services at least once a week compared to women attending less frequently (Pikálková, 2003). Similarly, studies from Austria found a positive effect of self-assessed religiosity on the likelihood of progressing to a second (Prskawetz and Zagaglia, 2005) and third birth (Hoem et al., 2001), with a stronger effect of religiosity on the latter. Nevertheless, these studies paid little or no attention to the labour force activity and income levels of the women and their partners.

The positive effect of religiosity on the likelihood of progressing to second and higher order birth is mainly explained by the higher value that is attributed to children and to large families within religious groups (Berghammer, 2009; Lehrer, 2004a). According to Lehrer (2004a) the higher fertility of religious women can be considered as a rational response to the social incentives within religious congregations, such as higher social status, which

increase the perceived benefits of children over their opportunity costs. These incentives may also be accompanied by additional support from religious social networks or the extended family for women who comply with traditional family norms (Chatters and Taylor, 2005). Moreover, Newman and Hugo (2006) contend that religious teaching or religious upbringing may affect fertility by influencing perceptions about material needs, and therefore, when considering an additional child, religious parents may place less emphasis on financial barriers than their non-religious counterparts.

Thus, *the third hypothesis contends that more religious women have a higher likelihood of progressing to a second and third birth compared to non-affiliated women, and that this effect remains consistent when controlling for the labour force activity of both partners*.

In addition, it is assumed that there is higher variability between religious and non-religious women in the transition to a third birth as opposed to a second birth. The rationale for this assumption is that although the two-child family norm has somewhat weakened in recent decades (Van Bavel and Różańska-Putek, 2010), there is still a strong convention of two children as the appropriate family size in Europe (Breton and Prioux, 2005; Esping-Andersen, 2007; Testa, 2012). Thus, the progression to third birth may reflect a selected group of individuals with a strong emphasis on family life (Berghammer, 2009). Therefore, *the fourth hypothesis postulates that the relationship between religiosity and parity progression would be stronger in the transition to third birth than in the transition to second birth.*

Data and Methods

The data for Britain are drawn from the 18 waves of the BHPS, with supplementary data from the consolidated partnership and birth histories file (Pronzato, 2011) and the combined

work-life history data from 1990-2005 (Halpin, 2006). The combined work-life history file is based on respondent's information on employment status at the time of interview as well as retrospective data from when the respondent first left full-time education (ibid). The data available for France include the two waves of the GGP French survey which were carried out in 2005 and 2008. Both waves of the French GGP include information on previous partnerships and biological children, as well as other socioeconomic factors. The second wave from 2008 also includes employment histories for each respondent from the age of 16 until the time of interview.

The first part of the analysis examines the first hypothesis about religious differences in employment over the life course and the second hypothesis about variations in this relationship between Britain and France. For this purpose, the employment trajectories of a birth cohort of women (born 1955-1975) are observed throughout their life course from the age of 18 to 50. This particular cohort is chosen since it is possible to observe these women's labour force participation for most of their reproductive and employment careers. The analysis focuses both on overall employment rates and on full-time employment among all women from Britain and France and for the main religious groups in each country. Thus, the average proportion of women in paid employment and the proportion of women employed full-time is estimated in the following age intervals: 18-24, 25-29, 30-34, 35-39, 40-44 and 45-50.

The second part of the analysis tests the third hypothesis about the higher likelihood of more religious women experiencing the transition to second and third birth, and the fourth hypothesis about greater differences among religious groups in the transition to third rather than second birth. The analysis includes an event history model with lagged variables for employment status and earned income in order to control for the order of events and to avoid,

as far as is possible, issues of reverse causality[21]. A separate survival analysis is used for the transition to second and third birth among partnered women aged 18-50 in Britain and France. The subsample for Britain includes women who had their first or second birth in 1991-2007, and the period of exposure is calculated from the 10th month following the last birth. Women who reached the age of 50 were right-censored.

The analysis for France is more restricted, since the available data include only two waves, from the years 2005 and 2008. The second wave of the GGP survey for France includes partnership and births histories, as well as employment history, but there is no retrospective data on earned income. In addition, retrospective data on employment are particularly susceptible to "recall" bias (in contrast to data on current employment that is collected repeatedly, as in the case of the BHPS), since people may omit events or give an inaccurate report of the duration spent in and out of the labour force and (Paull, 2002). This bias can be minimized, however, if the length of recall period is shortened (ibid). Hence, it was decided to estimate the likelihood of having an additional birth in the three-year period of time since the first wave in 2005 to the second wave in 2008. Since two child families in France are more common than one child families (Testa, 2012), the sample of women with only one child is considerably smaller than that for women with two children in a given year. Therefore, the analysis for France was restricted to the transition from second to third birth on a subsample of women aged 18-47 at the first wave.

In both countries, a women-months file has been created, although with different lengths of exposure periods (1991-2008 in Britain and 2005-2008 in France). Within these time periods, a discrete-time hazard model is employed in order to predict the likelihood of the

[21] While event history models are particularly suitable to explore causal relationships (Allison, 2014), there is still a concern of endogeneity between childbearing and women's employment, as both are highly interdependent and may be shaped by prior norms and preferences as mentioned above.

transition to second or third birth in a given month. The statistical method used to estimate this model is a logistic regression analysis, where the dependent variable is the log of the odds of experiencing the transition to second/third birth (see methodology section in Chapter 4).

The independent variables include combined religious affiliation and practice (except in the case of the Other religions group in France, which includes both nominal and practicing women due to small sample size). In Britain, the information on religion is derived from the first time these variables were recorded for each respondent, so that the time religious measures are reported precedes the transition to higher order birth. As religious measures in France were only recorded in the first wave in 2005, the measures used also precede the event of the transition to third birth.

Other covariates include woman's employment status and wage level, which were lagged by six months in order to minimize the risk of reverse causality, since women may change their employment behaviour as they approach the birth of a child (Baizán, 2007). However, since there is no available data on earnings between the two waves of the French panel, the level of earnings in the first wave was used. Employment status is comprised of five categories: employed full-time, employed part-time, unemployed, family care and other (includes students, apprenticeship etc.). Since in some cases employment information in Britain was missing, another category of "unknown" employment status is included there as well. In Britain the wage level was derived by calculating the wage distribution in each of the following time periods: 1991-1994, 1995-1999, 2000-2004 and 2005-2008. Then, the level of pay includes the categories "very low" (the lower 10 percentile), "low" (10-25 percentile), "medium" (25-75 percentile), "high" (75-90 percentile) and "very high" (the upper 10 percentile). The relative wage is calculated for France in a similar way for the year 2005. A similar method was used to calculate partner's wage level, which is also included

in the model. In addition, the model controls for age and age-squared, duration since last birth, education, marital status and housing tenure (whether house is owned or rented by the respondent or not).

As discussed in Chapter two, a substantial attrition of 35% of the original sample occurred between the first and the second wave of the French GGP. Therefore, a propensity score was calculated by modelling the probability of attrition (yes or no) as a function of the relevant predictor variables (age, education, religious affiliation and practice, marital status, number of children, geographical region, country of birth, employment status and house ownership status). Then, the predicted probability of attrition for each respondent was included as a controlling variable in the analysis of the transition to third birth. The analysis is restricted to partnered women, due to the low likelihood that non-partnered women would have an additional child. However, to add further robustness, an additional analysis was conducted for all women with controls for current marital status. The results of this analysis are included in Appendices 6.1-6.3 of this chapter.

Findings

Employment patterns over the life course

Figures 6.1-6.2 show the proportion of women from the 1955-1975 cohort who are in paid work and in full-time employment from age 18 through 50 in Britain and France. As expected, the proportion of working women is rather similar in both countries: a considerable rise in employment rates is shown between the ages of 18-24 to 25-29, which then levels off at ages 30-34, followed by a slight increase and then a levelling off again after the age of 40. On the other hand, when considering full-time employment, women in France are much more likely to be in full-time work throughout their lives, while in Britain,

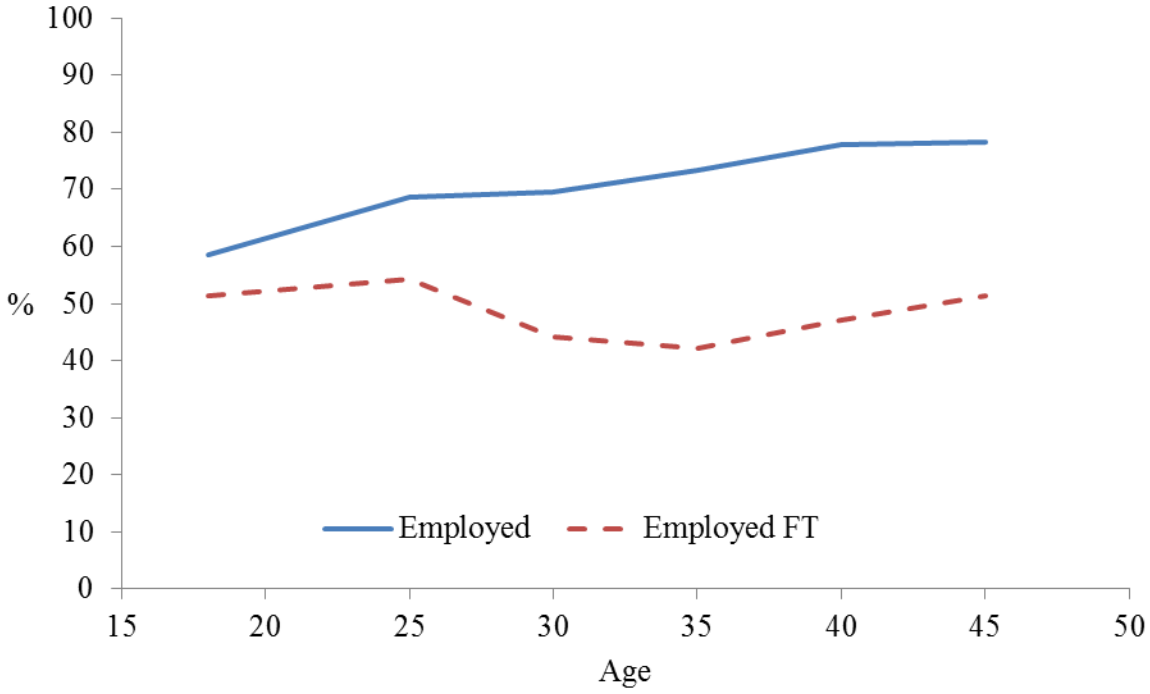
a large proportion of women move to part-time employment during the childbearing years. This is evident in the sharp decrease in full-time employment after the age of 25, a proportion that rises again only after the age of 35.

