

Religion and Fertility Bibliography

The aim of the *Religion and Fertility Bibliography* is to provide a comprehensive annotated bibliography of all published studies that discuss empirical or historical data on religious differentials with respect to human fertility.

Published studies include academic journal and magazine articles, books, book chapters, and official reports. The *Religion and Fertility Bibliography* does not include unpublished papers or dissertations, except in very limited cases where these have been frequently cited in the published literature.

One of the aims of the *Religion and Fertility Bibliography* has been to encourage interdisciplinary communication and collaboration, through the compilation of studies across all relevant academic disciplines. To this end, the *Religion and Fertility Bibliography* includes studies from, *inter alia*, the disciplines of Demography, Sociology, Anthropology, Social Studies, Economics, Psychology, Biology, Geography, Medicine, Religious Studies, and History.

The bibliography is a work in progress, compiled according to the following procedure:

- Beginning with a selection of recent pertinent studies, we have reviewed each bibliographic entry to identify earlier studies that contain sizable material on religion and fertility. We then repeated the process in respect of each earlier source so identified;
- We have reviewed studies which cite the studies so identified, including later studies that contain sizable material on religion and fertility;
- We have conducted word-searches for 'religion' and 'fertility' (and related terms, English and other) in academic databases;
- We have reviewed the curricula vitae and bibliographies of scholars found in the above searches for studies that contain sizable material on religion and fertility;
- We have reviewed the major journals and annuals for sizable material on religion and fertility.

In respect of each entry included in the *Religion and Fertility Bibliography*, the abstract/summary section reproduces available abstracts, where available. Additional material has been added to the abstract if it does not mention, or does not sufficiently describe, the religious differentials examined in the associated study. Where there was no abstract available, we have prepared our own summary. Where the study presents new data, we have also listed, where relevant: the data source used, the countries involved, a description of the population sample and religious variables, and the primary academic discipline.

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Discussion and overview

Much of the early analysis of the relationship between religious affiliation and fertility levels was focused on Jewish, Protestant, and Catholic differentials, predominantly among whites in the United States (Billings 1890; Holmes 1924; Stouffer 1935; Robinson 1936; Jaffe 1939; Van Den Brink 1954; Freedman, Baumert and Bolte 1959; Whelpton and Clyde 1959; Robinson 1961; Whelpton 1964; Long 1970). What drove this focus in early demographic studies were the twin phenomena of relatively low Jewish fertility (Goldscheider 1967) and, relatively high Catholic fertility (Freedman, Goldberg & Bumpass 1965; Burch 1966; Chou & Brown 1968; Bouvier & Rao 1975; Mosher & Hendershot 1984b), with high Catholic fertility viewed in the Protestant-majority US as the more provocative issue. Yet by approximately the mid-1970s, the US Catholic and Protestant fertility rates converged (Westoff & Jones 1979; Mosher, Johnson & Horn 1986). The high Catholic fertility which had driven much research into differentials only prevailed in Catholic-majority geographical areas (Williams & Zimmer 1990). Jewish fertility, while remaining low, was unremarkable in that it followed the trends of the US population as a whole (Della Pergola 1980; Ritterband 1981).

As a result, later studies expanded and nuanced the range of demographic subjects, including a wider range of:

- religious groups (e.g. Mormons: Pitcher, Peterson & Kunz 1974; Smith & Phillip 1976; Bean, May & Skolnick 1978; Skolnick, Bean, May, Arbon, De Nevers, & Cartwright 1978; Mineau, Bean & Skolnick 1979; Thornton 1979; Heaton & Calkins 1983; Heaton & Goodman 1985; Toney, Golesorkhi & Stinner 1985; Buddhists: Goldstein 1970; Hindus: Chaudhury 1971; Muslims: Chaudhury 1971; Omran 1973; Youssef 1978; Khan 1979; Chamie 1981; Skirbekk, et al 2015; animists: Adongo, Phillips & Binka 1998);
- countries (e.g. Canada, including French-speaking Quebec: Gauvreau, Gervais & Gossage 2007; Puerto Rico: Herold, et al 1989; Mexico: Pick & Butler 1989; India: El-Badry 1967; Visaria 1974; Bangladesh: Chaudhury 1971; Das & Pandey 1985; Pakistan: Zafar, Ford & Ankomah 1995; Nepal: Suwal 2001; Thailand: Goldstein 1970; Taiwan: Coombs & Freedman 1979; Singapore: Saw 1989; Japan: Atoh 2001; Israel: Neuman & Ziderman 1986; Lebanon: Chamie 1977; Zurayk 1979; Jordan: Rizk 1978; Iran: Aghadjanian 1995; USSR: Mazur 1967; Heer & Youssef 1977; UK: Chou & Brown 1968; France: Muller 1986; Spain: Adserà 2004; Germany: Knodel 1974; Belgium: Lesthaeghe 1977; Netherlands: Boonstra & van der Woude 1984; van Poppel 1985; Eire and Northern Ireland: Walsh 1970; Kennedy 1973; Wright & Davies 1974; Compton 1976; O'Grada & Walsh 1995; Nigeria: Sembajwe 1980; Lagos: Adegbola, Page & Lesthaeghe 1981; Sierra Leone: Bailey 1986; Ethiopia: Berhanu 1994; Liberia: Kollehlon 1994; Ghana: Adongo, et al 1997; sub-Saharan Africa: Caldwell & Caldwell 1987); and
- ethnicities (e.g. Mexican Americans: Alviréz 1973; Sabagh & Lopez 1980; black Americans: Mosher & Goldscheider 1984).

More recent studies have also made further differentiations within the broad “world religions” paradigm, including for example Protestant fundamentalists and evangelicals (De Jong 1965; Marcum 1981; Hout, Greeley & Wild 2001; Immerman & Mackey 2003; Kinnon, Potter & Garrard-Burnett 2008), Amish (Cross & McKusick 1970; Ericksen, Ericksen, Hostetler & Huntington 1979), Orthodox Jews (Friedlander & Feldmann 1993), Sephardi and Ashkenazi Jews (Čvorović 2015). Now that the Protestant suspicion of Catholic fertility which drove early demographic research has dissipated, suspicion of Muslim fertility has inspired research in Europe following rising anti-immigration views, and in the United States following the aggressive military response to 9/11 (Westoff & Frejka 2007; Kaufmann 2008, 2010, 2013; Stonawski, et al 2015). Similarly, fertility research in India since at least the mid-twentieth century has been dominated by Hindu-Muslim tensions (Basu 2004; Borooah 2004; Jeffrey and Jeffrey 2005). Yet Muslim fertility decline, although slower than the Catholic decline, is now evident across the Islamic-majority nations (Eberstadt & Shah 2012).

Explanations of the relationship between religion and fertility are primarily divided between ideological and socio-economic theories (Thompson 1925), often referred to in studies as the Particularised Theology Hypothesis and Characteristics Hypothesis (Goldscheider 1971; Schermerhorn 1978). The difference reflects the broader sociological-anthropological debate between, on the one hand, ideological or Weberian and, on the other hand, materialist or Marxist explanations of religious behaviour.

From approximately the 1960s, and in particular associated with the Princeton European Fertility Project initiated by Ansley J. Coale, demographic research increasingly incorporated sociological or anthropological methodologies (Kertzer 1995). With this development came a greater consideration of so-called “cultural” variables, which complemented the earlier focus on proximate and socio-economic determinants of fertility. “Culture” tends to be conceived within these studies at a highly generalised level (Hammel 1990), and frequently as a mere proxy for religious belief, with few studies examining the precise dynamics of specific religious groups, which are more complex than the high-level hypotheses allow (Knodel, et al 1999; Pearce 2002). A large number of studies view the primary underlying cause of fertility differentials as religious beliefs and doctrines (DeHart 1941; Notestein 1945; van Heek 1956; Freedman, Whelpton and Smit 1961; De Jong 1965; Blake 1966; Stokes 1972; Lesthaeghe 1977; Thornton 1979; Marcum 1981; Leasure 1982; Boonstra & van der Woude 1984; Das & Pandey 1985; Lutz 1987; Pick & Butler 1989; Sander 1992; Kim & Song 2007; Meisenberg 2012; Akintunde, Lawal & Simeon 2013; Bessey 2017; de la Croix & Delavallade 2017). Most of the religious beliefs surveyed have a direct relationship with fertility, in particular:

- objections to contraception (Ling 1969; Bonmariage & Gérard 1970; Caldwell & Caldwell 1990; Finnäs 1991; Schenker & Rabenou 1993; Adongo, et al 1997; Schellekens & van Poppel 2006; Salehi-Isfahani, Abbasi-Shavazi & Hosseini-Chavoshi 2010)
- opposition to sterilization (Mishra 2004);
- acceptance or promotion of contraception (Alvírez 1973; Coale 1973; Westoff & Bumpass 1973; Westoff & Jones 1977; Westoff & Ryder 1977; Coombs & Freedman 1979; Aghadjanian 1995; Okun 2000);

- pronatalism based on the perceived religious value of life, children, or the role of child-bearing (Goldstein 1970; Bush 1976; Byers 1982; Heaton & Calkins 1983); or
- antinatalism based on the belief that large families interfere with service to the church (Parkerson & Parkerson 1988).

Some studies emphasise the need to distinguish officially and actually held doctrines, with the latter having a greater correlation with fertility (Hastings, Reynolds & Canning 1972; Gauvreau & Gervais 2003; Somers & Van Poppel 2003; Schoomheim 2006).

There is also a trend of strong positive correlation between religiosity (strength of religious belief and practice) and fertility (Freedman, Baumert and Bolte 1959; Neuman & Ziderman 1986; Goldscheider & Mosher 1991; Sujatha & Murthy 1993; Manabe & Jagodzinski 2002; Philipov & Berghammer 2007; Hayford & Morgan 2008; Bystrov 2012; Buber-Ennser & Skirbekk 2016; Fieder & Huber 2016; Hleihel 2017) or between religiosity in childhood and fertility (Brañas-Garza & Neuman 2006, 2007; Berghammer 2009; Pearce 2010), although only in religious groups where high fertility receives higher support and proscription than in the wider culture (Hleihel 2011). In particular, religiosity and fertility are both low in most of Western Europe but higher in the United States (Frejka & Westoff 2008). Measurement of personal religiosity is usually based on:

- attendance levels (Weller & Bouvier 1972; Mosher & Hendershot 1984a; Blake 1984; Heckert & Teachman 1985; Marcum 1988; Sobotka & Adigüzel 2002; *pace* Jones & Westoff 1979; Adserà 2006 [critiqued in Neuman 2007]; Zhang 2008; Berghammer 2012; Baudin 2015);
- religious schooling (Westoff, Potter & Sagi 1964; Westoff & Potvin 1966; Johnson 1982; Blake 1984; Lalou 1993; Pearce 2002); and/or
- self-assessment (Hayford & Morgan 2008; Zhang 2008; Heineck 2012; Baudin 2015; Buber-Ennser & Skirbekk 2016).

Where religiosity data cannot be easily gathered, which is particularly the case for historical subjects, studies have attempted more creative indicators (biblical names: Hacker 1999; Haan 2005; Hacker & Roberts 2017; nuns per capita: Berman, Iannaccone & Ragusa 2012).

Despite the extensive number of studies examining religious beliefs directly related to fertility, religious belief often has limited explanatory value. In originally framing the Particularised Theology Hypothesis, Goldscheider warned that a focus on religious belief was “inadequate” without “the total content of that social organization, of which the particular theology is but one part and often not the most significant” (1971: 293, 274). The category of “religion” in many of these studies has a characteristically Protestant slant, in its reduction to intellectual or propositional content. Few studies go beyond religious beliefs about fertility to examine the whole complex of social, institutional, and identity effects of religious affiliation and its relationship with fertility (as do, e.g., Heaton 1986, 1989; Benz 2006; Lynch 2006; Bar-El, et al 2013). But without an examination of religion in its fuller social context, the explanatory significance of the correlation with fertility may be left unclear (cf. the similar criticism in McQuillan 2004; Lehrer 2008).