The next set of Figures (6.3 and 6.4) introduces the religious group variable into the analysis[22]. In Britain, no major differences in employment rates were found between the different religious groups during the early life course. However, after the age of 35 the proportion of practicing Protestant women who participate in the workforce is higher compared to non-affiliated women (Figure 6.3). Practicing Catholic women also show higher rates of employment compared to non-affiliated women after the age of 35, although these differences are much smaller. Nominal Catholic women however have a slightly lower labour force participation rate than non-affiliated women from the age of 30 onwards.

Looking only at full-time employment, it is apparent that nominal and Practicing Protestant women are less likely to engage in full-time employment during the main childbearing ages of 25-35, although they have similar working patterns to non-affiliated women both before and after that period. However, no differences in full-time work are shown for these age groups between practicing Catholic and non-affiliated women in Britain. Furthermore, nominally Catholic women show relatively high rates of full-time employment at the later stages of this section of the life course (Figure 6.4). The higher proportion of nominal Catholic women in full-time employment is consistent with the cross-sectional findings from Chapter 5. However, it appears that this difference is limited to women after the main childbearing years. It should be noted though, that the higher rate of full-time employment among nominal Catholics may partly derive from economic necessity, as Catholics in Britain are more likely to belong to lower socio-economic strata (O'Grada and Walsh, 1995).

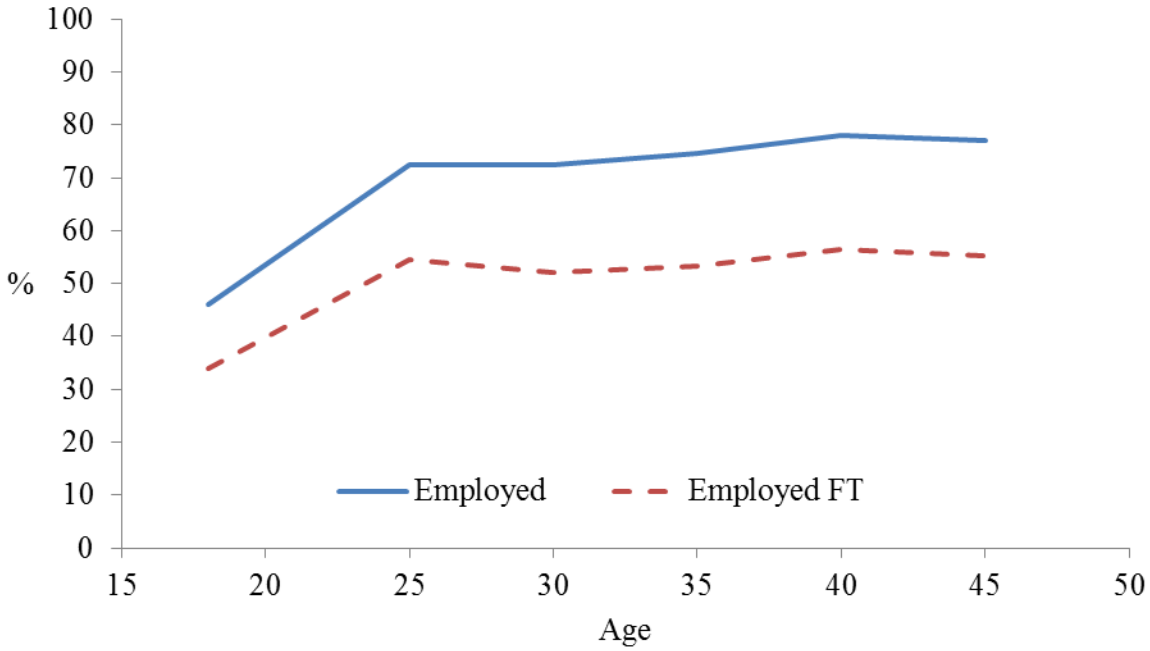
[22] 'Other' religions are not included in the analysis due to small sample size.

Figure 6.1 Employment status by age for women born in 1955-1975 in Britain



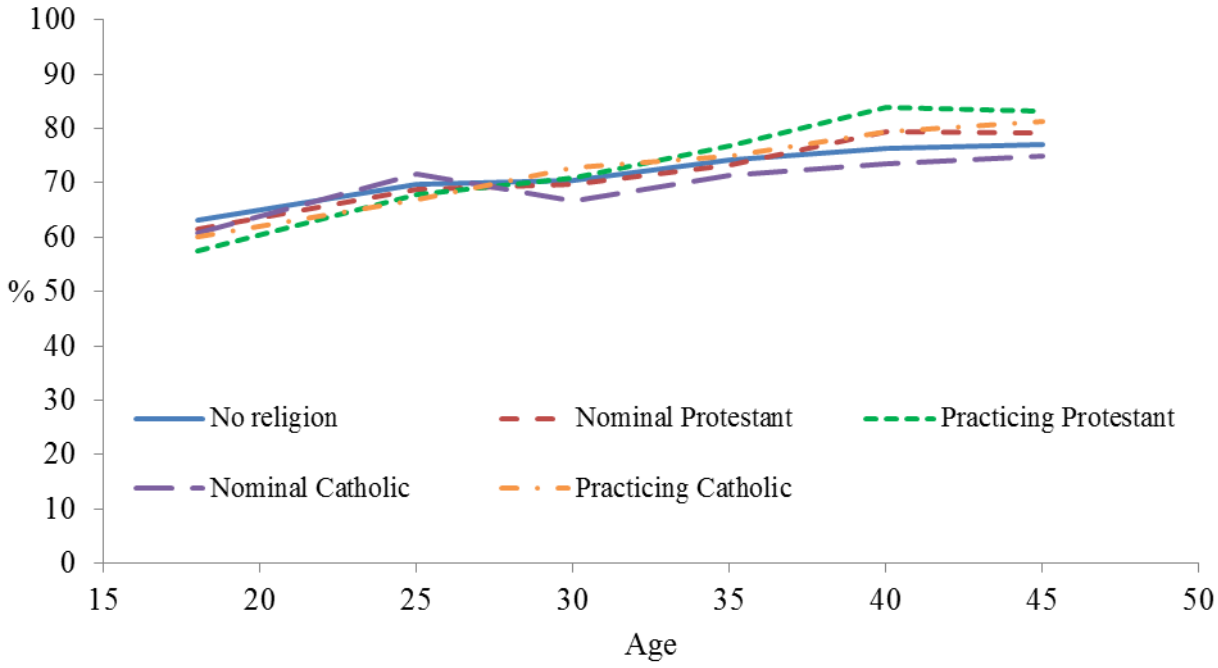
Source: BHPS 1991-2008

Figure 6.2 Employment status by age for women born in 1955-1975 in France



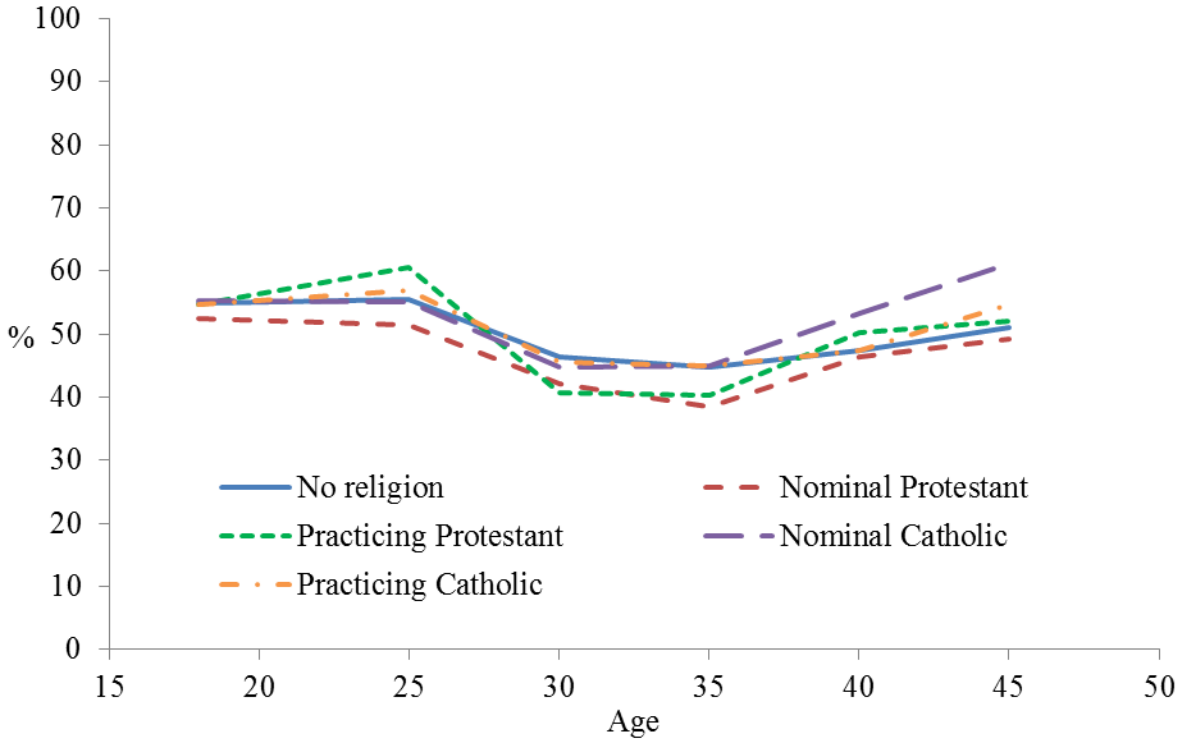
Source: GGP 2005-2008

Figure 6.3 Proportion of women in paid employment by age and religious group in Britain (1955-1975 cohort)