There have, however, been some studies in the last decade or so which have provided more of a “thick description” (Geertz 1973) of the relevant range of biological, economic, historical, political, or cultural variables in relation to religious communities, offering insight into the complex and often indirect effects of religious identification. The edited collection by van Poppel & Derosas (2006) is programmatic in this respect. For example, the historical study of two Swiss cantons by Praz (2006) found that differences in religious norms affected attitudes to children’s schooling and thereby indirectly affected fertility decisions by parents. Berman, et al (2007) find that different religious institutions provide varying levels of health care that alter the financial costs of having children. A sample of university students examined by Weeden, Cohen & Kenrick (2008) revealed that mating strategies rather than religious socialisation predicted religiosity. Hubert’s study (2014) of the impact of religiosity on fertility in Europe includes consideration of both direct and indirect effects. Direct effects which were examined included norms, socialization, religious identification, the religious network, and organizational characteristics; the indirect effects derive from the religious composition of the parents which affects marriage stability and thereby fertility. As one further example, in her examination of Israeli Jewish religiosity, Okun (2017) examines religion at cultural, political, institutional, communitarian, and normative levels to explain the positive correlation between fertility and religiosity.

The second major theory of differences in fertility between religious groups (the ‘Characteristics Hypothesis’) accounts for them as the result of socio-economic factors (Freedman and Pascal 1950; Nixon 1961; Ling 1969; Friedlander, Eisenbach & Goldscheider 1979; Lazerwitz 1980 [for Jews and Protestants, not Catholics]; Sembajwe 1980; Bok 1981; van Poppel 1983, 1985; Lesthaeghe & Wilson 1986; Engelen & Hillebrand 1986; Weeks 1988; Akoto 1990; Kollehon 1994; Jeffery & Jeffery 1997; Addai 1999; Schellekens & Eisenbach 2002; Jeffery, Jeffery & Jeffrey 2008; Mutuku 2013; Hussain & Owai 2016; Pasupuleti, Pathak & Jatrana 2017). Lower fertility correlates negatively with processes associated with “modernization”:

- increased women’s education and employment (Chamie 1977; Coombs & Freedman 1979; Brown & Guinnane 2002; Gauvreau 2002; Hogan & Biratu 2004; Chattopadhyay & Goswami 2007; Haque & Patel 2016);
- modern consumption patterns, the shift from viewing children as an economic cost rather than benefit to parents, increased prevalence for fewer children of greater “quality” (Friedlander & Feldmann 1993; Zafar, Ford & Ankomah 1995);
- nationalism (Anson & Meir 1996);
- the shift from viewing fertility as divinely ordained to viewing it as a matter of individual choice (Zafar, Asif & Adil 2003); and
- increased availability of contraception (Amin, Diamond, & Steele 1997; Azaiza 1997; Karim 1997; Abbasi-Shavazi, McDonald & Hosseini-Chavoshi 1999).

Many of these processes of modernization overlap with the processes of secularization, or decline in the influence of religious institutions on behaviour, insofar as traditional religion was often opposed to family planning or changes in women’s roles and status (Beit-Hallahmi 1997; McQuillan 2006; Guetto, Luijkx & Scherer 2015; Schnabel 2017). These processes of modernization may be counteracted by the continuation of strong state and family support for childbearing (Okun 2016).

Socio-economic factors are more clearly the primary cause of differentials between Muslims and Hindus (Chaudhury 1984; Johnson 1993; Mistry 1994; Kulkarni 1996; Jeffery & Jeffery 2000; Borooah 2004; Bhagat & Praharaj 2005; James and Nair 2005; Krishnaji and James 2005; Bose 2005; pace Moulasha & Rao 1999; Iyer 2002a, 2002b; Alagarajan 2003; Bhat 2005; Kulkarni & Alagarajan 2005) and between Jews and Arabs in Israel (Nigem & Nagi 1988), with the exception of the belief-motivated Ultra-orthodox (Haredi) Jewish population (Friedlander & Feldmann 1993; Okun 2013; Bystrov 2016; Hleihel 2017).

Comparison of fertility levels between religious groups needs to correct for differences in ethnicity, nationality, immigrant and immigrant-generation populations, and emigration (Thompson 1925; Day 1964; Burch 1966; Compton 1978; Sabagh & Lopez 1980; Gutmann 1990; Gauvreau 2006; Thornton & Olson 2006; Westoff & Marshall 2010; Peri-Rotem 2016; Hacker & Roberts 2017), urbanization (Day 1964, 1965; Zimmer & Goldscheider 1966; Goldstein 1970; Weller & Bouvier 1972), and government support of family planning (Nagi & Stockwell 1982; Nagi 1983). In addition, fertility levels between religious groups may vary due to the effects of beliefs, practices or customs on proximate variables, such as breastfeeding rates, infant mortality rates, timing of marriage, timing of first births, birth intervals, and timing of last births (van Poppel 1984; Balasubramanian 1984; Althaus 1992; Mosher, Williams & Johnson 1992; Nair 1996; Kemkes-Grottenthaler 2003; van Bavel & Kok (2005) and socio-economic status (Lehrer 2004).

Goldscheider raised a third explanation for the effects of religion on fertility—in addition to socio-economic and ideological-doctrinal explanations—which should also be briefly noted. The Minority-group Status Hypothesis argues that the social dynamics peculiar to membership in a “minority religion” causes fertility differentials to persist rather than converge over time. In particular, in an effort to overcome socio-economic barriers, some minority groups may choose to reduce fertility in order to maximise advantages for fewer family members (Van Heek 1956; Day 1968; Goldscheider & Uhlenberg 1969; Ling 1969; Goldscheider 1971; Kennedy 1973; Johnson 1980; Johnson & Nishida 1980; Johnson & Burton 1987; Derosas 2006). Not all minority groups seek lower fertility. More separatist religious groups, in particular, might combat their inferior societal status by maintaining higher levels of fertility (Coward 1980; Courbage 1991). Yet the independent effect of minority status on fertility remains disputed, as it has been criticised or given only qualified support in a number of studies (Rindfuss & Sweet 1974; Rindfuss 1980; Day 1984).

Bibliography

Abbasi-Shavazi, Mohammad Jalal

Abbasi-Shavazi, M. J. (2001). The Fertility Revolution in Iran. *Population et Sociétés*, 373.

Abstract: In recent years, the pace of the demographic transition which has occurred in the Islamic Republic of Iran has puzzled international observers. The total fertility rate (TFR) declined from over 6 children per woman in the mid-1980s to 2.1 in 2000. In December 1989, the Iranian government radically reversed its policy and launched a new family planning program. The latter, according to figures, seems to have been very successful, since the contraceptive prevalence rate (CPR) rose from 37 % in 1976 to about 75% in 2000.

Data Sources: Censuses

Countries: Iran

Subjects/ Variables: Iranians

Discipline: Demography

Abbasi-Shavazi, M. J. (2005). The Rise and Fall of Fertility in Post-Revolutionary Iran. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 199-217). London:

Hurst.*Summary:* Iran experienced a rise in fertility in 1976-1986, partly due to the suspension of the family planning programme by the government. But a decline occurred after 1988, with the anti-natalist policy introduced by the Islamic government. The chapter examines the extent to which the changes were due to socio-economic transformations (especially education, health, access to mass media) or the role of religious leaders and the state.

Data Sources: 1986 and 1996 censuses

Countries: Iran

Subjects/ Variables: Iranians, Muslims

Discipline: Demography

Abbasi-Shavazi, Mohammad Jalal; Jones, Gavin W.

Abbasi-Shavazi, M. J. J., Gavin W. (2005). Socio-economic and Demographic Setting of Muslim Populations. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 9-39). London: Hurst.

Summary: Examines population dynamics and characteristics of Muslim populations, especially in Muslim-majority countries. Explains demographic, social, economic characteristics of Muslim populations. Analyses demographic transition in the Muslim world. Examines population policies in Muslim-majority world.

Data Sources: UN Demographic Yearbooks, International Labour Organization publications, World Bank Indicators, Population Reference Bureau Data Sheets

Countries: Mainly Muslim-majority countries

Subjects/ Variables: Muslims

Discipline: Demography

Abbasi-Shavazi, Mohammad Jalal; McDonald, Peter; Hosseini-Chavoshi, Meimanat

Abbasi-Shavazi, M. J., McDonald, P., & Hosseini-Chavoshi, M. (1999). *The Fertility Transition in Iran: Revolution and Reproduction*. Dordrecht: Springer.

Summary: Confounding all conventional wisdom, the fertility rate in the Islamic Republic of Iran fell from 7 births per woman in 1979 to 1.9 births per woman in 2006. That this, the largest and fastest fall in fertility ever recorded, should have occurred in one of the world's few Islamic Republics demands explanation. We would argue that there are certain necessary conditions for a fertility transition to occur. These include the achievement of low levels of infant and child mortality, institutional changes that provide access to contraception and access to economic opportunity at least for the next generation, diffusion of the idea that limiting the number of children in the family will enhance the family's economic wellbeing and improve the opportunities of each child, and the establishment of communication between husband and wife to a level that provides the wife with the opportunity to exercise control over her own fertility. All of these necessary conditions were met in Iran. If these necessary conditions are in place, then government and community support for family planning especially through an efficient and accessible national family planning program will accelerate the speed of the transition as it certainly did in Iran.

Data Sources: (primary) Iran Fertility Transition Survey 2002; Iran Low Fertility Survey 2005; (also) Census 1986, 1996, 2006; Iran Demographic and Health Survey 2000

Countries: Iran

Subjects/Variables: Whole population

Discipline: Demography

Addai, Isaac

Addai, I. (1999). Does Religion Matter in Contraceptive Use among Ghanaian Women? *Review of Religious Research*, 40(3), 259-277.

Abstract: Using a subsample of currently married women from the 1993 Ghana Demographic and Health Survey (GDHS), this study examines differentials in contraceptive use by religious affiliation, namely: Catholic, Protestant, Other Christian, Muslim, No Religion, and Traditional. Logistic regression is employed to explore whether reported religious variations in contraceptive use can be explained by religion per se (particularized theology hypothesis) or by other characteristics that distinguish the religious groups (characteristics hypothesis). Generally the findings are congruent with the characteristics hypothesis, because the contraceptive use differentials by religious groups is accounted for by the differences in socioeconomic and demographic characteristics of these women. However, for the urban Other Christian women, even after the necessary controls, religion continued to emerge as significant determinant of contraceptive use. Policy implications of these results are discussed.

Data Sources: The Ghana Demographic and Health Survey (GDHS), 1993

Countries: Ghana

Subjects/Variables: Ghanaians; Catholic, Protestant, Other Christian, Muslim, No Religion, and Traditional

Adegbola, O.; Page, Hillary J.; Lesthaeghe, Ron J.

Adegbola, O., Page, H. J., & Lesthaeghe, R. J. (1981). Child-spacing and fertility in Lagos. In H. J. Page & R. J. Lesthaeghe (Eds.), *Child-spacing in Tropical Africa: Traditions and Change* (pp. 147-179). London: Academic Press.

Aderibigbe, Titilayo O.

Aderibigbe, T. O. (2009). 'Broken Calabashes': Yoruba Traditional Faith. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 179-204). London: Jessica Kingsley.

Summary: The contribution of Titilayo O. Aderibigbe on African traditional religion (Chapter 7) focuses predominantly on the Yoruba traditional religion in Nigeria. According to Aderibigbe, for Africans their belief encompasses the very essence of their whole being and neither 'imported' Christianity nor Islam has succeeded in eroding their worldview. What is common to all African traditional religions is belief in a supreme, omnipotent and omniscient creator, and the fact that almost all adherents worship the supreme deity through lesser gods, who they believe intercede between humans and the supreme God. Traditional religions all share a common belief in spirits, divinities and ancestors who form a link between the present and the past. One of the basic tenets of the Yoruba traditional religion, that women and children belong to men, has often been interpreted to mean that men can also control their reproduction. Since children are regarded as the blessing of the gods and a source of a man's wealth, the Yoruba traditional religion rejects the ideas of contraception and abortion. Aderibigbe describes in detail the Yoruba traditional religion's views on involuntary childlessness, protection of the unborn, the status of women in a patriarchal society that allows polygamy and assisted conception.

Data Sources: Theoretical discussion

Adhikari, Ramesh

Adhikari, R. (2010). Demographic, socio-economic, and cultural factors affecting fertility differentials in Nepal. *BMC Pregnancy and Childbirth*, 10(19).

Abstract: Background: Traditionally Nepalese society favors high fertility. Children are a symbol of well-being both socially and economically. Although fertility has been decreasing in Nepal since 1981, it is still high compared to many other developing countries. This paper is an attempt to examine the demographic, socio-economic, and cultural factors for fertility differentials in Nepal. Methods: This paper has used data from the Nepal Demographic and Health Survey (NDHS 2006). The analysis is confined to ever married women of reproductive age (8,644). Both bivariate and multivariate analyses have been performed to describe the fertility differentials. The bivariate analysis (one-way ANOVA) was applied to examine the association between children ever born and women's demographic, socio-economic, and cultural characteristics. Besides bivariate analysis, the

net effect of each independent variable on the dependent variable after controlling for the effect of other predictors has also been measured through multivariate analysis (multiple linear regressions). Results: The mean numbers of children ever born (CEB) among married Nepali women of reproductive age and among women aged 40-49 were three and five children, respectively. There are considerable differentials in the average number of children ever born according to women's demographic, socio-economic, and cultural settings. Regression analysis revealed that age at first marriage, perceived ideal number of children, place of residence, literacy status, religion, mass media exposure, use of family planning methods, household headship, and experience of child death were the most important variables that explained the variance in fertility. Women who considered a higher number of children as ideal ($\beta = 0.03$; $p < 0.001$), those who resided in rural areas ($\beta = 0.02$; $p < 0.05$), Muslim women ($\beta = 0.07$; $p < 0.001$), those who had ever used family planning methods ($\beta = 0.08$; $p < 0.001$), and those who had a childdeath experience ($\beta = 0.31$; $p < 0.001$) were more likely to have a higher number of CEB compared to their counterparts. On the other hand, those who married at a later age ($\beta = -0.15$; $p < 0.001$), were literate ($\beta = -0.05$; $p < 0.001$), were exposed to both (radio/TV) mass media ($\beta = -0.05$; $p < 0.001$), were richest ($\beta = -0.12$; $p < 0.001$), and were from female-headed households ($\beta = -0.02$; $p < 0.05$) had a lower number of children ever born than their counterparts.

Conclusion: The average number of children ever born is high among women in Nepal. There are many contributing factors for the high fertility, among which are age at first marriage, perceived ideal number of children, literacy status, mass media exposure, wealth status, and child-death experience by mothers. All of these were strong predictors for CEB. It can be concluded that programs should aim to reduce fertility rates by focusing on these identified factors so that fertility as well as infant and maternal mortality and morbidity will be decreased and the overall well-being of the family maintained and enhanced.

Data Sources: Nepal Demographic and Health Survey (NDHS 2006)

Countries: Nepal

Subjects/ Variables: Ever married women of reproductive age (n=8,644)

Discipline: Geography and Population

Adioetomo, Sri M.

Adioetomo, S. M. (1995). The role of religion in the construction of the small family norm in Java, Indonesia. *Journal of Population Economics*, 1(1), 107–129.

Adongo, Philip B.; Phillips, James F.; Binka, Fred N.

Adongo, P. B., Phillips, J. F., & Binka, F. N. (1998). The Influence of Traditional Religion on Fertility Regulation among the Kassena-Nankana of Northern Ghana. *Studies in Family Planning*, 29(1).

Abstract: This article presents findings from a study of the influence of traditional religion on reproductive preferences of Kassena-Nankana lineage heads in northern Ghana. Seven reproductive preference questions were administered to nine lineage heads who are primary practitioners of the cult of soothsaying. With the assistance of soothsayers, interviews were repeated in conjunction with

the invocation of religious rites in order to determine the views of ancestral spirits on the seven questions. Pairs of lineage head and ancestral interviews are compared to determine the role of traditional religion in shaping male reproductive preferences. Interview pairs reflect a shared preference for sons, large compounds, and a growing lineage. Findings nonetheless show that some ancestral spirits want small families, some even wanting fewer children than corresponding lineage heads. Spiritual consultations are nondogmatic and open to external ideas and influences, suggesting that family planning introduction will not encounter systematic religious opposition among the Kassena-Nankana.

Data Sources: Interviews with lineage heads

Countries: Ghana

Subjects/Variables: Lineage heads from the Kassena-Nankana people of northern Ghana

Discipline: Social Science

Adongo, Philip B.; Phillips, James F.; Kajihara, Beverly; Fayorsey, Clara; Debpuur, Cornelius; Binka, Fred N.

Adongo, P. B., Phillips, J. F., Kajihara, B., Fayorsey, C., Debpuur, C., & Binka, F. N. (1997). Cultural factors constraining the introduction of family planning among the Kassena-Nankana of northern Ghana. *Social Science and Medicine*, 45(12), 1789-1804.

Abstract: This study presents a focus group investigation of reasons why women in a rural, Sahelian community are reluctant to adopt family planning even when convenient services are made freely available. First, women opting to practice contraception must do so at considerable risk of social ostracism or familial conflict. Implementing individual preference is something that must be done without the support of others. Second, few women view personal decisions about contraceptives as theirs to make. Women and children are the property of the corporate family-kin and community militate against reproductive control. Third, although children are highly valued for a variety of economic, social, and cultural reasons, mortality risks remain extremely high. Low fertility imposes the unacceptable risk that a woman will have no surviving children at the end of her reproductive life. Taken together, these findings attest to the inadequacy of service strategies focused on the contribution of distribution, individual agency, or personal choice. Outreach should also build a sense of community legitimacy for the program, collective health action, and traditional leadership support for family planning behavior. The Kassena-Nankana are animists and ancestor-worshippers. The end of a lineage represents a spiritual catastrophe, confining ancestors to the afterworld forever. Religious rites and consultations (with soothsayers) often emphasize the importance of childbearing.

Data Sources: Focus group discussions by six types of respondents: women below the age of 30 years, older women between the ages of 30 45 years, wives of compound heads, young men, opinion leaders, and compound heads in rural Kassena-Nankana District; in-depth interviews were held among chiefs, lineage heads, and landlords

Countries: Ghana

Subjects/Variables: Agrarian, rural residents of the Kassena-Nankana District on Ghana's northern border with Burkina Faso

Discipline: Social Science

Adserà, Alicia

Adserà, A. (2004). *Marital fertility and religion: Recent changes in Spain*. Bonn: Institute for the Study of Labor.

Summary: Since the onset of democracy in 1975, both total fertility and Mass attendance rates in Spain have dropped dramatically. I use the 1985 and 1999 Spanish Fertility Surveys to study whether the significance of religion in fertility behavior – both in family size and in the spacing of births – has changed. While in the 1985 SFS family size was similar among practicing and non-practicing Catholics, practicing Catholics portray significantly higher fertility during recent years. In the context of lower church participation, religiosity has acquired a more relevant meaning for demographic behavior. Among the youngest generation, non-practicing Catholics behave as those without affiliation. The small group of Protestants and Muslims has the highest fertility and interfaith unions are less fertile.

Data Sources: Spanish Fertility Survey 1985, 1999

Countries: Spain

Subjects/ Variables: (majority) practicing and non-practicing Catholics, (minority) Protestants, Muslims

Discipline: Economics

Adserà, A. (2006). Marital fertility and religion in Spain, 1985 and 1999. *Population Studies*, 60(2), 205-221.

Abstract: Since the transition to democracy in Spain in 1975, both total fertility and rates of church attendance of Catholics have dropped dramatically. In this study the 1985 and 1999 Spanish Fertility Surveys were used to investigate whether the significance of religion for fertility behaviour -- current family size and the spacing of births -- changed between the survey dates. In the 1985 survey, family size was similar for those Catholics who actively participated in religious activities and those who, though nominally Catholic, were not active participants. By 1999, the family size of the latter was lower and comparable to the family size of those without religious affiliation. These findings accord with the declines in both church attendance and fertility in Spain. The small groups of Protestants and Muslims had the highest fertility. Women in inter-faith unions had relatively low fertility.

Data Sources: 1985 and 1999 Spanish Fertility Surveys of married women aged 15-49

Countries: Spain

Subjects/ Variables: Current married women aged 15-49; practising Catholic, non-practising Catholic, no religion, and other religion; spouse's religion

Discipline: Economics

Adserà, A. (2006). Religion and Changes in Family-Size Norms in Developed Countries *Review of Religious Research*, 47(3), 271-286.

Abstract: This paper studies the influence of religious affiliation and frequency of church attendance in shaping preferences for family size across 13 developed countries and over five broad religious groups. The ideal number of children is higher for Conservative Protestants and Catholics, affiliations with more pronatalist teachings, than for Mainline Protestants or individuals with no religious affiliation. Religious affiliation regardless of religiosity is more significant in explaining differences in the ideal number of children for older individuals and for men than for women. With the progressive loss of influence of religious institutions in society, the degree of church attendance has become a more salient predictor of family norms, particularly for women. Church membership, independent of religiosity, exerts greater influence in demographic preferences in pluralistic societies than in countries monopolized by one religious affiliation.

Data Sources: Survey of Family and Changing Gender Roles conducted by the International Social Survey Program (ISSP), 1994

Countries: Australia, Austria, Canada, West Germany, Great Britain, Ireland, Italy, the Netherlands, New Zealand, Northern Ireland, Norway, Sweden, and the United States

Subjects/Variables: 16,000 individuals aged 18 years and older; Mainline Protestants, Conservative Protestants, Catholics, those affiliated to other religions (mostly non-Christian), and those without an affiliation; religiosity

Discipline: Economics

Adserà, A. (2007). Reply to the note by Neuman 'Is fertility indeed related to religiosity?'. *Population Studies*, 61(2), 225-230.

Abstract: In this reply [to Neuman 2007] I argue that her results rely on the use of a group of women already selected for their attachment to the Catholic Church. I include new analyses with the ISSP 98 data-set to show that the positive relation between attendance at mass and fertility holds in a sample that includes those who have ever been baptized regardless of the background of their spouses. Further, I explore an alternative measure of religiosity in the ISSP 98. Finally I make some clarifications of the findings in the paper and their relevance to the explanation of recent fertility changes in Spain.

Data Sources: Spanish Fertility Surveys (SFS); the International Social Survey Programme 1998: Religion II (ISSP 98)

Countries: Spain

Subjects/Variables: Catholics, non-Catholics; practicing and non-practicing Catholics

Discipline: Economics

Adserà, A. (2013). Fertility, Feminism, and Faith: The Influence of Secularism and Economic Conditions. In E. Kaufmann & W. B. Wilcox (Eds.), *Whither the Child?: Causes and Consequences of Low Fertility* (pp. 1-28). Abingen: Routledge.

Summary: Two important developments coincide with fertility declines in Europe since the 1960s: a steep drop in religious piety and greater individualism, and growing female labour force participation. While cultural differences delineate differences in ideal family size, economic constraints best explain individual women's abilities to meet their fertility goals.

Data Sources: World Values Survey and European Values Survey; European Community Household Panel; International Social Survey Program (ISSP) module Religion II (1998)

Countries: Europe

Subjects/Variables: Europeans

Discipline: Economics

Adserà, A. (2014). Fertility, feminism, and faith: The influence of secularism and economic conditions. In E. Kaufmann & W. B. Wilcox (Eds.), *Whither the child? Causes and consequences of low fertility* (pp. 1-28). Boulder: Paradigm.

Summary: Two important developments coincide with fertility declines across Europe since the 1960s: a steep drop in religious piety and growing female labour force participation. At the same time, intra-European variation maps onto both religious and economic differences. Using the latest economic and social survey data for Europe and the OECD, Adserà weighs competing cultural and economic explanations for the variation in fertility rates across Europe and the OECD. She finds that while cultural differences delineate differences in ideal family size, economic constraints best explain individual women's abilities to meet their fertility goals.

Countries: Europe
Discipline: Economics

Aghadjanian, Akbar

Aghadjanian, A. (1995). A new direction in population policy and family planning in the Islamic Republic of Iran. *Asia-Pacific population journal*, 10(1), 3-20.