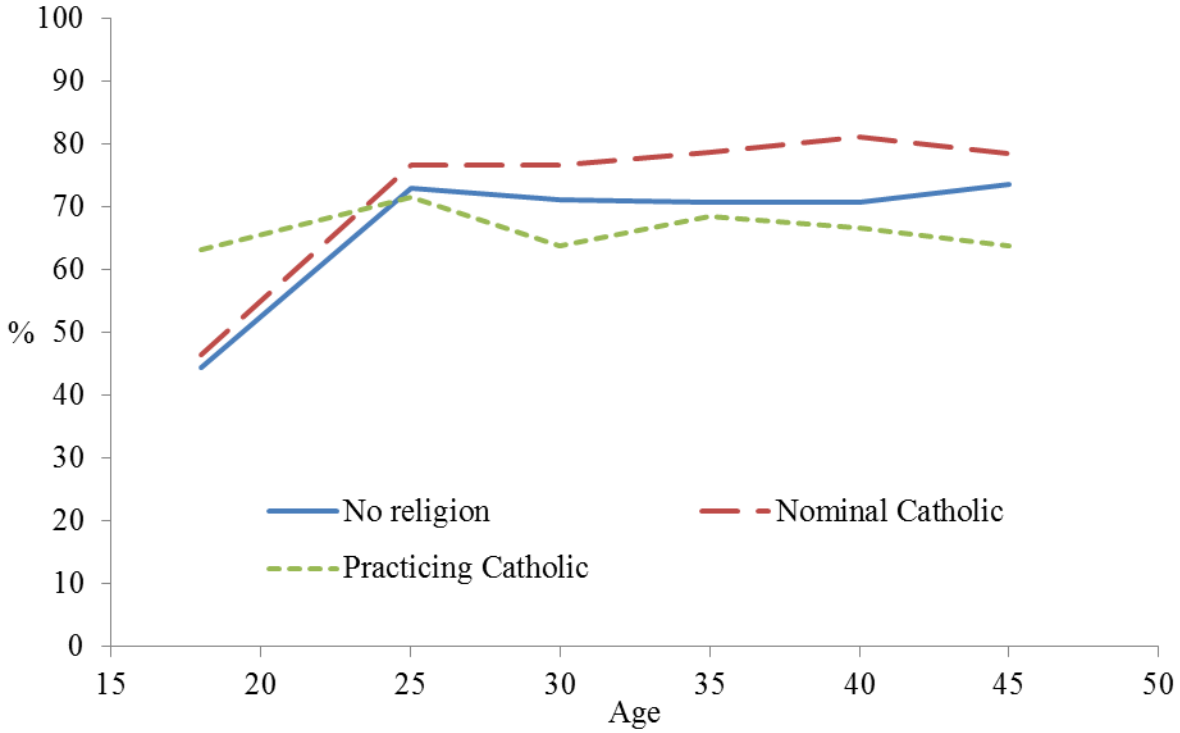
Source: BHPS 1991-2008

Figure 6.4 Proportion of women employed full-time by age and religious group in Britain (1955-1975 cohort)



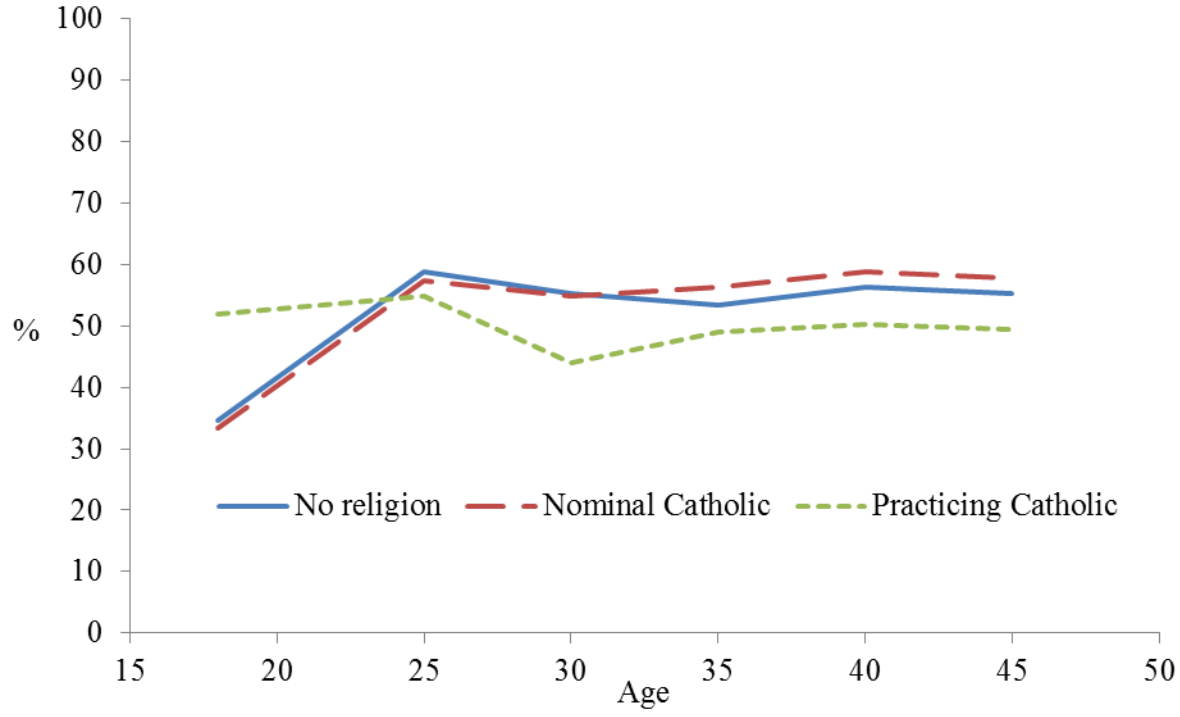
Source: BHPS 1991-2008

Figure 6.5 Proportion of women in paid employment by age and religious group in France (1955-1975 cohort)



Source: GGP 2005-2008

Figure 6.6 Proportion of women employed full-time by age and religious group in France (1955-1975 cohort)



Source: GGP 2005-2008

In France, somewhat different patterns appear, as practicing Catholic women have relatively high participation in employment at ages 18-24, followed by a sharp decrease at the ages of 25-35 (Figure 6.5). The decrease in labour force attachment during this stage is even more pronounced when looking at differences in full-time employment between practicing Catholic and other women in France (Figure 6.6). Nominal Catholic women on the other hand have higher labour force participation rates than non-affiliated women (Figure 6.5), although no major differences are found in the comparison of full-time employment (Figure 6.6).

These findings generally support the first hypothesis, according to which more religious women would reduce their working hours compared to other women mainly during the primary childbearing years. These findings are also in line with the cross-sectional results shown in Chapter Five, which indicate that the lower labour supply of actively religious women is largely mediated by the presence of young children in the household, and does not necessarily represent employment rates at other life course stages.

When comparing employment patterns of actively religious women in Britain and France, it appears that after the age of 25, the employment rates of practicing Catholic women in France are lower both in relation to non-affiliated French women as well as in relation to practicing Catholic women in Britain (Figures 6.3 and 6.5). Moreover, the gap in full-time employment between practicing Catholic and non-affiliated women in France is even more pronounced than the gap in overall employment and continues after the age of 35. Thus, the findings also support the second hypothesis, as after the age of 25, a higher proportion of practicing Catholic women in France drop out from the labour force compared to non-affiliated ones, while in Britain there are no differences between practicing religious and unaffiliated women in this regard. Thus, actively religious women in Britain are more likely to use part-time work as a way of maintaining attachment to the labour market during the

childbearing years, while their counterparts in France are more likely to withdraw from the labour force altogether.

Parity progression to second and third birth

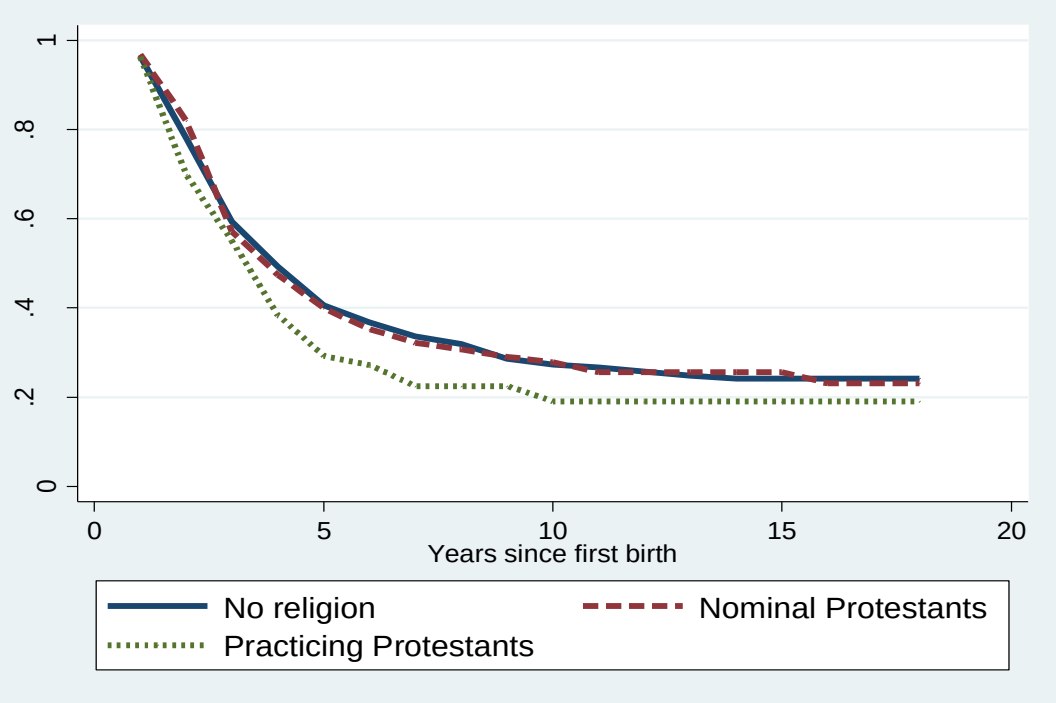
This section pursues the employment-fertility relationship across the life course, by looking at the likelihood of women from different religious groups of progressing to second and third births, while controlling for lagged employment status and other socioeconomic variables. Firstly, the survival curves for the transition to second and third birth following the previous birth are presented for Britain (Figures 6.7-6.8).

The survival curves in these figures show that, as predicted by the third hypothesis, both practicing Protestants and practicing Catholics show higher likelihoods of progressing to second and third birth than non-affiliated women. Among practicing Protestants, the transition from first to second and from second to third birth also occur at a faster pace than among non-affiliated women (Figures 6.7a and 6.8a). Among practicing Catholic women in Britain, although they are more likely to experience the transition to second and third birth compared to non-affiliated women, the intervals between births for those who do go on to these parities seem to be longer (Figures 6.7b and 6.8b). The survival curve for the transition to second birth for nominal Protestant and Catholic women is similar to that among non-affiliated women. In addition, nominal religious women show a lower tendency than non-affiliated women to experience the transition to third birth.

A slightly different analytical strategy was used for France, since the longitudinal data is only available for the period 2005-2008. Thus, the survival curve in Figure 6.9 shows the likelihood for women who had two children in 2005 to have a third birth by 2008.