Abstract: This article traces the history of Iran's population policy from the establishment of a family planning (FP) policy in 1967 to the present. Context for the discussion is provided by a review of population growth in the country since 1900. Indicators for 1966, 1976, and 1986 show population size growing from 25.7 million to 33.7 and 49.4, respectively, as the crude birth rate fluctuated from 49 to 42.7 to 47.6, and the total fertility rate changed from 7.7 to 6.3 to 7.0. These figures reflect changes in population policy which promoted the use of effective contraceptive methods among urban women in the period 1967-79 but which led to only 11% acceptance by 1977. From 1979 until 1988, the newly established Islamic Republic allowed family planning programs to disintegrate. In 1988, the results of overpopulation could be seen, and a new program was established in 1989 with the full concurrence of religious authorities. This program is attempting to 1) encourage birth spacing of 3-4 years, 2) discourage early and late pregnancies, and 3) limit family size to three children. Government support for this program is evident in financing commitments and in the creation of disincentives to have more than three children. Services are provided in 400 centers which emphasize sterilization and provide a range of contraceptive options including Norplant and injectables. Data from the 1976-77 Iran Fertility Survey (IFS) and the 1992 Contraceptive Prevalence Survey (CPS) show that, in 1976, 85% of women had heard of oral contraceptives. The CPS revealed 90% knowledge of at least one method and more than 70% approval of FP. The IRS showed 35.9% of all currently married women using contraceptives; the corresponding CPS figure was 64.6%. The urban-rural gap in knowledge and use which existed in 1976 also narrowed by 1992, but the popularity of certain methods varied by urban-rural residence. Positive determinants of contraceptive use for both periods include literacy and number of living children. Preliminary data reveal that the new program has led to a significantly reduced growth rate as well as a decline in the total fertility rate and in the number of registered births. These declines may also be due to a significant increase in marriage age from 1986 to 1991. Iran's new FP program has been successful because it has the support of religious leaders and operates with the moral authority of a fatwa issued by the Ayatollah Khomeini. Other Islamic countries could create successful programs in a similar way.

Data Sources: 1976-77 Iran Fertility Survey (IFS) ; 1992 Contraceptive Prevalence Survey (CPS)

Countries: Iran

Subjects/Variables: Iranian ever-married women

Discipline: Sociology-Demography

Aghadjanian, Victor

Aghadjanian, V. (2001). Religion, social milieu, and the contraceptive revolution. *Population Studies*, 55, 135-148.

Abstract: This study examines how the social environment of religious congregations affects the spread of contraceptive use in developing contexts, using Mozambique as a case study. Analysis of qualitative data collected in urban areas of that country in 1998-99 and of the data from the 1997 Mozambique Demographic and Health Survey suggests that, in urban areas, the environment of more socioculturally diverse and inclusive Roman Catholic and mission-based Protestant congregations is more propitious to the spread and legitimization of modern contraception than the milieu of smaller, relatively homogeneous, independent churches. In rural areas, however, sociocultural diversity within and across different religious denominations is minimal, and membership in any formal congregation offers an advantage in contraceptive learning.

Data Sources: The 1997 Mozambique Demographic and Health Survey

Countries: Mozambique

Subjects/Variables: Subsample of women aged 15-49 from Catholic/mainstream Protestant churches, Zionist/Pentecostal churches, and no religious affiliation

Discipline: Sociology

Akintunde, Mutairu Oyewale; Lawal, Musediq Olufemi; Simeon, Olawuwo

Akintunde, M. O., Lawal, M. O., & Simeon, O. (2013). Religious Roles in Fertility Behaviour among the Residents of Akinyele Local Government, Oyo State, Nigeria. *International Journal of Economy, Management and Social Sciences*, 2(6), 455-462.

Abstract: This paper work on fertility differential among various religions in Akinyele Local Government area of Oyo State aimed at finding the socio-economic and demographic characteristics of the studied area. The fertility level was examined, the relationship between the level of fertility and religious belief and the current state of knowledge, attitudes, and practice of family planning programs as it affects different religion. The duo of purposive sampling and simple random sampling methods were used to administer questionnaire. In all two thousand, four hundred questionnaire (2400) were administered out of which only two thousand, one hundred and ninety seven (2,197) were returned successfully. The information was tabulated and the percentage responses were taken, so also, multiple regression analysis chi-square analysis and ANOVA was done by the use of SPSS. It was discovered that over 70 percent of the respondents could neither read nor write and over 80 percent are self-employed. More than 75 percent are of polygamous settings and over 65 percent believed that they should have as many numbers of children as God's permits. The implication of this study is that Muslims and Traditionalists had highest number of children in the studied area (the two accounting for over 78 percent while Christian accounted for less than 22 percent). Six hypotheses were tested and all alternative hypotheses were accepted, all pointing to the fact that religion is a strong determinant of fertility and other socio-economic variables.

Data Sources: 2400 houses sampled across the 12 political wards in Akinyele Local Government, Nigeria

Countries: Nigeria

Subjects/Variables: Residents of Akinyele Local Government, Oyo State, Nigeria; Muslim, Christian, Traditional, other

Discipline: Statistics

Akoto, Eliwo

Akoto, E. (1990). Christianisme et inégalités en matière de mortalité des enfants en Afrique noire. *Population (Edition Française)*, 45(6), 971-992.

Abstract: Children's mortality is lower when the mother is Christian, but religious affiliation is also associated with various health, social and economic indicators (place of birth, literacy, socio-professional category); and the relationship weakens or disappears when the various indicators above are taken into account at the same time as religion. The specific influence of religion on mortality thus appears negligible. The data used was taken from an international survey on fertility carried out in Cameroon, Ghana and Kenya. Infant mortality rates were found to be lower for children of Christian mothers. However, the social group is also associated with other indicators of health, social and economic factors (place of delivery, literacy, socio-occupational group). When these factors are taken into account with religion, the correlation becomes weaker or disappears and the specific impact of religion becomes negligible.

Data Sources: World Fertility Survey for Cameroon, Ghana and Kenya

Countries: Cameroon, Ghana and Kenya

Subjects/ Variables: Residents of Cameroon, Ghana and Kenya

Discipline: Demography

Alagarajan, Manoj

Alagarajan, M. (2000). *An analysis of fertility differentials by religion in Kerala state, India.* (Ph.D.), Bharathiar University, Coimbatore, Tamil Nadu, India. *Data Sources:* Data source

Countries: Countries

Subjects/ Variables: Subjects

Alagarajan, M. (2003). An Analysis of Fertility Differentials by Religion in Kerala State: A Test of the Interaction Hypothesis. *Population Research and Policy Review*, 22(5-6), 557-574.

Abstract: In a revelation of overall decline to below replacement fertility in the Kerala state of India, it was generally found that fertility among Muslims is higher and contraceptive prevalence lower than among Hindus and Christians. This paper examines the interaction between religion and other socioeconomic factors, that is, whether the effect of religion on fertility remains constant across other factors. The analysis is based on the data from the National Family Health Survey-1 in Kerala. The analysis found that large Hindu-Muslim fertility differences at a low level of education do not persist at higher levels. For contraceptive use, wider gaps are found at a middle level of education and at a medium level of standard of living than at lower and higher levels. This indicates that couples at different socioeconomic settings make different decisions in spite of belonging to the same religion. The fact that fertility of Muslims at higher levels of socioeconomic status is low, and not much different than the fertility of other religions, suggests that the observed fertility gap between Hindus/Christians and Muslims is a passing phenomenon. There is no fixed religion effect. In other words, there is no Hindu Fertility, Muslim Fertility, or Christian Fertility as such.

Data Sources: National Family Health Survey-1 in Kerala (1992-1993), International Institute for Population Sciences

Countries: India

Subjects/Variables: Hindus, Muslims and Christians from Kerala.

Discipline: Developmental Studies

Alagarajan, Manoj; Kulkarni, P.M.

Alagarajan, M., & Kulkarni, P. M. (1998). Fertility differentials by religion in Kerala: a period parity progression ratio analysis. *Demography India*, 27(1), 213-227.

Abstract: This study relied on parity progression ratios (PPRs) in order to examine differences in fertility in Kerala state, India. Data were obtained from the 1991-92 National Fertility and Health Survey (NFHS) in Kerala among three districts: Ernakulam, Palakkad, and Malappuram. Multiple Classification Analysis was used to consider whether differences were related to socioeconomic factors, religion, or parity. Fertility decline has not been uniform among the three major religious groups. Fertility decline among Muslims has been modest; most women proceed to a 4th child. Hindus and Christians stop childbearing after the 2nd child. Religious-fertility differences may be explained by socioeconomic status (SES), particularized theological, and minority status hypotheses. PPRs indicate that differences by religion are large. Muslims had much higher fertility. There were also strong effects from education, standard of living (based on Roy and Jayachandran's methods, 1996), and Malabar region in the north. Religious differences persisted despite controls for SES. PPRs during 1968-91 for progressions up to 4th parity indicated a clear declining trend on the progression to 3rd and higher births. PPRs to the 1st birth declined only slightly for Hindus and Muslims. PPRs to the 2nd birth declined for only Hindus, increased for Muslims, and were irregular for Christians. PPRs to the 3rd and 4th parities were quite steep among Hindus during 1987-91, fairly steep among Christians, and moderate for Muslims. Muslims lagged about 10 years behind Hindus and 5-10 years behind Christians. Differences followed patterns for contraceptive use.

Data Sources: 1991-92 National Fertility and Health Survey (NFHS) in Kerala among three districts: Ernakulam, Palakkad, and Malappuram

Countries: India

Subjects/Variables: Indians; Hindus, Muslims

Discipline: Developmental Studies

Alagarajan, M., & Kulkarni, P. M. (2008). Religious Differentials in Fertility in India: Is There a Convergence? *Economic and Political Weekly*, 43(48), 44-53.

Abstract: Analysis of the data from the three rounds of India's National Family Health Survey shows that fertility transition is continuing in all the major religious groups of India. Substantial declines have occurred in fertility over the period encompassing the three rounds. The use of contraceptives has become more widely prevalent with a majority of couples wanting to stop childbearing at two or three children. Spatial variation is also noticeable with religious differentials being very small or negligible in some states. At the national level, religious differentials are narrowing though it is difficult to say when a convergence could occur. However, fertility for all religious groups is expected to fall further towards the replacement level and possibly to below this level.

Data Sources: Sample Registration System; National Family Health Survey-3, International Institute for Population Sciences (IIPS), Mumbai and Macro International

Countries: India

Subjects/Variables: 124,385 women of childbearing age (93,089 of whom were married)

Discipline: Demography

Allahbadia, Gautam N.; Allahbadia, Swati G.; Arora, Sulbha

Allahbadia, G. N., Allahbadia, S. G., & Arora, S. (2009). Hinduism and Reproduction in Contemporary India: Vedic Learnings. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 111-136). London: Jessica Kingsley Publishers.

Summary: Hinduism's approach to family and fertility issues is greatly affected by the Hindu belief in rebirth, viewing life from a perspective that encompasses not just this life but many other lives that preceded it, as well as lives that will succeed it. Based on ancient Sanskrit epics of India and other sacred scripts and ancient tales, in Chapter 4 Gautam N. Allahbadia, Swati G. Allahbadia and Sulbha Arora familiarise the reader with the basic Hindu concepts of dharma and karma, with the deities Brahma, Vishnu and Shiva, and a variety of rituals customary in Hindu families. Although, unlike other faith systems, Hinduism is very tolerant of abortion and the use of reproductive technologies, the ancient preference for male children still significantly affects the structure of Hindu society. Female children may still be subjected to gender bias. Female infanticide and killing of infants born with physical impairments soon after birth have been frequent practices in India owing to lack of law enforcement, and are now augmented by sex selection procedures that are used to forestall the births of female infants.

Data Sources: Theoretical discussion

Allman, James

Allman, J. (1978). *Women's Status and Fertility in the Muslim World*. New York: Praeger.

Althaus, F.A.

Althaus, F. A. (1992). Differences in fertility of Catholics and Protestants are related to timing and prevalence of marriage. *Family Planning Perspectives*, 24, 234-235.

Alvirez, David

Alvirez, D. (1973). The Effects of Formal Church Affiliation and Religiosity on the Fertility Patterns of Mexican-American Catholics. *Demography*, 10(1), 19-36.

Abstract: The effects of religion on the fertility patterns of Mexican Americans are examined with two different path models, the Institutional Model using formal affiliation with the Roman Catholic Church as a measure of religion, and the Religiosity Model using a measure of religiosity. Each model, tested separately for husbands and wives, examines the effects of religion on types of contraceptive methods used and on wanted family size. Although the majority of Mexican

Americans are Catholics and tend to have large families, religion does not seem to have the same effect on their fertility patterns as on that of other Catholics in the United States. Among the men, neither formal affiliation nor religiosity affect the fertility patterns in any way, while among the women the effect is slight. Considering the Catholic Church's position on contraceptive usage, it is especially noteworthy that religion does not affect the use or non-use of the more effective means of contraception, a factor contributing to the generally weak association between the measures of religion and wanted family size. The last section attempts a partial explanation of why the results turned out as they did.