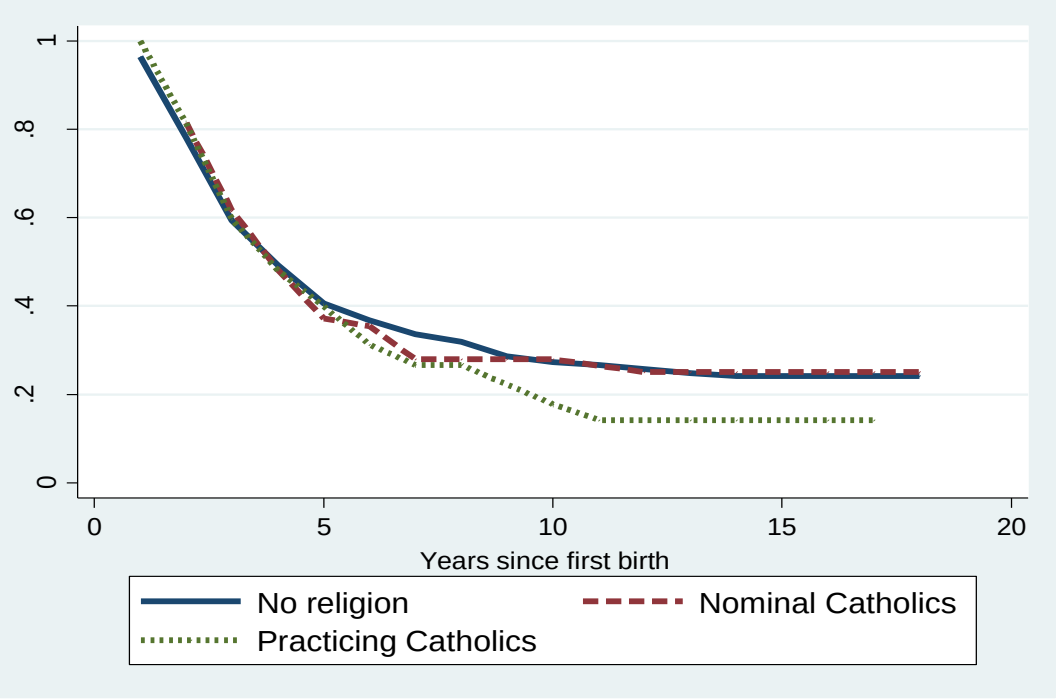
Figure 6.7 Survival curve for the transition to second birth by religious group in Britain

6.7a - No religion and Protestants



Source: BHPS 1991-2008

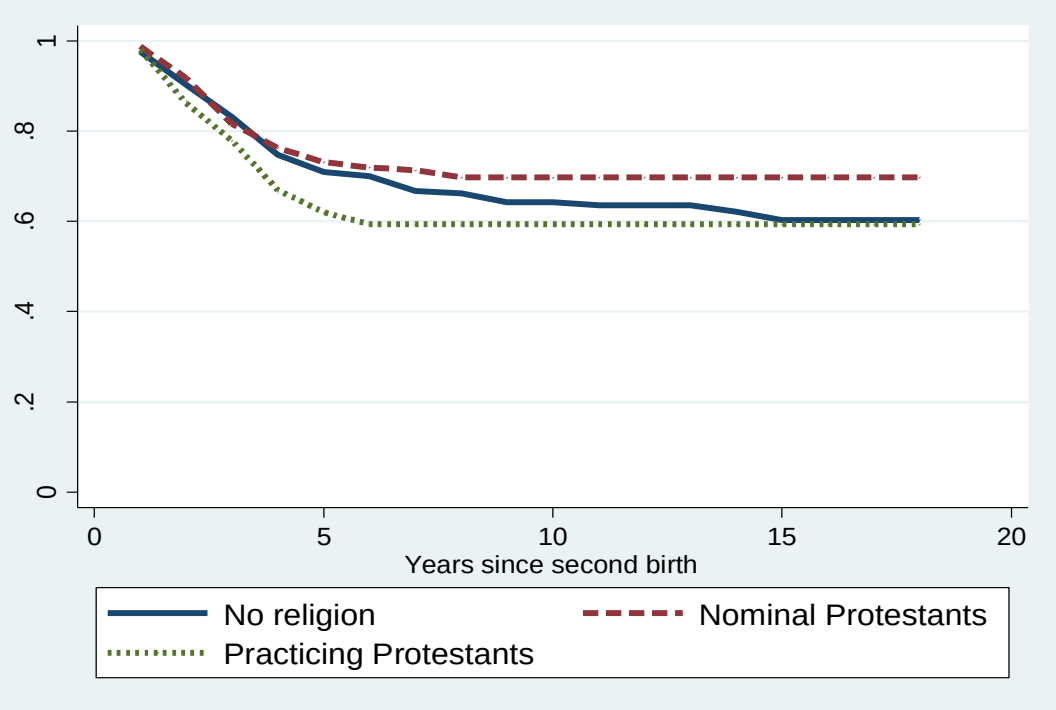
6.7b - No religion and Catholics



Source: BHPS 1991-2008

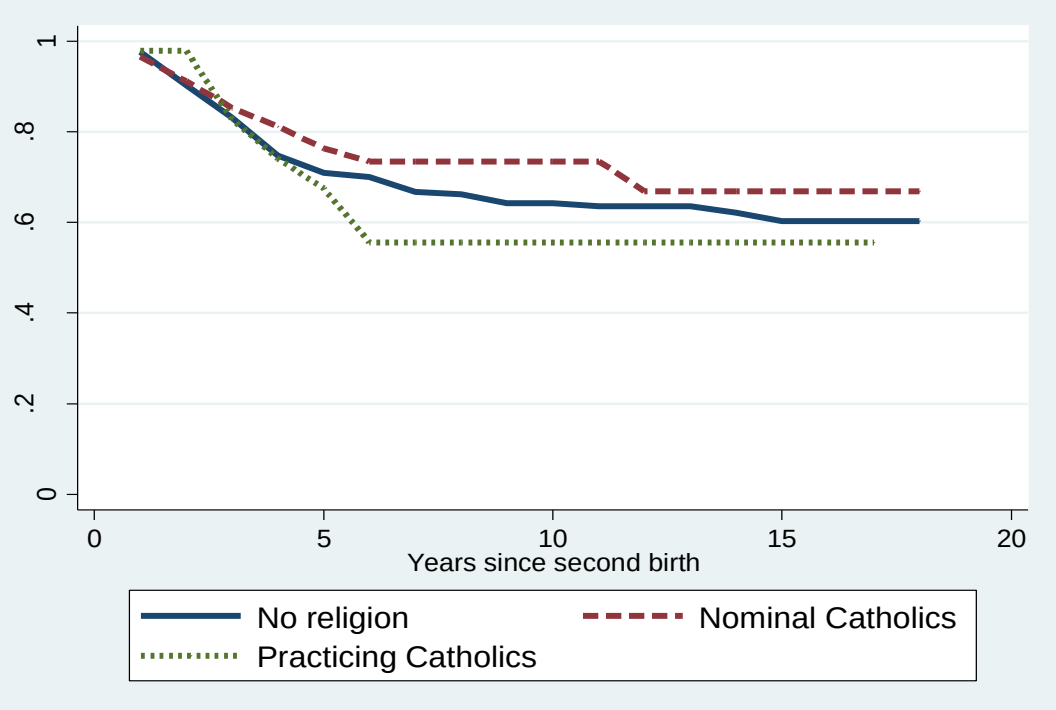
Figure 6.8 Survival curve for the transition to third birth by religious group in Britain

6.8a - No religion and Protestants



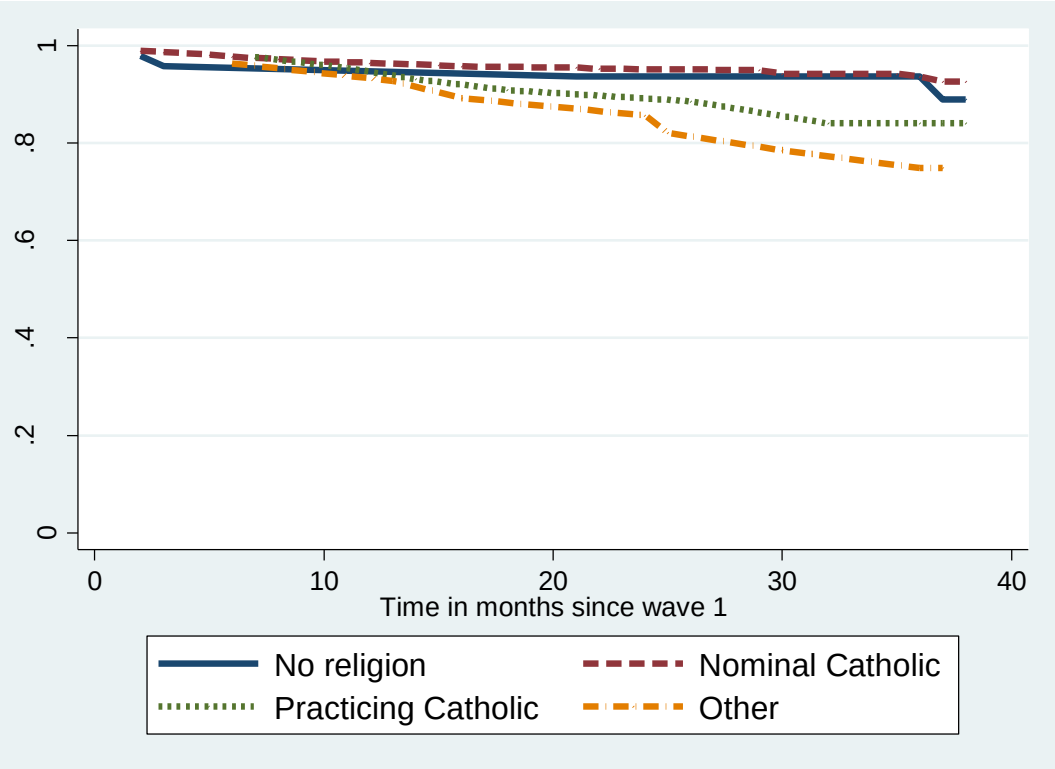
Source: BHPS 1991-2008

6.8b - No religion and Catholics



Source: BHPS 1991-2008

Figure 6.9 Survival curve for the transition to third birth by religious group in France



Source: GGP 2005-2008

The results indeed show a higher likelihood among practicing Catholics to progress to a third birth within that time compared to non-practicing Catholic and non-affiliated women. In addition, the group of women from other religions, which comprises mostly Muslim women, shows the highest likelihood of having a third birth compared to other women.

The results of the logistic regression for the transition to second and third birth are reported in Tables 6.1-6.3. The regression results are presented in a nested model showing different combinations of socioeconomic variables in each model. The findings for the transition to second birth in Britain (Table 6.1) show that the odds ratios for practicing Protestants are indeed positive, although this result is only marginally significant. It is possible that some of the positive effect of the transition to second birth is explained by a greater union stability

among more religious couples (Lehrer, 2004a), and therefore less variance is shown when the model is restricted to partnered women. For comparison, in the analysis that includes all women (Appendix 6.1), the positive effect for practicing Protestants is much stronger in all five models, which indicates the importance of marital status for explaining the religious variation in parity progression. For example, when all else is held constant, the odds for cohabiting women of progressing to a second birth are 34% lower than those of married women. The odds for single women to continue to a second birth are 75% lower than the odds for married women. Similarly lower odds of progressing to second birth are found among divorced or separated women compared to married ones (see Appendix 6.1, model 5). Thus, as religiously adherent women are both more likely to enter formal marriage and to have greater union stability (Lehrer, 2000, 2004b; Thornton et al., 1992) this would indirectly affect the chances of having an additional birth.

However, no significant differences in the transition to second birth are found among nominal and practicing Catholic women, nor among women from the Other religions group. By contrast, among practicing women from Other religions, the higher transition rates to second birth are particularly robust, and this relationship remains significant even when the sample is restricted to partnered women (Table 6.1).

Other noteworthy findings include the effects of income and employment status on the likelihood of progressing to a second birth. When controlling only for wages (Table 6.1, model 2), the effect appears to be negative, as women with a very low level of pay exhibit a significantly higher likelihood of having a second birth compared to those in the medium pay level (odds ratio of 1.386, significant at $p<0.01$). However, when employment status is introduced into the model, the income effect becomes positive, and the odds for the transition to second birth for women who are ranked in the highest level of earnings are around 50% higher than for those in the medium wage level. This effect can be explained by the greater

ability of women with high levels of income to purchase child care (Ermisch, 1989). As the results indicate, women's employment status also plays a very important role in predicting the likelihood of having an additional birth; when all else is held constant, the odds of proceeding to a second birth for women in part-time jobs are almost 50% higher compared to the odds of women in full-time employment (odds ratio of 1.478, significant at $p<0.01$). For women who engage in family care, the odds for the transition to second birth are twice as high as those of women in full-time employment (odds ratio of 2.082, significant at $p<0.01$). When comparing the odds of a second birth between unemployed and full-time employed women the difference is even larger (odds ratio of 2.647, significant at $p<0.01$, see Table 6.1, model 5).

In the transition to the third birth, practicing Protestant women show a significantly higher likelihood of experiencing this transition in comparison to non-affiliated women, in both the model restricted to partnered women and the model for all women (see Table 6.2 and Appendix 6.2). A significant effect for practicing Catholics appears only in the regression for all women, when marital status is not controlled for (Appendix 6.2, model 4). This reflects the intervening effect of marital status on the relationship between religion and the progression to higher order births. In addition, the weaker effect of practicing Catholicism on parity progression may be the result of the longer birth intervals within this group, although they are eventually more likely to have an additional child, as shown in Figures 6.7b and 6.8b. Unexpectedly, the results for practicing women from other religions are not significant for the transition to third birth, which may be due to greater heterogeneity in childbearing patterns within this group. Women's employment status also plays an important role in the transition to third birth (Table 6.2, model 5). The odds for stay at home mothers continuing to a third birth are more than twice as high as the odds for mothers in full-time work (odds ratio of 2.143, significant at 0.05).

Table 6.1 Odds ratios for the transition to second birth for partnered women in Britain

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Protestant	0.942	0.964	0.942	0.977	0.935
	Practicing Protestant	1.252	1.345*	1.309	1.311	1.227
	Nominal Catholic	1.100	1.170	1.191	1.173	1.166
	Practicing Catholic	1.117	1.180	1.188	1.267	1.215
	Nominal other	0.713	0.715	0.700	0.746	0.676
	Practicing other	1.606**	1.575**	1.529**	1.660**	1.515**
Married	Married	1.349***	1.379***	1.395***		1.420***
Nativity	Foreign born	1.199	1.270	1.269	1.265	1.240
Education	Low secondary	1.023			0.952	0.929
	Upper secondary	1.000			1.000	1.000
	Tertiary	1.156			1.170	1.163
Empl' Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			1.482***	1.459***	1.478***
	Unemployed			2.576***	2.572***	2.647***
	Family care			2.025***	2.039***	2.082***
	Other			1.737	1.631	1.738
	Unknown			1.280	1.422	1.515
Respondent's wage level (lagged)	Very low		1.386***	0.857	0.865	0.860
	Low		1.005	0.841	0.863	0.860
	Medium		1.000	1.000	1.000	1.000
	High		1.084	1.203	1.171	1.202
	Very high		1.306	1.560**	1.537*	1.552*
	Not stated		1.232	1.170	1.165	1.194
H. Tenure	House rented					1.050
Duration	1-12 months	1.000	1.000	1.000	1.000	1.000
	13-24 months	2.309***	2.298***	2.279***	2.306***	2.309***
	25-36 months	2.489***	2.502***	2.518***	2.576***	2.599***
	37-72 months	1.774***	1.774***	1.832***	1.861***	1.872***
	73+ months	0.410***	0.412***	0.439***	0.460***	0.455***
Partner's wage level	Very low					1.116
	Low					0.817
	Medium					1.000
	High					0.822
	Very high					0.965
	Not stated					0.744*
	N (women months)			31,272		

Source: BHPS 1991-2008

*p<0.1, **p<0.05, ***p<0.01. The model also controls for age and age squared and time periods, divided to four categories (1991-1995, 1996-2000, 2001-2005 and 2006-2008).

Table 6.2 Odds ratios for the transition to third birth for partnered women in Britain

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Protestant	0.860	0.853	0.861	0.888	0.853
	Practicing Protestant	1.692*	1.688*	1.731*	1.729*	1.673*
	Nominal Catholic	1.068	1.165	1.172	1.143	1.141
	Practicing Catholic	1.449	1.422	1.416	1.506	1.392
	Nominal other	0.877	0.858	0.823	0.925	0.848
	Practicing other	1.099	1.060	1.062	1.171	1.076
Married	Married	1.136	1.132	1.148		1.218
Nativity	Foreign born	1.065	1.048	1.020	1.022	1.012
Education	Low secondary	1.201			1.076	1.073
	Upper secondary	1.000			1.000	1.000
	Tertiary	0.992			1.043	1.027
Empl' Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			1.402	1.386	1.354
	Unemployed			3.838**	3.520**	3.516**
	Family care			2.337**	2.243**	2.143**
	Other			0.665	0.612	0.604
	Unknown			0.743	0.677	0.724
Respondent's wage level (lagged)	Very low		1.157	0.656	0.643	0.647
	Low		0.670	0.582*	0.590*	0.597*
	Medium		1.000	1.000	1.000	1.000
	High		1.438	1.581	1.559	1.509
	Very high		0.546	0.613	0.607	0.584
	Not stated		0.737	0.817	0.800	0.772
H. Tenure	House rented				1.403**	1.443*
Duration	1-12 months	1.000	1.000	1.000	1.000	1.000
	13-24 months	1.879***	1.910***	1.946***	1.937***	1.931***
	25-36 months	1.849***	1.886***	1.942***	1.919***	1.921***
	37-72 months	1.299	1.371	1.466*	1.439	1.428
	73+ months	0.350**	0.379**	0.420**	0.417**	0.414**
Partner's wage level	Very low					1.212
	Low					0.983
	Medium					1.000
	High					1.089
	Very high					1.372
	Not stated					1.005
	N (women months)			45,810		

Source: BHPS 1991-2008

*p<0.1, **p<0.05, ***p<0.01.

The model also controls for age and age squared and time periods (as described in Table 4.2).

Table 6.3 Odds ratios for the transition to third birth for partnered women in France

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Catholic	1.358	1.167	1.430	1.723	1.557
	Practicing Catholic	4.205*	3.108	3.264	4.059*	2.261
	Other	6.480**	6.019*	7.623**	9.742**	8.453*
Married	Married	2.134	2.020	2.057		2.138
Nativity	Foreign born	0.336	0.124**	0.116**	0.144*	0.097*
Education	Low secondary	0.394			0.610	0.564
	Upper secondary	1.000			1.000	1.000
	Tertiary	1.123			1.336	0.986
Employment Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			2.323*	2.169	2.135
	Unemployed			2.106	1.928	1.593
	Family care			1.919	1.936	2.249
	Other			3.168*	2.885*	2.785*
Respondent's wage level in 2005	Very low		4.170***	3.583**	3.731**	4.560**
	Low		1.432	1.113	1.092	1.335
	Medium		1.000	1.000	1.000	1.000
	High		0.807	0.973	0.824	0.691
	Very high		2.036	2.102	1.783	1.567
	Not stated		1.583	1.620	1.063	1.410
H. Tenure	House rented				0.837	1.228
Years since second birth	<2	0.230**	0.222**	0.191***	0.212**	0.191***
	2-3	0.606	0.533	0.484	0.507	0.495
	3-4	1.000	1.000	1.000	1.000	1.000
	4-5	0.467	0.440	0.532	0.550	0.545
	5-7	0.312**	0.263**	0.339*	0.374*	0.321*
	>7	0.063***	0.055***	0.071***	0.080***	0.068***
Partner's wage level	Very low					0.585
	Low					0.408
	Medium					1.000
	High					1.551
	Very high					1.845
	Not stated					1.202
	N (women months)			13,749		

Source: GGP 2005-2008

*p<0.1, **p<0.05, ***p<0.01.

The model also controls for age, age squared and the probability of attrition (not shown here).

In addition, the odds of unemployed mothers of having a third birth are 3.5 times higher than for those working full-time (odds ratio of 3.516, significant at 0.05). However, no significant difference was found between full-time and part-time working women in the transition to third birth. It should be noted that even though the employment variables are lagged by six months, this does not necessarily imply a causal relationship, since women's career choices may also be influenced by prior fertility desires (Desai and Waite, 1991).

A positive effect of women's wage level is also evident for the progression to third birth, as women with relatively low wages are less likely to progress to a third birth than women with medium wage levels (odds ratio of 0.597, significant at 0.1). On the other hand, living in a rented rather than a privately owned house is positively correlated with the progression to third birth. It is possible that living in a rented house captures other socioeconomic characteristics related to social class, and therefore has a positive correlation with the transition to higher order births, while lower income level forms a constraint to expanding the family when all other things are equal.

In France (where only the transition to third birth is estimated), the positive effect for practicing Catholic women on the likelihood of progressing to a third birth is only marginally significant for partnered women (Table 6.3) and more strongly significant when all women are included in the analysis (Appendix 6.3). The group of women from other religions (including both nominal and practicing religious women) shows the highest likelihood of progressing to a third birth within the observed period from 2005 to 2008.

In regard to other socioeconomic covariates, the odds among French women in the lowest wage level to proceed to a third birth are 4.5 times higher than the odds for women with medium wage level (odds ratio of 4.560, significant at 0.05). However, this finding should

be treated with caution, since this variable records wage only in 2005, as there is no information available on income for the period between the two waves.

Unlike in Britain, employment status in France does not seem to play an important role in the transition from second to third birth. This could be attributed to differences in welfare regime and childcare provision in each country. While Britain mainly provides income-tested benefits for mothers, in France, subsidized childcare and maternity leave benefits are offered to women at all income levels (Rendall et al., 2009). Hence, the opportunity costs of having an additional child for working mothers may be lower in France than in Britain. These differences in welfare policy between the two countries may also account for the finding of no relationship between house ownership and the transition to third birth in France, as opposed to the inverse relationship found in Britain.