Data Sources: A sample of 348 couples interviewed in Austin, Texas, during the summer of 1969

Countries: United States (Texas)

Subjects/Variables: Mexican-American couples, married a minimum three and a-half years, with the wife under 36 years of age and the husband under 50

Discipline: Demography

Amin, S.; Diamond, I.; Steele, F.

Amin, S., Diamond, I., & Steele, F. (1996). *Contraception and Religious Practice in Bangladesh*. New York: Population Council.

Summary: This analysis proposes the hypothesis that religion operates at the community level, that is, that the practice of individuals is less important with regard to contraception than that of the community. The hypothesis is based on two factors: (1) Islamic doctrine has a variety of interpretations on the issue of contraception and does not forbid its use explicitly; (2) religion, Islam in particular, often works through building consensus on issues where the Qur'an is ambiguous, as is the subject of contraception, which operates at the level of the group. Religiosity (measured by daily prayer) has a negative relationship with contraceptive use, but literacy and contraceptive use has a positive relationship. But by comparison across districts, it is found that religious practice at the individual level is not as strong a predictor of contraceptive use as it is at the district level.

Data Sources: Sample based on the Bangladesh Fertility Survey 1989

Countries: Bangladesh

Subjects/Variables: 9,777 Bangladeshi women

Discipline: Demography

Amin, Sajeda; Diamond, Ian; Steele, Fiona

Amin, S., Diamond, I., & Steele, F. (1997). *Contraception and Religiosity in Bangladesh*. In G. W. Jones, R. M. Douglas, J. C. Caldwell, & R. M. D'Souza (Eds.), *The Continuing Demographic Transition* (pp. 268-289). Oxford: Clarendon Press.

Summary: A study of the influence of religion on contraceptive use in Bangladesh. It is hypothesized that religion operates at the community level; i.e. it is not the religiosity of individuals that is important, but that of the community. The hypothesis is motivated by two factors: (1) Islamic doctrine lends itself to a variety of interpretations on the issue of contraception and does not forbid its use explicitly; (2) there are aspects of the way religion, and Islam in particular, works through building consensus on issues where the Qur'an is ambiguous, as it is on contraception, which

suggests that it will operate at the level of the group, rather than the individual. Variations in women's literacy and religiosity account for a large proportion of the unexplained district-level variation. The central finding is that religiosity at the individual level is not as strong a predictor of contraceptive use as religiosity at the district level.

Data Sources: Bangladesh Fertility Survey 1989

Countries: Bangladesh

Subjects/Variables: Ever-married Bangladeshi women; Muslim; religiosity (regular prayer)

Discipline: Demography

Anderton, Douglas L.; Bean, Lee L.; Willigan, J. Dennis; Mineau, Geraldine P.

Anderton, D. L., Bean, L. L., Willigan, J. D., & Mineau, G. P. (1984). Adoption of fertility limitation in an American frontier population: An analysis and simulation of socio-religious subgroups. *Social Biology*, 31(1-2), 140-159.

Abstract: This paper investigates a late nineteenth-century fertility transition in a predominantly Mormon population of the western United States. A unique set of longitudinal data composed of 31,500 computerized family genealogies is drawn upon to examine a number of problems identified in reappraisals of fertility transition research (Caldwell, 1981; Freedman, 1979). Four subcohorts, differentiated by religious commitment and exposure to urban influences, are examined over the course of the transition. The study presents traditional analyses of subcohort CEB levels, period MTR's, and *m* values (Coale and Trussell, 1974) and focuses on a macrosimulation of the fertility transition within the population (Bongaarts, 1976). Despite wide subcohort variation in cross-sectional levels of fertility over time, simulation results suggest a similar absolute longitudinal decline in fertility levels, parity at which contraception was initiated, and maximum birth parities for all four subcohorts. The implications of these results for future analyses and the desirability of individual level data are discussed.

Data Sources: 180,000 computerized genealogies, based on family group sheets of Utah Genealogical Society

Countries: United States (Utah)

Subjects/Variables: 31,500 once-married couples (husband and wife married only once) with the wife born between 1840 and 1899 and known to have survived to at least 49 years of age

Discipline: Sociology

Anson, Jon

Anson, J. (2006). Religion, Nationalism and Demography: False Consciousness, Real Consequences. *Association for the Study of Ethnicity and Nationalism conference*.

Abstract: We may treat religion as an immanent belief system which directly guides human action, or as a social phenomenon in which the actual content of the belief is contingent. The first course leads into a series of contradictions: neither the beliefs nor their consequences are consistent, nor eternal over time. As social phenomena, however, religions differ from nationalisms only in the referent of their expressed belief: an otherworldly sacred being or a this-worldly sacred community, and the two

are often conflated. If in the past men killed and died for their gods, today they do so for their country. Demographic events, childbirth and death, may similarly be treated as individual events or as social phenomena subject to group, and not just individual, control. In this paper we consider the relations between these two sets of social phenomena, religion and nationalism on one hand, demographic processes on the other, and the contradictions inherent in ignoring the social element in the explanation of their interrelationship. We go on to suggest a mode of explanation that treats demographic phenomena as an element in the interrelations between social groups.

Data Sources: Review of studies

Discipline: Sociology

Anson, Jon; Meir, Avinoam

Anson, J., & Meir, A. (1996). Religiosity, Nationalism and Fertility in Israel. *European Journal of Population / Revue Européenne de Démographie*, 12(1), 1-25.

Abstract: The present paper seeks to re-evaluate explanations for the apparently high level of Jewish fertility in Israel. We suggest that previous explanations, based on ethnic origin or religiosity, are sociologically incomplete, and substitute well established empirical correlational associations for theoretically grounded explanations. We argue that Israel's high fertility stems, directly, from the form and salience of nationalist sentiments in the Israeli conscience collective, which in turn derives from Israel's special position in the Middle East and in the world-economy. Using voting returns from Israel's proportional vote elections, we classify census statistical areas by religiosity and their support for radical nationalist parties. We show that area-level fertility is a function of nationalist support and the area standard of living, and that once these are controlled the effect of religiosity is insignificant. We therefore conclude that the statistical association between fertility and religiosity in Israel is spurious, and that much of the religiosity recorded in fertility surveys is an expression, in consciousness and in the mode of daily living, of a strongly felt nationalist sentiment.

Data Sources: 1983 Census; voting patterns in the 1984 national elections

Countries: Israel

Subjects/ Variables: Urban statistical areas with a homogeneous Jewish population (>95% Jewish)

Discipline: Sociology, Geography

Anwaruzzaman, A.K.M.

Anwaruzzaman, A. K. M. (2010). Hindu-Muslim Differentials in Fertility in India with Special Reference to Darjeeling District, West Bengal. *Pakistan Journal of Geography*, 19(1-2), 75-98.

Abstract: Study of fertility has traditionally been an exclusive field of demographers and medical/bio-scientists. But in the recent years "Saffron Demographers" have utilized 'demographic data to achieve non-demographic objectives'. 'Politicization of fertility' is aimed at pressurizing policy makers to intervene in the private life of a particular community. "Saffron Demographers" have been successful to mislead the common folk with lack of their proper understanding of dynamics of fertility. Fertility is considered to be an important attribute of demography of any region. It may be determined by several socio-economic, cultural, demographic and biological factors such as literacy,

work participation ratio, female work participation ratio, female literacy, tertiary sex ratio and age at marriage etc. Since the above attributes are not uniform across the religious groups, the differentials exist between the communities. Hindu-Muslim differentials in fertility are reality that can not be denied by any one but the extent and cause of such difference is studied differently by different scholars. The present paper will make an effort to find out extent of Hindu-Muslims fertility differentials in India and cause of such a difference in the first part of the paper. The second part will deal with fertility differentials by religion in Darjeeling district in India.

Data Sources: Census of India publications, National Sample Survey Organization Publications, National Family Health Survey Reports, District statistical Hand Book of Darjeeling district, author's fieldwork

Countries: India

Subjects/Variables: Married female Indians in the age group of 15-49 years

Discipline: Geography

Anwaruzzaman, A. K. M. (2010). Regional pattern of fertility in West Bengal with special reference to religious differentials. *Indian Journal of Regional Science, ARSI, Kolkata, 42(1), 116-126.*

Abstract: Fertility is an important attribute of demography of a region which may vary considerably within the same region. Fertility may be controlled by several socio-economic, demographic and biological factors such as literacy, work participation ratio, female work participation ratio, female literacy, tertiary sex ratio and age at marriage etc. Since the above attributes are not uniform across the religious groups, the differentials exist between the communities. The differentials again vary across the districts within the state. The paper will aim at finding these patterns of differentials in fertility and an endeavour would be made to explain the causes of such pattern.

Data Sources: Censuses; Sample Registration System, Registrar General of India; National Sample Survey (NSS) rounds by CMIE, Pune; National Family Health Survey Reports by IIPS, Mumbai; Statistical Handbook of Districts, Bureau of Applied Economic and Statistics, Government of West Bengal; field work in Darjeeling district during 2007-2008

Countries: India

Subjects/Variables: West Bengal Buddhists, Christians, Hindus, Muslims

Discipline: Demography

Anwaruzzaman, A. K. M. (2011). Differentials in Fertility by Religion with special emphasis on Hindu-Muslim Fertility Differential in Darjeeling District. *Asian Profile, Asian Research Service, Canada, 39(2), 137-150.*

Abstract: Estimate of extent of difference in fertility among Buddhists, Christians, Hindus and Muslims in West Bengal, and causes of such difference.

Data Sources: Censuses; Sample Registration System, Registrar General of India; National Sample Survey (NSS) rounds by CMIE, Pune; National Family Health Survey Reports by IIPS, Mumbai; Statistical Handbook of Districts, Bureau of Applied Economic and Statistics, Government of West Bengal; field work in Darjeeling district during 2007-2008

Countries: India

Subjects/Variables: West Bengal Buddhists, Christians, Hindus, Muslims

Discipline: Demography

Aquino, Estela M.L.; Heilborn, Maria Luiza; Knauth, Daniela; Bozon, Michel; Almeida, Maria da Conceição; Araújo, Jenny; Menezes, Greice

Aquino, E. M. L., Heilborn, M. L., Knauth, D., Bozon, M., Almeida, M. d. C., Araújo, J., & Menezes, G. (2003). Adolescência e reprodução no Brasil: a heterogeneidade dos perfis sociais. *Cadernos Saúde Pública*, 19(Suppl. 2), S377-S388.

Abstract: This study aims to estimate the prevalence of adolescent pregnancy (AP) in three Brazilian cities – Salvador, Rio de Janeiro, and Porto Alegre – and to examine the profiles of pregnant girls and their partners in relation to pregnancy outcomes. Data for a retrospective assessment of AP were collected using an interview-based household survey applied to a stratified sample of males and females aged 18-24. A total of 4,634 individuals were interviewed (85.2 % of the eligible individuals). 21.4% of males and 29.5% of females aged 20-24 reported AP, but few such pregnancies had taken place before age 15 (0.6% and 1.6%). Pregnancy between adolescent partners was reported by 55.1% of males and 27.9% of females. 79.8% of the latter became pregnant while involved in a stable relationship with an older partner. AP levels varied inversely to schooling and income levels. 72.2% of females and 34.5% of males carried their first AP to completion, and more cases of induced abortion were reported by male partners in pregnancies (41.3%) than by females (15.3%). With the birth of the first child, 25.0% of women interrupted their studies temporarily and 17.3% definitively. However, 42.1% of primiparous mothers were already outside school before pregnancy.

Data Sources: Household survey in Salvador, Rio de Janeiro and Porto Alegre

Countries: Brazil

Subjects/ Variables: Men and women between the ages of 18 and 24

Discipline: Health, Gender Studies

Atoh, Makoto

Atoh, M. (2001). Very Low Fertility in Japan and Value Change Hypotheses. *Review of Population and Social Policy*, 10, 1-21.

Abstract: Fertility in Japan dropped below replacement level in the middle of the 1970s and declined further since the middle of the 1980s, having reached the total fertility rate (TFR) of 1.42 in 1995. There is much evidence to show that such fertility decline occurred directly as the result of the rise in the proportion never married and the rise in the age at marriage and age at childbearing. In this article the author tries to examine whether value change hypotheses as proposed for explaining below replacement fertility in the West are applicable to the fertility decline in Japan. According to various nationally representative time-series and comparable attitudinal surveys which have been undertaken in the post-war period by various institutes, there has hardly been any dramatic change in attitude toward religion and only a moderate change from social conformism toward individualistic attitude over the last 40 years. In contrast, there has been a tremendous attitudinal change related to women's social and family roles, in such areas as premarital sex, divorce, gender-role division, and the care of elderly parents, especially since the middle of the 1980s. All these survey results suggest that the rapid rise in the proportion never married in Japan in this latest decade can be related to the change in the value system regarding women's social and familial role and status, a change toward the valuation of a gender equal society, rather than to secular individuation or the end of a child-centered society.

Data Sources: Institute of Mathematical Statistics (IMS), the Ministry of Education and the Prime Minister's Office (every fifth year, 1953 to 1993, amongst people aged 20 and over); the World

Youth Attitudinal Survey by the Prime Minister's Office, 1972-1993 (survey of attitudes of people aged between 18 to 24)

Countries: Japan

Subjects/ Variables: General population

Discipline: Demography

Azaiza, Feisei

Azaiza, F. (1997). Contraceptive utilization: Profile of the Muslim Arab women in rural Israel *Scandinavian Journal of Social Welfare*, 6(4), 317-324.

Abstract: The contraceptive habits of the Arab population in rural Israel was explored by means of a cohort (n=429) of rural Muslim women, with the aim to compose a profile of the women who practice modern contraception. Self-reported information revealed that only one third of the women apply modern contraceptive devices. Multivariate analysis showed the following independent variables to bear a contributory and predictive value with respect to use or non-use of modern contraceptive means by Muslim village women in Israel: degree of religiosity of the woman, male offspring, extent of modernity within the nuclear family, number of children, occupation of the husband, and adherence to traditional norms by the woman. The present study brought to light a strong linkage between the degree of religiosity of the woman and contraceptive use. Traditional methods were dominant among those of the religious and conservative women who did practice contraception at all, with the secular group remaining far below them. The legitimacy of withdrawal seems well established, as witnessed by its persistent appearance among the self-reported traditional methods. It is acceptable to even the most religious Muslim woman since, according to studies of the Muslim religion, the prophet Muhammad did not answer when he was asked his opinion as to the issue of withdrawal. This absence of response is interpreted to mean that he did not object to this manner of family planning (Almaududi, 1975; Alzayati, 1968). An interesting, even intriguing, finding was that about half of the respondents who described themselves as religious to varying degrees admitted to applying modern devices. This implies that even among those who declared themselves extremely religious, the attributes of modernization had penetrated into their lives (by way of the centers for family health care/family planning or medical clinics).

Data Sources: Questionnaire based on sample from 25 Muslim Arab villages located in the northern (Galilee) and central districts of Israel

Countries: Israel

Subjects/ Variables: 429 Muslim-Arab women of fertile age who had already given birth; independent variables: age of the woman; educational level of the woman (years of formal schooling); socioeconomic status of the family; number of children; number of male offspring; satisfaction of the woman with the gender of the youngest child; occupation of husband (academic profession, skilled worker, common laborer); outside job of the woman (yedno); type of household (multigenerational, i.e., three or more generations, or nuclear, i.e., parents and their immediate offspring); advice and guidance regarding use of contraception (none, professional sources, family and friends, written material, television, radio); and religiosity of the woman (self-reported on a graded list of degrees of religiosity running from devout to secular)

Discipline: Social work

Azaiza, F. (1997). Family Planning among Rural Moslem Women in Israel. *Journal of Comparative Family Studies*, 27(3), 559-568.

Abstract: The data obtained in the present study show the rural Moslem woman in Israel amenable to the notion of modernization at a pace that surpasses the emancipation of their counterparts in most Arab countries.

Data Sources: Questionnaires in sample of four villages (Aug 1988 - April 1989)

Countries: Israel

Subjects/ Variables: 429 Muslim-Arab women of fertile age who had already given birth

Discipline: Social Work

Bailey, Mohamed

Bailey, M. (1986). Differential Fertility by Religious Group in Rural Sierra Leone. *Journal of Biosocial Science*, 18(1), 75-86.

Abstract: This study examines the influence of Islam and Christianity (Catholicism and Protestantism) on fertility in rural Sierra Leone. Analyses using number of children ever born and number of living children for currently married women of childbearing ages 15–49 as measures of fertility show that Muslim fertility is lower than either Catholic or Protestant fertility net of relevant demographic and socioeconomic variables. The interaction between wife's educational level and her religious affiliation was statistically significant for number of children ever born but not for number of living children. Religion is shown to be an important factor in differentiating fertility behaviour at different educational levels. Among wives with no schooling, differences in religion lead to small fertility differentials; among those with primary or higher education, the fertility differentials are substantial.

Data Sources: 2000 interviews in Sierra Leone, Feb-May 1979

Countries: Sierra Leone

Subjects/ Variables: 2000 currently married Sierra Leone women, aged 15–49; Muslim, Christian (Catholic, Protestant)

Discipline: Demography

Balasubramanian, K.

Balasubramanian, K. (1984). Hindu-Muslim Differentials in Fertility and Population Growth in India: Role of Proximate Variables. *Artha vijñāna: Journal of the Gokhale Institute of Politics and Economics*, 26(3), 189-216.

Abstract: A review of major studies on fertility concludes that it is only from the late 1960s that movement from the stage of uncontrolled fertility to the stage of controlled fertility leading to the emergence of socio-economic differentials in fertility seems to have really gotten underway in India. This process appears to have been accelerated during the 1970s and 1980s

Data Sources: Review essay

Countries: India

Subjects/ Variables: Indians

Discipline: Demography

Balbo, Nicoletta; Billari, Francesco C.; Mills, Melinda

Balbo, N., Billari, F. C., & Mills, M. (2013). Fertility in Advanced Societies: A Review of Research. *European Journal of Population / Revue Européenne de Démographie*, 29, 1-38.

Abstract: This paper provides a review of fertility research in advanced societies, societies in which birth control is the default option. The central aim is to provide a comprehensive review that summarizes how contemporary research has explained ongoing and expected fertility changes across time and space (i.e., cross- and within-country heterogeneity). A secondary aim is to provide an analytical synthesis of the core determinants of fertility, grouping them within the analytical level in which they operate. Determinants are positioned at the individual and/or couple level (micro-level), social relationships and social networks (meso-level); and, by cultural and institutional settings (macro-level). The focus is both on the quantum and on the tempo of fertility, with a particular focus on the postponement of childbearing. The review incorporates both theoretical and empirical contributions, with attention placed on empirically tested research and whether results support or falsify existing theoretical expectations. Attention is also devoted to causality and endogeneity issues. The paper concludes with an outline of the current challenges and opportunities for future research.
Data Sources: Review article, focusing on tempo (i.e., the timing of childbirth) and quantum (i.e., the total number of children)

Countries: Netherlands

Discipline: Sociology

Banthia, Jayant Kumar

Banthia, J. K. (2001). *The First Report on Religion Data Summary*: The report outlines the census questions used from 1872-2001. It examines the salient population characteristics by different religious affiliations: population, distribution and growth rate; sex ratio; percentage of child population aged 0-6 to total population; literacy; work participation rate; category of workers; Parsi population decline.

Data Sources: Census of India 2001

Countries: India

Subjects/ Variables: Hindus, Muslims, Christians, Sikhs, Buddhists, Jains, others

Discipline: Demography

Bar-El, Ronen; García-Muñoz, Teresa; Neuman, Shoshana; Tobol, Yossef

Bar-El, R., García-Muñoz, T., Neuman, S., & Tobol, Y. (2013). The evolution of secularization: cultural transmission, religion and fertility—theory, simulations and evidence. *Journal of Population Economics*, 26(3), 1129-1174.

Abstract: This study presents an evolutionary process of secularization assuming that cultural/social/religious norms (in particular the 'religious taste for children') are transmitted from

one generation to the next via two venues: (i) direct socialization - across generations, by parents; and (ii) oblique socialization - within generations, by the cultural environment. The paper integrates a theoretical model, simulations and an empirical estimation, that lead to the following main findings: (i) direct religious socialization efforts of one generation have a negative effect on secularization within the next generation; (ii) oblique socialization by the community has a parabolic effect on secularization; and (iii) the two types of socialization are complementary in 'producing' religiosity in the next generation.

Data Sources: The International Social Survey Program (ISSP): Religion II, 1998

Countries: 32 countries, Europe, Australia, North America, Chile, Japan, Israel, Philippines

Subjects/Variables: Whole populations

Discipline: Economics

Bardet, J.-P.

Bardet, J.-P. (1988). Les incertitudes de l'explication. In J. Dupâquier (Ed.), *Histoire de la population française* (Vol. 3, pp. 364-378). Paris: Presses Universitaires de France.

Summary: Review of historical trends in French fertility since the 18th century, including rise in Malthusian views. The initial response of the Catholic Church to anti-natalism was not immediate or vigorous. Until the nineteenth century, the Catholic Church policy was not to closely question couples about contraception. An 1816 Roman court ruling, for example, allowed that "a woman can have intercourse even if she knows from experience that her husband will ejaculate outside of the vagina, if in refusing she would be looked down upon by her husband". A change occurred from about the 1870s-1880s, when Toulouse published the Treat of Nardi denouncing "conjugal onanism". Despite this tolerance, Catholic fertility remained higher than the average, until the early twentieth century. Socio-economic rationales are offered for the constant population levels in the 19th century. Edward Wrigley suggests it could be explained by the maintenance of the traditional agrarian structure. Contraception was the response of farmers to avoid fragmentation of land ownership.

Data Sources: Historical vital statistics

Countries: France

Discipline: Historical demography

Barkat-e-Khuda

Barkat-e-Khuda. (2005). Fertility Decline in Bangladesh. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 218-232). London: Hurst.

Summary: At a fertility rate of 3.3 in 1997-1999, Bangladesh is the poorest country in the world to have such low fertility, halved from the rate of 1971-1975 (6.3). Fertility is in part caused by a strong family planning programme, but cannot be wholly attributed to it. The views of the Hanafite school of legal interpretation prevail in Bangladesh, and these maintain that contraception is permissible, subject to the wife's approval, who has as much right to the child as her husband. Hanagites favour birth control in order to safeguard children's future and provide for their physical and emotional

needs. Major socio-economic changes in the last 20 years increasing women's participation in the economy contributed also to lower fertility rates.

Data Sources: Statistical Yearbooks of Bangladesh

Countries: Bangladesh

Subjects/Variables: Bangladeshis, Muslims

Discipline: Demography

Barnett, Larry D.

Barnett, L. D. (1965). Religious Differentials in Fertility Planning and Fertility in the United States. *The Family Life Coordinator*, 14, 161-170.

Abstract: A thorough review of the literature on the differences in fertility planning and fertility between married couples in the major religious groups in the United States (the Protestant, Catholic, and Jewish faiths).

Data Sources: Literature review

Countries: United States

Subjects/Variables: US married couples; Protestant, Catholic, Jewish

Discipline: Sociology

Barnhart, Michael G.

Barnhart, M. G. (2009). Buddhist Family Values: Fertility and Technological Intervention in the Quest for Enlightenment. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 158-178). London: Jessica Kingsley Publishers.

Summary: In Chapter 6, drawing on Sigala Discourse (a dialogue between Buddha and the layman Sigala on the question of proper conduct in family relationships), Michael G. Barnhart discusses Buddhism's views of family and fertility. The main emphasis in Buddhism, in Barnhart's view, is on the overall manner in which one should conduct oneself in living and the degree of compassionately motivated reciprocity that can lead to freedom from suffering. As Barnhart introduces the basic values and concepts of Buddhism, the reader gradually learns that Buddhism is not a dogmatic belief system; Buddhists are relatively free to determine what sorts of rites and socially sanctioned relationships with others support the idea of living in a way that promotes peace and freedom from fear through compassionate reciprocity. Considering that Buddhism is very adaptive, and that historical precedent is of limited value in determining what Buddhist ethics demand, an apparently more 'liberal' approach to fertility control, diverse family structures (including 'alternative' families) and assisted reproduction are also possible from a Buddhist perspective.

Data Sources: Theoretical discussion

Basu, Alaka Malwade

Basu, A. M. (1996). The Demographics of Religious Fundamentalism. In K. Basu & S. Subrahmanyam (Eds.), *Unraveling the Nation: Sectarian Conflict and India's Secular Identity*. New Delhi: Penguin Books India.