In both countries however, the partner's wage (unlike woman's wage) did not have a significant effect on the occurrence of additional birth either in Britain or in France. This is in line with theories on the increasing importance of women's wage for reproductive behaviour; as women are becoming more economically independent, the earnings of the male partner have become less relevant for childbearing decisions. Instead, decisions about the timing and the number of children are mainly related to women's characteristics, such as career trajectory, earnings and employment conditions, as well as family friendly policies (Esping-Andersen, 2009; Sleebos, 2003).

Another intriguing finding is that employment and wage characteristics appear to be far more important for progressing to higher parities than educational attainment, as no significant effect of education on the transition to second or third birth was found among partnered women in Britain and France. While education is found to have a strong delaying effect on the transition to first birth (see Chapter 4), the effect of education on higher order

births is much more ambiguous. This ambiguity is also evident in the U-shaped effect of education on the transition to second birth in the model including all women in Britain (though no significant effect appeared for third birth, see Appendix 6.1 and 6.2). Women with lower levels of education may have greater incentives for having an additional child, since the opportunity costs for childbearing is lower for this group (Becker, 1991). On the other hand, highly educated women may wish to space children closer together in time to minimize the period of time spent out of the labour force (Baizán, 2007). Furthermore, since highly educated women are more likely to delay their first birth, they may proceed faster to the second birth in order to achieve their fertility aspirations (Van Bavel and Różańska-Putek, 2010).

In sum, in both countries there is evidence supporting the third hypothesis on the higher likelihood of more religious women progressing to a higher order birth, while controlling for employment status. However, this relationship appears to be stronger when all women are included in the model, rather than when restricting the model to partnered women only. In Britain, this relationship is more significant for practicing Protestants than for practicing Catholics. Moreover, in both countries, no differences were found between nominally religious women and non-affiliated in the transition to a higher order birth. The findings also support the fourth hypothesis, according to which differences in parity progression by religiosity would be more pronounced in the transition to the third rather than the second birth. The results for Britain, where this comparison is available, reveal that identification as a practicing Protestant has a more significant effect on the transition to third birth as compared to the second birth. This is true either when all women are included in the analysis (Appendices 6.1-6.2) or for partnered women only (Tables 6.1-6.2). The positive effect on the progression to third birth for practicing Catholic women also seems stronger than this effect on the transition to second birth, though it is not significant for partnered women.

Discussion

Women's employment trajectories and life-cycle events, such as union formation and childbearing, are closely interlinked. Since women are still the primary caretakers in most societies, the event of childbirth is likely to affect the time they spend in paid work.

The employment curve throughout the life-course of women from different religious groups in Britain reveals that nominal and practicing Protestant women are more likely to opt for part-time work during the primary childbearing years, while maintaining similar employment levels as women with no religious affiliation. This strategy allows the reconciliation of high fertility aspirations with paid employment. In France, on the other hand, where part-time jobs are less abundant and child related benefits are higher than in the UK, there is a sharp decrease in both full-time work and overall participation among practicing Catholic women during childbearing ages. Afterwards, participation rates for this group are still slightly below those of non-affiliated women. On the other hand, practicing Catholics are more likely to be employed in the early life course compared to other women. These results support the first two hypotheses and are also in line with the findings from Chapter Five, by showing that the lower labour supply of more religious women is mostly driven by the presence of young dependent children in the household and does not represent labour force participation during other periods of the life course.

The second part of the chapter focused on the likelihood of progressing to a second and third birth among women from different religious groups. According to expectations, religiously active women were more likely to progress to an additional birth, even when employment status and other socioeconomic variables are held constant (though this effect appears to be weaker for practicing Catholic women in Britain). In addition, as suggested by the forth hypothesis, these differences by religious group are much more pronounced for the third

than for the second birth. While the progression from one child to two is very common, only a minority of people proceed to the third birth (Breton and Prioux, 2005; Testa 2012). Thus, as the proportion of families with three or more children has substantially declined over the past decades, those who do progress to third or higher order birth represent a more distinct group with stronger family orientations (Berghammer, 2009). Furthermore, these findings strengthen the assumption that religious involvement leads to higher fertility levels rather than the opposite direction of relationship, since the time when religious affiliation and practice were reported preceded the timing of the transition to a higher order birth.

Interestingly, while practicing Christian women have a larger family size compared to their non-affiliated counterparts, they sustain relatively high rates of participation in the workforce. This indicates that they find ways to combine paid work with achieving high fertility goals. Newman and Hugo (2006) have reached a similar conclusion in a study on Christian and non-affiliated women in Australia. In this study, it was found that women who grew up in religious families were often encouraged to have a large family alongside obtaining education and pursuing a career, and they were also likely to perceive the combination of family and work as less conflicting than women with no religion.

According to McDonald (2000, 2002), the family sphere is much more resilient to the changes brought by modernization and global forces compared to other social arenas, such as education and the labour market. This inconsistency leads to a situation where women's labour market activity is on the rise, while they still carry the main responsibility for the home and the children. It is therefore possible that the more religious segments of society increasingly accept the idea of women's participation in the labour force, as long as they continue to fulfil their traditional family roles.

Appendix 6.1: Odds ratios for the transition to second birth for all women in Britain

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Protestant	0.951	0.958	0.946	1.054	0.959
	Practicing Protestant	1.297*	1.372**	1.357**	1.461**	1.337*
	Nominal Catholic	1.119	1.177	1.187	1.119	1.183
	Practicing Catholic	1.234	1.281	1.291	1.227	1.318
	Nominal other	0.770	0.777	0.757	0.929	0.744
	Practicing other	1.633***	1.635***	1.586**	1.720***	1.545**
Marital Status	Single	0.268***	0.260***	0.259***		0.247***
	Cohabiting	0.691***	0.669***	0.672***		0.664***
	Married	1.000	1.000	1.000		1.000
	Separated/Divorced	0.202***	0.190***	0.188***		0.184***
Nativity	Foreign born	1.069	1.118	1.116	1.047	1.061
Education	Low secondary	1.394***			1.306**	1.255**
	Upper secondary	1.000			1.000	1.000
	Tertiary	1.212**			1.268***	1.231**
Employment Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			1.508***	1.446***	1.475***
	Unemployed			2.017***	1.526	1.918**
	Family care			2.219***	1.941***	2.126***
	Other			1.481	1.028	1.390
	Unknown			1.199	0.830	1.188
Respondent's wage level (lagged)	Very low		1.482***	0.865	0.898	0.879
	Low		1.039	0.844	0.894	0.861
	Medium		1.000	1.000	1.000	1.000
	High		1.036	1.133	0.949	1.084
	Very high		1.330	1.556**	1.414*	1.461*
	Not stated		1.256*	1.224	1.050	1.225
H. Tenure	House rented				0.879	1.146
Duration	1-12 months	1.000	1.000	1.000	1.000	1.000
	13-24 months	2.192***	2.181***	2.151***	2.025***	2.147***
	25-36 months	2.305***	2.313***	2.311***	1.993***	2.300***
	37-72 months	1.625***	1.627***	1.689***	1.289**	1.674***
	73+ months	0.754*	0.760	0.832	0.558***	0.839
Age	Age	1.289***	1.323***	1.341***	1.476***	1.360***
	Age squared	0.995***	0.994***	0.994***	0.993***	0.994***
	N (women months)			63,485		

Source: BHPS 1991-2008

*p<0.1, **p<0.05, ***p<0.01.

The model also controls for time periods, divided to four categories (1991-1995, 1996-2000, 2001-2005 and 2006-2009).

Appendix 6.2: Odds ratios for the transition to third birth for all women in Britain

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Protestant	0.903	0.900	0.900	0.921	0.903
	Practicing Protestant	1.659*	1.671**	1.722**	1.708**	1.702**
	Nominal Catholic	0.972	1.025	1.034	1.068	1.027
	Practicing Catholic	1.562	1.563	1.570	1.612*	1.571
	Nominal other	0.783	0.784	0.765	0.854	0.771
	Practicing other	1.058	1.010	1.016	1.045	1.030
Marital Status	Single	0.691	0.645	0.594		0.572
	Cohabiting	0.896	0.884	0.887		0.865
	Married	1.000	1.000	1.000		1.000
	Separated/Divorced	0.448***	0.438***	0.442***		0.427***
Nativity	Foreign born	1.176	1.178	1.127	1.107	1.116
Education	Low secondary	1.104			1.020	1.017
	Upper secondary	1.000			1.000	1.000
	Tertiary	1.031			1.049	1.071
Employment Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			1.048	1.033	1.037
	Unemployed			1.998	1.667	1.987
	Family care			1.767*	1.689	1.741
	Other			0.375	0.336	0.365
	Unknown			0.752	0.739	0.744
Respondent's wage level (lagged)	Very low		1.231	0.823	0.837	0.828
	Low		0.750	0.738	0.750	0.752
	Medium		1.000	1.000	1.000	1.000
	High		1.421	1.447	1.436	1.429
	Very high		0.542	0.547	0.540	0.537
	Not stated		0.986	1.089	1.083	1.082
H. Tenure	House rented				0.985	1.114
Duration	1-12 months	1.000	1.000	1.000	1.000	1.000
	13-24 months	1.872***	1.887***	1.904***	1.860***	1.903***
	25-36 months	2.103***	2.139***	2.175***	2.086***	2.172***
	37-72 months	1.388	1.447*	1.528**	1.442*	1.526**
	73+ months	0.452**	0.477**	0.509*	0.440**	0.506*
Age	Age	1.079	1.091	1.116	1.168	1.128
	Age squared	0.997	0.997	0.996*	0.996**	0.996*
	N (women months)			60,728		

Source: BHPS 1991-2008

*p<0.1, **p<0.05, ***p<0.01.

The model also controls for time periods, divided to four categories (1991-1995, 1996-2000, 2001-2005 and 2006-2009).