Summary: This paper examines the manner in which the demographic argument has been used to justify an anti-minority stance in the Hindu community in India. The Muslim population rose from 11.2% of the total population in 1971 to 11.4% in 1981. Demography perception about communities can lead to exactly the kind of political and social instability that demographic events themselves can.

Data Sources: National Family Health Survey 1992-1993

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Basu, A. M. (1997). The 'Politicization' of Fertility to Achieve Non-Demographic Objectives. *Population Studies*, 51(1), 5-18.

Abstract: It is argued in this paper that "perceptions" about the determinants of fertility and of fertility decline can be "politicized" by various special interest groups; that is, these perceptions can be used to push for policies and interventions which often have an ambiguous relationship to actual fertility, but are important because they already appear on the political agenda of these groups. Such politicization is facilitated by the near-universal consensus that fertility decline is a legitimate goal in the developing world, by the increasing evidence that there can be no grand theory of fertility decline, and by the willingness of scholars to attach a policy significance to all their findings. Two examples of such politicization in India are presented, one of which has a socially beneficial impact, whilst the other is potentially disruptive, to illustrate that such politicization is not without its dangers. One of the examples is the claim by the Hindu right that Muslim fertility will soon overtake the Hindu majority.

Data Sources: Theoretical discussion

Countries: India

Discipline: Demography

Basu, A. M. (2004). The Squabble that Never Ends: Religion and Fertility. *Economic and Political Weekly*, 39(39), 4294-4296.

Abstract: An impartial examination of the complexities underlying simple measures of fertility and population growth will reveal that we are all - Hindu, Muslim and Christian - driven by the same basic quotidian needs and constraints, and that our reproductive behaviour is one important way of reflecting these desires and dilemmas. These conclusions are not exciting, but they need to be publicized in the same way that the raw religious differences have been. This is the joint social responsibility of academia, the press, and political and religious 'leaders'. Such personal exercise of responsibility is essential because demonizing the 'other' is easy, but it is also dishonest and it is often brutally consequential for all sides.

Data Sources: The National Family Health Survey of 1998-1999

Countries: India

Subjects/Variables: Indians; Hindus, Muslims

Discipline: Demography

Baudin, Thomas

Baudin, T. (2010). A Role For Cultural Transmission In Fertility Transitions. *Macroeconomic Dynamics*, 14(4), 454-481.

Abstract: Cultural variables in economic analysis have recently experienced a strong renewal. This evolution sheds a new light on the old debate between the "Beckerian Model" of fertility and the "Synthesis Model" of fertility. In this paper, I propose a fertility model making the long run evolution of culture endogenous. The whole population is divided into two alternative cultures corresponding to specific preferences for fertility. Parents decide their fertility rate and try to transmit their culture to their children. Differential fertility between cultures gives rise to an evolutionary process while differential effort to transmit the parental culture gives rise to a cultural process. The long run distribution of preferences and the average total fertility rate in the population both result from interactions between these two processes. As a result, a fertility transition cannot appear without productivity shocks in favor of the culture which is not biased toward quantity of children. However, these asymmetric productivity shocks are not always a sufficient condition to undergo a fertility transition.

Data Sources: Modeling: Traditional and Modern cultures.

Discipline: Economics

Baudin, T. (2014). *More on Religion and Fertility: The French Connection*: EQUIPPE - Université Lille Nord de France.

Summary: This paper contributes to the study of the relationship between religion and fertility. More specifically, I investigate the impact of being Catholic on fertility in France. Fertility is measured either by the number of children ever born or by completed fertility. I show that women who are strong practisers have significantly more children than other women; however, being a Catholic believer has no significant impact on fertility. I also construct two variables allowing me to detect that the particularized ideology mechanisms can partially explain why religion has an impact on fertility in my dataset. Nevertheless, I cannot exclude the social interactions hypothesis. The multivariate analysis I provide also validates the main mechanisms of the rational actor model.

Data Sources: Enquête Mode de Vie des Français

Countries: France

Subjects/ Variables: French Catholics, no religious affiliation; raised in Catholic family, believing, religiousness (attendance, self-estimation)

Discipline: Demography

Baudin, T. (2015). Religion and fertility: The French connection. *Demographic Research*, 32(13).

Abstract: France has been among the first countries to become secularized but has preserved a Catholic identity. Before 2008, French laws made it very difficult to collect data on an individual's religious affiliation. The dataset "Enquete Mode de Vie des Français" is the first allowing one to collect such data. I investigate the impact that being a Catholic has on fertility in France. I answer two main questions: (i) Do Catholic people have more children than others? (ii) Why is this the case? Fertility is measured by the number of children ever born. I use the dataset "Enquete Mode de Vie des Français" and Zero-Inflated Poisson regression models. Individual religiosity is approximated by the attendance at religious services. I first show that practicing Catholics have more children than the rest of the population, while this is not verified for nominal Catholics. I also construct two variables allowing me to detect that particularized ideology mechanisms (Goldscheider 1971) can explain in part why religion has an impact on fertility in my dataset. Nevertheless, I cannot exclude

the social interaction hypothesis. The multivariate analysis I provide also validates the main mechanisms of the rational actor model. I implement several robustness checks showing that my main results are robust to changing my regression model (ordered probit and linear regressions) and the way religiousness and fertility are measured.

Data Sources: Enquete Mode de Vie des Français

Countries: France

Subjects/ Variables: French Catholics versus no affiliation; those raised in Catholic families; religiosity (attendance, self-assessment)

Discipline: Demography

Bean, Lee L.; May, Dean L.; Skolnick, Mark

Bean, L. L., May, D. L., & Skolnick, M. (1978). The Mormon Historical Demography Project. *Historical Methods*, 11(1), 45-53.

Abstract: The paper outlines the Mormon Historical Demography Project, University of Utah. The LDS Genealogical Department has recorded genealogical information in forms called family group sheets, totalling 8M. In 1973 a team of researchers at the University of Utah decided to use these records to develop a data base that could then be linked to various medical records to investigate the genetic transmission of several diseases. In the spring of 1975, several scholars from the University of Utah and the Historical Department of the LDS church began to explore the use of the data base for historical demographic studies. Analysis of once-married Mormon females, 1820-1920, show median age of marriage for females declined from 21.29 years for the 1820-34 marriage cohort to 19.38 years for the 1870-80 marriage cohort. It then increased to 21.36 years for the 1911-20 group. The total marital fertility rate reached a peak in 1870-80, 11.3 children, and the number of children ever born reached a peak of 8.34 children for the 1859-69 marriage cohort. Given the high levels of observed fertility, it appears that the Mormon population is characterized by natural fertility.

Data Sources: Mormon Historical Demography Project

Countries: United States

Subjects/ Variables: Once-married Mormon females, 1820-1920

Discipline: Demography

Bean, Lee. L.; Geraldine Mineau; Douglas Anderton

Bean, L. L., Mineau, G., & Anderton, D. (1983). Residence and religious effects on declining family size: an historical analysis of the Utah population. *Review of Religious Research*, 25(2), 91-101.

Abstract: The patterns of fertility change in successive birth cohorts of Utah women are traced, starting with those born in 1840-1845 and ending with those born in 1895-1899. The study is based on a data set generated by a large-scale medical genetics program at the University of Utah. These data permit the classification of the study population into four sub-cohorts distinguished by dichotomies of religious commitment and exposure to urban secularizing influences. The focus of the study is on the influence of religious factors on the transition from natural to controlled fertility. The analysis suggests that women in all of the sub-cohorts, differing in religious commitment and

exposure to urban influences, adopted birth spacing and truncation behavior at increasingly early ages. However, the more religious and rural population adopted family limitation at higher parities.

Data Sources: Family group sheets, Utah Genealogical Society

Countries: United States (Utah)

Subjects/Variables: Once-married couples, with the wife born between 1840-45 and 1895-99 and married between age 10 and 45, both spouses surviving until the wife reached age 45

Discipline: Demography

Becker, Gary S.; Landes, Elisabeth M.; Michael, Robert T.

Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An Economic Analysis of Marital Instability. *Journal of Political Economy*, 85(6), 1141-1187.

Abstract: This paper focuses on the causes of marital instability. Section I develops a theoretical analysis of marital dissolution, incorporating uncertainty about outcomes of marital decisions into a framework of utility maximization and the marriage market. Section II explores implications of the theoretical analysis with cross-sectional data, primarily the 1967 Survey of Economic Opportunity and the Terman sample. The relevance of both the theoretical and empirical analyses in explaining the recent acceleration in divorce rates is also discussed. Probability of divorce increases in religion intermarriage. This in turn reduces fertility.

Data Sources: Nationwide survey of approximately 30,000 households conducted by the U.S. Bureau of the Census in 1967 (the Survey of Economic Opportunity [SEO] data), and also a survey of approximately 1,500 persons with IQs over 135 who were first surveyed in 1921 by psychologist Lewis Terman and who were resurveyed over the subsequent 50 years (the Terman Survey)

Countries: United States

Subjects/Variables: 30,000 US households; 1,500 persons with IQs over 135

Discipline: Economics

Beit-Hallahmi, Benjamin

Beit-Hallahmi, B. (1997). Biology, Destiny and Change: Women's Religiosity and Economic Development. *Journal of Institutional and Theoretical Economics (JITE)* / *Zeitschrift für die gesamte Staatswissenschaft*, 153(1), 166-178.

Abstract: In underdeveloped countries we are faced with the vicious circle of high fertility, with resulting population growth and economic stagnation. The cultural background of this economic situation is marked by the low status of women, usually sanctioned by major world religions, which enjoy women's enthusiastic support. Religion is often described as a major obstacle to family planning and all other changes in women's status, which are the key to lowering fertility. Economic growth, education, and birth control are all interconnected, and they are all tied to secularization. Education seems the surest way, guaranteed to reduce fertility in most developing societies.

Data Sources: Theoretical discussion

Benz, Ernest

Benz, E. (2006). Family limitation among political Catholics in Baden in 1869. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 107-132).

Dordrecht: Springer.

Summary: The study challenges the view that orthodox Roman Catholicism was an obstacle to contraception. Reconstituted family histories in local genealogies from the German state of Baden reveal that supporters of a new political Catholic movement (ultramontanes) in 1869 joined in the fertility transition by the middle years of the nineteenth century, a generation or two ahead of most Europeans. In addition, there was no significant difference in fertility in the family histories of public supporters of national liberalism. Jews in the region only temporarily lagged behind Christians. Benz concludes that possible impacts of religion on fertility go beyond doctrines, values, and institutional controls to the ways religious contacts spread information and practices of all sorts.

Data Sources: *Ortssippenbücher* (OSB), or local genealogies, prevalent in Ettenheim county, which assemble parish and civil registers

Countries: Baden (Germany)

Subjects/ Variables: Orthodox Catholics; political liberals; Jews

Discipline: History

Berghammer, Caroline

Berghammer, C. (2009). Religious Socialisation and Fertility: Transition to Third Birth in The Netherlands. *European Journal of Population / Revue Européenne de Démographie*, 25(3), 297–324.

Abstract: Although previous studies have demonstrated that religious people in Europe have larger families, the role played by religious socialisation in the context of contemporary fertility behaviour has not yet been analysed in detail. This contribution specifically looks at the interrelation between religious socialisation and current religiosity and their impact on the transition to the third child for Dutch women. It is based on data of the first wave of the Netherlands Kinship Panel Study (2002–2004) and uses event history analysis. The transitions to first, second and third birth are modelled jointly with a control for unobserved heterogeneity. The findings provide evidence for an impact of women's current church attendance as well as religious socialisation measured by their fathers' religious affiliation, when they were teenagers. A religious family background remains influential even when a woman has stopped attending church. The effects of religious indicators strengthen over cohorts. Moreover, the combined religious make-up of the respondent's parents also significantly determines the progression to the third child.

Data Sources: The first wave of the Netherlands Kinship Panel Study (2002–2004)

Countries: Netherlands

Subjects/ Variables: 8,161 individuals (4,741 women and 3,420 men) living in private households in the Netherlands, 18 to 79 years old; no religion, Roman Catholic, Dutch Reformed, Calvinist (synodal), Calvinist (orthodox), others; religiosity; parental religion at age 15

Discipline: Demography

Berghammer, C. (2012). Church attendance and childbearing: Evidence from a Dutch panel study, 1987-2005. *Population Studies*, 66(2), 197-212.