Appendix 6.3: Odds ratios for the transition to third birth for all women in France

		Model 1	Model 2	Model 3	Model 4	Model 5
Religious Group	No religion	1.000	1.000	1.000	1.000	1.000
	Nominal Catholic	1.433	1.801	2.077	1.979	1.803
	Practicing Catholic	4.389**	4.528**	4.456**	3.951*	3.429
	Other	5.677**	6.880**	7.725**	6.389**	7.119**
Marital Status	No union	0.117**	0.137*	0.127**		0.127**
	Cohabiting	0.735	0.734	0.705		0.720
	Married	1.000	1.000	1.000		1.000
Nativity	Foreign born	0.395	0.160*	0.202*	0.255	0.225
Education	Low secondary	0.547			0.765	0.677
	Upper secondary	1.000			1.000	1.000
	Tertiary	1.214			1.498	1.437
Employment Status (lagged)	Employed FT			1.000	1.000	1.000
	Employed PT			2.361*	2.176	2.162
	Unemployed			4.394**	3.213	3.857*
	Family care			1.518	1.524	1.463
	Other			3.438**	3.210**	3.103*
Respondent's wage level in 2005	Very low		4.657***	4.597***	5.202***	4.889***
	Low		1.749	1.290	1.293	1.354
	Medium		1.000	1.000	1.000	1.000
	High		0.898	1.125	1.053	0.972
	Very high		2.132	2.155	1.841	1.808
	Not stated		1.260	1.400	0.999	1.191
H. Tenure	House rented				0.772	1.000
Years since second birth	<2	0.271**	0.262**	0.222***	0.245**	0.232**
	2-3	0.626	0.566	0.505	0.547	0.514
	3-4	1.000	1.000	1.000	1.000	1.000
	4-5	0.527	0.520	0.615	0.609	0.610
	5-7	0.277**	0.251**	0.311**	0.300**	0.312**
	>7	0.072***	0.066***	0.085***	0.074***	0.090***
Age	Age	0.629	0.774	0.679	0.685	0.668
	Age squared	1.004	1.002	1.003	1.003	1.004
	N (women months)			17,945		

Source: GGP 2005-2008

*p<0.1, **p<0.05, ***p<0.01.

The probability of attrition is also included in the model (not shown here).

7. Discussion and Concluding Remarks

Over the past two centuries the role of religion in society has changed markedly. Religion has lost its key role in many social and political institutions, and its influence on both public and private life has diminished (Berger et al., 2008; Davie, 2002). In most of Europe, the proportion of people who describe themselves as having no religion has increased across generations and the rate of regular church goers has been shrinking (Voas, 2009). Yet, the classic secularization thesis, which postulates a consistent and linear decline in religion with the progress of modernization, has been widely disputed, and it has been recognized that religion is not about to disappear in the foreseeable future (Greeley, 2003; Norris and Inglehart, 2004). Moreover, there is evidence that religion still exerts strong influence on norms and attitudes related to family life and reproduction, such as disapproval of cohabitation without marriage, induced abortion and divorce, as well as the endorsement of the breadwinner-housewife model (Liefbroer and Rijken, 2013; Marks, 2005; McQuillan, 2004; Pearce and Thornton, 2007). In addition, religious adherence is linked to other social factors that may indirectly affect family behaviours; for example, religious involvement is associated with improved educational outcomes (Muller and Ellison, 2001; Regnerus, 2000), and in some cases, it may lead to increased rewards in the labour market (Ewing, 2000; H'madoun, 2007; Lehrer, 2009).

In this study, I have examined the interrelationships between different dimensions of religiosity, family and fertility patterns, education and female labour force participation with the aim of arriving at a better understanding of the underlying mechanisms in the relationships between religion and family behaviours. I chose to focus on Britain and France, two countries that have undergone a sharp decline in institutional forms of religion. These countries were chosen in order to examine whether religion still matters for social and

demographic behaviours in highly secularized societies, and to see how the meaning of belonging to a particular religion or attending religious services has changed in the context of a rapid religious decline. In addition, each country provides a unique religious, demographic and social context, which is likely to have consequences for the role of religion in everyday lives.

In France, despite the strict separation between state and religion and the small minority of regular churchgoers there, the vast majority of people describe themselves as Roman Catholics. In Britain, the majority of people also identify as belonging to a particular religion, although the religious landscape in this country is more diverse; whereas Protestants form the largest religious denomination (although their proportion among the younger cohorts has dramatically declined - see Chapter 2), Catholics form a significant and largely stable minority. In both countries however, a growing proportion of people are affiliated with non-Christian religions, a trend that may also have consequences for religious identification among majority and minority groups and for the significance of religion in society (Cable, 1994; Pace, 2007; Voas and Bruce, 2004).

There is good reason to think that religion and religious practice affect family formation behaviour. Since all major religions place a great emphasis on the centrality of family life and children (though some religions are more pro-natalist than others), religion is expected to be related to more traditional family patterns and higher fertility. In particular, people who attend religious services on a regular basis are likely to show stronger compliance to traditional teachings on reproductive behaviour, as participation in religious services both reflect higher commitment to religious norms and can also reinforce these norms through frequent interaction with people who share similar values (Davie, 2007; McQuillan, 2004). Furthermore, religious participation is found to promote the formation of social networks, where psychological and practical support is exchanged between members (Chatters and

Taylor, 2005; Eccles, 2008; Putnam, 2000; Waite and Lehrer, 2003). Therefore, people with higher religious involvement often have higher social capital, which is also found to be positively related to fertility intentions (Philipov et al., 2006). In addition, religious practice and belief can contribute to dealing with stressful situations in daily life, including those that may arise from multiple work and family responsibilities (Chatters and Taylor, 2005; Eccles, 2008; Storm, 2013). Thus, as larger families are highly valued by religious communities and more religious women are better supported when they wish to expand their family, the costs of children are also likely to be perceived as lower among more religious segments of society, or at least lower compared to the benefits of having a larger family (Lehrer, 2004a).

On the other hand, it is also possible that marriage and childbearing would lead to increased religiosity, as new families may turn to religious congregations to seek support and guidance, or to form contacts with other families (Stolzenberg et al., 1995). Additionally, parents may increase attendance at religious services if they wish to expose their children to religious values (Ingersoll-Dayton et al., 2002; Stolzenberg et al., 1995).

The second chapter discussed the issue of reverse causality in the relationship between religiosity and the life-cycle with reference to the stability of religious practice over time. First, it was found that men and women are more likely to reduce their religious participation over time, rather than increasing it. Secondly, as expected from the literature, past religious participation appears to be a very strong determinant of current religious participation. Moreover, while the transition to first birth is found associated with increased religious practice for men, no evidence for this effect is found for women. This difference could be attributed to the fact that women are generally more religious than men, and following family formation, men may adjust their religious involvement to that of their spouse. Nevertheless, this analysis is limited to Britain, and, despite the weight of the existing literature, it cannot automatically be assumed that these relationship hold for France as well.

In addition, the data for Britain does not allow following up respondents' religious practice throughout their entire life course. Thus, the question over reverse causality, particularly in the case of France, remains a substantial limitation of this research.

The Third Chapter focussed on the relationship between religion and fertility in Britain and France and followed trends in this relationship across cohorts. As expected, more religious individuals (either nominally or actively practicing religion) tend to ascribe higher value to having children compared to those stating they have no religion. In addition, more religious women have higher completed fertility compared to non-affiliated ones, although this relationship appears to be stronger for practicing religious individuals.

Moreover, the relationship between religion and fertility behaviour is not constant over time, as processes of secularization and global migration are changing societies' religious composition. While classic secularization thesis assumes that the impact of religion on social behaviours will gradually diminish, it seems that there is actually an increasing divergence between those who are still actively practicing a religion and those who are not. As more people are leaving the church, the ones who continue to attend services on a regular basis form a more selective group of adherents with strong commitment to religious values, including values related to family life (Adsera, 2006a; Davie, 2007; Kaufmann, 2010). This divergence is evident by the increase in the fertility gap among women who have recently completed their reproductive years both in Britain and in France (see Figures 3.7-3.8). While fertility levels among the non-affiliated women are either declining or remain stable at around 1.8-1.9, practicing religious women maintained above-replacement fertility levels, and even experienced some increase among cohorts born in 1955-1964. Similar results were found in the French-based study by Régnier-Loilier and Prioux (2008:3), who concluded that "with the decline in religious practice over time, family values appear to carry more weight among the minority of women who still attend religious services". Thus, as religious

practice is becoming more individualized - or in Davie's (1994: 38) words: "something sought after and chosen" rather than simply being "assumed or taken for granted" - fertility variation by religious service attendance has become not less, but more pronounced.

While fertility differences by religious practice appear to increase among younger cohorts, the fertility level of nominal Protestant women in Britain became closer to that of non-affiliated women. A similar convergence is also apparent between nominal Catholics and non-affiliated women in France. As suggested by Voas (2009), nominal affiliation represents a casual and less committed adherence to religious tradition compared to those attending services regularly, and is also described as a transitory stage in the process towards secularization. In addition, the meaning of affiliation with a particular religion may have also changed over time. Thus, with the spreading globalization and increased cultural diversity, identification with a particular religion is becoming more a matter of belonging to a shared cultural heritage rather than adherence to religious teachings and regulations (Hervieu-Léger, 1990, 2000; Pace, 2007). For example, since religious identification is closely associated with national or ethnic identity, people may describe themselves as religiously affiliated while not attributing great importance to religion in everyday life (Day, 2011). These explanations are consistent with findings throughout the thesis, that show smaller or no differences in family and fertility patterns between non-affiliated and nominally religious women, when compared to differences in these behaviours between non-affiliated and actively religious women, who attend religious services at least once a month.

The following chapters explored the interaction between religion and other socioeconomic factors that are closely linked with family patterns, such as education and female labour force participation. As previous studies show, women's education is usually found to be negatively related to fertility (Joshi, 2002; Smith and Ratcliffe, 2009). This inverse

relationship can be explained either by the higher opportunity costs that children impose on women with higher earning potential (Becker, 1991), or by promoting alternative aspirations to traditional family roles (Lesthaeghe and Surkyn, 1988). However, as shown in Chapter Four, the relationship between education and fertility (as well as the transition to first birth) varies by religiosity: while more religious women generally have a lower probability of remaining childless, among women with secondary education or less, non-affiliated women have the highest likelihood of a first birth. This may be the result of the higher risk of women with low educational level becoming single mothers at a relatively young age (Smith and Ratcliffe, 2009). However, this is less likely to be the case for more religious women who are more likely to oppose premarital sex and therefore tend to have a later sexual debut, as well as delaying motherhood until after they are married. On the other hand, non-affiliated women with tertiary education are significantly more likely to remain childless than their less educated counterparts, while among more religious women these educational differences in the transition to first birth are much less significant. Therefore, it appears that religiosity mitigates the negative effect of education on parenthood.

The interaction effect between education and religiosity is also evident for completed fertility: among non-affiliated women, the fertility gradient by education matches the typical pattern predicted by New Home Economics theory (Becker, 1991), showing a linear decline in the number of children as educational level rises. On the other hand, among the more religious women from Christian denominations, fertility is less likely to decrease at higher levels of education, and in many cases a U-shaped relationship is found between education and fertility, as religious women with tertiary education have more children compared to their peers with upper secondary education. Since the increase in women's education is considered to be one of the major determinants of fertility decline during the past decades (Esping-Andersen, 2009; Hirschman, 1994; Rindfuss et al., 1996), the finding that education

has a differential effect on religious and non-religious women can at least partially account for the increasing divide between these groups. Nevertheless, it is important to understand the different mechanisms that lead to this interaction effect, and how it is related to family and work practices among the different religious groups.

As mentioned above, education is expected to lead to reduced fertility by promoting increased participation of women in the labour market, and therefore intensifying the conflict between paid work and women's traditional family roles. Therefore, a lower attachment of more religious women to the labour force, regardless of their educational attainment, may help to clarify the differential effect of education on their fertility. As argued in previous studies, most religious traditions are characterized as patriarchal and hierarchical, and are assumed to promote a strict division of labour between men and women (Heaton and Cornwall, 1989; Inglehart and Norris, 2003). Hence, individuals with stronger religious adherence may hold more conservative attitudes about the gendered division of labour and show greater conformity to the male-breadwinner female-caretaker family model. As shown in Chapter Five, higher religiosity is indeed associated with more conservative gender role attitudes. However, there was little evidence for a direct negative relationship between religiosity and women's employment status among the main religious denominations in Britain and France. When family variables such as the number of children under the age of 16 and the presence of preschool children in the household were controlled, the differences in employment patterns for the main religious groups were no longer significant (see Tables 5.8-5.11). Moreover, nominal Catholic women were more likely to engage in full-time work compared to non-affiliated women in both countries. Thus, more religious women from the main religious denominations either show no difference in employment patterns or even had higher labour supply compared to non-affiliated women in both countries. The only exception was the higher likelihood of women from minority

religions in Britain and France to work reduced hours rather than being in full-time employment. Nevertheless, there were no significant differences in terms of non-employment between this group and non-affiliated women. Thus, at least for the major religious groups, the lower labour supply of practicing religious women shown in the descriptive data appears to be the result of religious differences in family structure.

These findings received further support in Chapter Six, which provided a longitudinal view on women's employment trajectories. These trajectories show that nominal and practicing Protestant women in Britain tend to move to part-time employment during the main childbearing ages (25-35), although the proportion of women from that group who are in paid employment is similar to that of non-affiliated women. In addition, the proportion of practicing Protestant women aged 35 or older who are in paid employment is even higher than that of non-affiliated women (see Figures 6.3-6.4). In France, it is found that at younger ages, practicing Catholic women are more likely to be in paid work compared to nominal Catholics and non-affiliated women, although the proportion of practicing Catholic French women in paid employment or in full-time work is sharply reduced at the ages of 25-35 (see Figures 6.5-6.6).

The different patterns of employment among religious groups in Britain and in France may at least in part be attributed to the particular labour market conditions and welfare policy in each country. As part-time employment is a more commonly used solution for working mothers in Britain, more religious women can employ this strategy as a way of combining paid work with having a larger family. However, in France, part-time work is a less commonly used practice for mothers, while child benefits are relatively high and universal. These conditions may contribute to the situation in which more religious women in France show higher tendency to completely withdraw from the labour market during the main childbearing years.

In line with these findings, practicing Protestant women in Britain show a higher likelihood of progressing to a second and third birth compared to non-affiliated women, even when employment status is controlled for. This gives further support to the idea that the opportunity costs of children is lower or perceived as such among women with greater religious involvement. As argued by Lehrer (2004a), the perceived costs and benefits of children may vary according to the way childbearing is encouraged in different religious groups. In this sense, the benefits of having a large family, which may take the form of increased social status, would outweigh the direct or indirect costs that having an additional child entails. In addition to this, regular attenders at religious services are likely to form social networks that are relatively homogenous in terms of family norms and behaviours, and therefore are more successful in reinforcing members' conformity to traditional family patterns (McQuillan, 2004).

The importance of religious social networks and social capital to fertility has been stressed in several studies (Chatters and Taylor, 2005; Philipov et al., 2006; Philipov and Berghammer, 2007). People who attend religious services regularly were found to have deeper informal connections and to be involved in other types of social groups and societies, as well as voluntary associations (Putnam, 2000). Religious based networks may provide a source of social support as well as regulation of appropriate family behaviours (Chatters and Taylor, 2005). For example, people who are involved in religious activity are more likely to be encouraged and supported by their community to find a partner, maintain marital stability and have a larger family (Marks, 2005; Newman and Hugo, 2006). Interestingly, this support, which may be either emotional, informational or practical in nature, does not necessarily exclude women's achievements in education and the labour market, but, rather, may complement them, as it may reduce the conflict between family and work responsibilities (Newman and Hugo, 2006). Furthermore, in the context of increasing

uncertainty and job insecurity which are associated with delayed family formation and childbirth (Esping-Andersen, 2007), individuals with greater social capital would be in a position to feel more secure socially and financially to have a(nother) child (Philipov et al., 2006).

The reduced conflict between family and work, together with perceived higher benefits and lower costs of children, may account for the differential effect of education on fertility among women with varying levels of religiosity. As shown in previous studies, in some circumstances, women's higher education can lead to increased fertility by removing financial constraints such as the costs of childcare (Ermisch, 1989), or by improving the ability to reconcile family and work responsibilities through higher flexibility in the labour market (Joshi, 2002; Klein and Eckhard, 2007). The complex relationship between increased earning power and fertility was also described by Hirschman (1994: 220):

"It is true that both higher incomes and greater industrial employment are central elements of the broad complex of the modernization process that have transformed the world over the last century. This does not mean that higher income or industrial employment, by themselves, will motivate families to have fewer children. In fact, the reverse is equally plausible. The most direct consequences of an increase in income are higher levels of consumption. If children are highly valued in a society, economic theory would predict a higher demand for children."

Thus, the relationship between increased earning power and fertility may vary according to the given socio-cultural context. When having a large family is a high priority, religious women would be more likely to utilize their available resources towards achieving this goal. This explanation can account for the U-shaped fertility gradient by education that appears among women with higher religious involvement, as opposed to the downward linear trend

among the non-affiliated; highly educated religious women may perceive the costs of children as lower compared to their non-religious counterparts and experience fewer constraints to expanding their family than religious women with a medium level of education.

It should be noted though, that these findings mainly apply to differences between women from Christian denominations and non-affiliated women, while the interrelationships between fertility, education and employment for women of minority religious groups are somewhat different. For example, the findings for Muslims in France show that completed fertility among Muslim women at the age of 40 and above are considerably higher compared to all other women. In addition, compared to all other groups, Muslim men and women show the highest agreement rate with a traditional gendered division of labour (i.e. disapproval of maternal employment and giving men more right to a job than women when jobs are scarce), and Muslim women have the lowest employment rates compared to all other religious groups in France. Thus, Muslim women display the most traditional patterns of fertility and employment.

In Britain, due to their small sample size, Muslim women could not be analysed separately from the Other religions group. However, practicing religious women from that group show in general more traditional family and work attitudes and behaviours compared to non-affiliated women. It should be noted, though, that while fertility levels among women from minority religions are higher on average compared to non-affiliated women, when nativity status was included in the model these differences were not significant.

In both Britain and France, practicing women from minority religions showed lower labour supply compared to non-affiliated women, even when family structure factors were taken

into account. This may be the result of the disadvantaged position of religious and ethnic minorities in the British and French labour market (Adida, 2010; Martin, 2010).

Despite the limitations described above, the current study does contribute to expanding the existing knowledge on the relationship between religion and social behaviour, not only by confirming the long lasting relationship between religiosity and traditional family behaviours (e.g. high marriage and high fertility rates), but also by disproving some common propositions about religion in society; for example, the notion that the process of religious decline leads to a diminishing effect of religiosity on all segments of society is challenged by the findings of this thesis. Another counter-intuitive finding, which challenges the classic theory of secularization viewing of scientific development as contradictory to religious doctrine, is that regular attenders at religious services tend to have higher levels of education than non-regular attenders. As this study reveals, not only do fertility differences by religiosity persist after controlling for socio-economic status, it is also shown that in some cases religiosity undermines the negative effect of education on fertility. Finally, when holding family structure variables constant, nominal and practicing women are not less likely to be in paid employment compared to non-affiliated ones, even though they tend to hold more conservative attitudes towards the gendered division of labour. This however, does not hold for women from minority religions in the countries observed here, who have a generally lower attachment to the labour force.

Additional insights emerged from observing the intersection between religion, fertility and employment in two different countries. While Britain and France differ in terms of religious structure, demographic patterns and welfare regime, there are many similarities in the role religion plays in these countries. For example, in both countries religious practice appears to be a stronger determinant of fertility differences than religious affiliation alone. However, there were also several differences in the relationships between religion, family and

employment patterns between the countries. These differences include the higher fertility divergence that is found between practicing Catholic and non-affiliated women among more recent cohorts in France. Compared to Britain, both practicing Catholics and non-affiliated people in France constitute relatively select groups, as the vast majority of the population are nominal Catholics (although this proportion may be slightly exaggerated due to the wording of the religion question in the French GGP). Moreover, the group of practicing Catholic women in France may be particularly subject to selection pressure as a result of the historical conflict between the Catholic Church and the French state.

In addition, religious differences in family formation patterns also appear to be more pronounced in France compared to Britain, especially in the transition to marriage. As shown in previous studies, marriage rates in France have markedly declined over the past decades (Toulemon et al., 2008) and non-marital cohabitation has become highly prevalent, also in comparison to Britain (Kiernan, 2000; Perelli-Harris et al., 2009). Thus, as more religious women continue maintaining traditional family patterns, the variation in the transition to marriage by religiosity has become more marked.

Finally, the relationship between religiosity and the allocation of time to family and work also differs between Britain and France; while more religious (Protestant) women in Britain remain attached to the labour force by moving to part-time employment during the main childbearing years, practicing Catholic women in France are more likely to leave the labour force during that period. These differences are likely to be the result of differential labour market conditions and welfare provisions.

These findings have important implications for the complex interrelationships between culture, structural factors and demographic behaviour. As this research demonstrates, religion still has an important role in shaping family and employment behaviours even in

countries that have undergone a substantial decline in religious indicators. However, the form and intensity of these relationships differ across countries and over time.

Additional directions for investigating the nexus between religion, family and work are warranted. In particular, further explorations of the direction of causality of religion and religiosity on family and work patterns is needed, especially in France, but also in other countries. Furthermore, there is room to explore the extent to which the effect of religiosity on social behaviour varies by gender; while the link between family structure and labour force participation is much stronger for women, there is a need to pay more attention to these practices among men, and the potential influences of religion on them. In addition, religious differences in women's employment status could be extended to include occupational categories and ranks, to see whether type of occupation also varies across religious groups. Another possible direction would be to further explore the role of social networks in shaping family patterns in post-industrialized societies, and to see whether religiously based networks are qualitatively different from other types of social network. Furthermore, qualitative research on the strategies used by women in different religious groups to reconcile their work and family responsibilities could also shed more light on the ways through which religion influences reproductive behaviour.

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