Abstract: While researchers have often found that Europeans who report faith-based beliefs or practices have larger families than those who do not, there is a lack of evidence on the reasons for these links. This study investigated whether having a first child affects parents' level of church attendance and whether the frequency of church attendance at different times in life predicts a person's (almost) completed fertility. Drawing on five waves of a large-scale Dutch panel survey, the study used data that cover a substantial part of the respondents' reproductive period (1987-2005). In contrast to findings from the USA, the results suggest a one-way influence: having a first child does not predict a change in church attendance, but church attendance is a strong predictor of future childbearing.

Data Sources: Data from the Panel Study of Social Integration in the Netherlands (PSIN; Liefbroer and Kalmijn 1997)

Countries: Netherlands

Subjects/Variables: Dutch males and females born in 1961, 1965, and 1969

Discipline: Demography

Berghammer, C. (2012). Family Life Trajectories and Religiosity in Austria. *European Sociological Review*, 28(1), 127–144.

Abstract: A growing body of research documents the persistent relevance of religiosity for partnership and reproductive behaviour in Europe. This study expands the current knowledge by analysing whole union and fertility trajectories—i.e. entering cohabitation versus direct marriage, non-marital childbearing, number of children, divorce—instead of focusing on single events as previous research did. It is based on data from the first wave of the Austrian Generations and Gender Survey (2008–2009) and includes 1,249 women and men aged 40–45 years. Using sequence analysis, respondents are first clustered around several template family life paths. Afterwards, the role of religiosity in following one rather than another path is ascertained with the help of multinomial logit regression. Four aspects—affiliation, mass attendance, self-assessed religiosity, and religious socialization—are considered. Compared to their less religious peers, religious people are more likely to choose direct marriage rather than prior cohabitation. Yet they prefer the latter option over more 'adverse' life paths involving non-marital childbearing, sequential cohabitation, and divorce. Permanent singlehood without children is equally widespread among both groups. Differences in religiosity play a minor role in explaining why people have two or three children, once they have decided to enter premarital cohabitation or to marry directly.

Data Sources: Austrian Generations and Gender Survey (2008–2009)

Countries: Austria

Subjects/Variables: 1,249 women and men aged 40–45 years

Discipline: Demography

Berhanu, Betemariam

Berhanu, B. (1994). Religion fertility differentials in Shewa, central Ethiopia. *Journal of Family Welfare*, 40(1), 22-29.

Abstract: Multiple classification analysis (MCA) of census data on Shewa province in Ethiopia revealed differences in fertility by religious affiliation. Muslims had lower fertility than a combination of Catholics, Protestants, or Orthodox Christians in rural Shewa and total Shewa. This finding was not supported by prior studies. The explanation for the different results may be in the influences of

socioeconomic or demographic factors. In this study, the fertility differences by religious group were small, and religion had low beta values for all Shewa, rural, and urban areas. Analysis that accommodates socioeconomic differences and other important predictor factors might show greater convergence among religious groups. Shewa is centrally located and includes the capital city of Addis Ababa. In 1984, about 20% of the total Ethiopian population resided in Shewa. The crude birth rate in 1984 was 45/1000 population, and the total fertility rate was 7.7 children per woman. The region is comprised of 30 ethnic groups: about 23.4% are Muslims and about 75% are Christian groups (Protestants, Orthodox Christians, and Catholics). Data were obtained from the 5% sample of women aged 15-49 years of the Population and Housing Census for 1984. Fertility was measured as surviving children ever born. The sample included about 62% Orthodox Christians, 30% Protestants, 6% Catholics, and 2% Muslims, and only seven ethnic groups. ANOVA methods were used to examine the interaction effects between variables. Urban Muslim women were found to have higher urban fertility. Lower fertility was found among women engaged in the labor force and with increased education for all religious groups. Protestants in the adjusted MCA had the highest fertility for all women and among rural women. Orthodox Christians had the lowest fertility. The MCA model accounted for more than 33% of the variance in fertility in total Shewa and in urban and rural areas.

Data Sources: Ethiopian Population and Housing Census (1984)

Countries: Ethiopia

Subjects/ Variables: 5% sample of women aged 15-49 years; Ethiopians; Muslims, Catholics, Protestants, Orthodox

Discipline: Demography

Berman, Eli; Iannaccone, Laurence R.; Ragusa, Giuseppe

Berman, E., Iannaccone, L. R., & Ragusa, G. (2012). *From empty pews to empty cradles: Fertility decline among European Catholics*. Cambridge, MA: National Bureau of Economic Research.

Summary: Catholic countries of Europe pose a demographic puzzle – fertility is unprecedentedly low (total fertility=1.3) despite low female labor force participation. We model three channels of religious effects on demand for children: through changing norms, reduced market wages, and reduced costs of childrearing. We estimate their effects using new panel data on church attendance and clergy employment for thirteen European countries from 1960-2000, spanning the Second Vatican Council (1962-65). Catholic theology is uniform across countries. Yet service varied considerably across countries and over time, especially before the Council, reflecting differences in Church provision of education, health, welfare and other social services. We use differential declines in service provision -- measured by nuns/capita -- to identify its effect on fertility, controlling for secular trends. They are large: 300 to 400 children per nun. Reduced religiosity (measured by church attendance) has no effect for Protestants, but predicts fertility decline for Catholics. The data suggest that service provision and religiosity complement each other – a finding consistent with referential provision of services to church attendees. Nuns outperform priests in predicting fertility, suggesting that the childrearing cost channel dominates theology and norms.

Data Sources: Administrative data from the Vatican (1959-), the International Social Survey Program (ISSP), the World Development Indicators (WDI)

Countries: Europe

Subjects/ Variables: Europeans; Catholic, non-Catholic

Discipline: Economics

Berman, Eli; Stepanyan, Ara

Berman, E., & Stepanyan, A. (2003). *Fertility and education in radical Islamic sects: Evidence from Asia and Africa*. Cambridge, MA: National Bureau of Economic Research.

Bessey, Donata

Bessey, D. (2017). Religion and Fertility in East Asia: Evidence from the East Asian Social Survey. *Pacific Economic Review*, **(), **.**

Abstract: This article analyses the effect of religious affiliation on fertility in Japan, Korea and the Republic of China (Taiwan). It adds to the sparse empirical evidence on the effects of religious affiliation on fertility in East Asia, for both Christian and other religions. It uses an identity-economic model and analyses prescriptions among the different religions to derive testable hypotheses. In the empirical section, the East Asian Social Survey and a generalized Poisson model are used to estimate the effects of different religions on fertility. In line with theoretical predictions, the empirical results suggest that a positive effect of Catholicism on fertility is still present in East Asia. In line with the sparse previous empirical evidence on Buddhism, it seems to have no effect on fertility.

Data Sources: The 2006 wave of the East Asian Social Study (EASS) and data for Japan, Korea and the Republic of China (Taiwan),

Countries: Japan, Korea, Taiwan

Subjects/ Variables: Women above age 45 who should have completed their fertility decisions; the respondent's ideal number of children

Discipline: Economics

Bhagat, R.B.

Bhagat, R. B. (1998). Recent Trends in Population Growth and Fertility Level among Muslims in Major States of India, 1981-91. In M. H. Qureshi (Ed.), *Muslims in India Since Independence: A Regional Perspective* (pp. 67-80). New Delhi: Institute of Objective Studies.

Summary: A study of the Muslim population in India in recent decades. The higher growth rate among Muslims is largely the outcome of higher natural increase compared to Hindus, with migration contributing a little. The fertility level is relatively higher among Muslims, but has shown a decline in recent decades. A substantial number of Muslims have started practising family planning recently, yet still lag behind due primarily to the fact that Muslim women are mostly illiterate and economically poor.

Data Sources: Censuses

Countries: India

Subjects/ Variables: Indians; Muslim, Hindu

Discipline: Demography

Bhagat, R. B. (2015). *Transition in Hindu and Muslim Population Growth Rates: Myth and Reality.* Vadodara.

Summary: The population growth and fertility level among Muslims has been relatively higher than Hindus, but showing a substantial declining trend. It is also not correct to presume that Muslims are a monolithic group as they are exhibiting varying levels of population growth and fertility levels. The decadal growth rate of Muslim population varies as low as 10 to 15 per cent in the state of Kerala and undivided Andhra Pradesh to about 30 per cent in the states of Assam and Bihar. While studies show that the differential in fertility by religion does persist, there are ample evidences to confirm that fertility declines as women's education rises. This is also true for Muslims. On the other hand, Muslim population growth is also the product of mortality advantages as mortality is lower among Muslims compared to Hindus. There is also a time lag in the onset of fertility decline. So while Hindu population will likely to stabilize by 2061, Muslims will stabilize by 2071. In this event some rise in the share of Muslims is likely, but the idea that Muslims will outnumber Hindus is a myth. The time lag in demographic transition among Muslims reflects the impact of the combination of interacting factors which are both socioeconomic and political rooted in the minority status of the community. However, Muslims are not very different from those who are poor and less educated but their response to such problems is likely to be influenced by the issues they face vis-à-vis identity, security and inclusiveness. The gap between Hindus and Muslims in fertility levels is the result of the time lag in demographic transition between the two communities, and is a passing phase in the demographic history of India.

Data Sources: 2011 Census

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Bhagat, R.B.; Praharaj, Purujit

Bhagat, R. B., & Praharaj, P. (2005). *Hindu-Muslim Fertility Differentials. Economic and Political Weekly, 40(5), 411-418.*

Abstract: Although a Hindu-Muslim differential in fertility has persisted in India, it is no more than one child, and even this gap is not likely to endure as fertility among Muslims declines with increasing levels of education and standards of living. While the lower level of contraceptive use among Muslims is the most important factor responsible for the fertility differentials, the use of contraceptives has increased faster among Muslims in recent times. However, the relatively higher fertility among Muslims cannot be understood independent of its socio-economic and political contexts.

Data Sources: Census 2001

Countries: India

Subjects/Variables: Indians; Hindus, Muslims

Discipline: Demography

Bhagat, R.B.; Unisa, S.

Bhagat, R. B., & Unisa, S. (1991). Religion, Caste/Tribe and Marriage Age of Females in India. *Journal of Family Welfare*, 37(1), 17-22.

Bhat, P.N. Mari

Bhat, P. N. M. (1996). Contours of Fertility Decline in India: A District Level Study Based on the 1991 Census. In K. Srinivasan (Ed.), *Population Policy and Reproductive Health* (pp. 96-177). Delhi: Hindustan.

Summary: The census analysis confirms that a secular fall in fertility is currently underway in much of India. The estimated speed and spread of the decline is larger than what the Sample Registration rates had indicated. The total fertility, which had fallen from 5.6 births per woman in 1971 to 4.9 in 1977, is estimated to have declined further to 4.1 in 1987. The SRS, whose levels appear to be more complete now, shows that the downward trend has continued to reach a TFR level of 3.7 by 1991. Thus total fertility in India has declined by about two births per woman, or by one-third in the 20 year period between 1971 and 1991.

Data Sources: Censuses; National Family Health Survey, 1992-93 (International Institute for Population Sciences, 1995)

Countries: India

Subjects/Variables: All-India

Discipline: Demography

Bhat, P. N. M. (2004). Religion in Demographic Transition: The Case of Indian Muslims. In S. I. Rajan & K. S. James (Eds.), *Demographic Change, Health Inequality and Human Development in India* (pp. 59-137). Hyderabad: Centre for Economic and Social Studies.

Bhat, P. N. M. (2005). Trivialising Religion: Causes of Higher Muslim Fertility. *Economic and Political Weekly*, 40(13), 1376-1379.

Abstract: A response to in the EPW special issue on fertility behaviour of Hindus and Muslims (40, no. 5; January 29, 2005). Jeffrey and Jeffrey criticism Hindu nationalists for exaggerating fertility differences, but the significance of differentials should be argued vis-a-vis other works of scholarship. There are at least three separate lines of argument that studiously avoid implicating religion. First, the higher fertility of Muslims is attributed to their minority status, and constant threats and vilification campaign of Hindu nationalists [Bhagat and Praharaj 2005; Dharmalingam et al 2005; Jeffrey and Jeffrey 2005]. Second, it is attributed to their higher natural fertility and delayed onset of fertility decline, owing to their lower socio-economic status [James and Nair 2005; Krishnaji and James 2005]. Third, Borooah and Iyer (2005) attribute it to the low degree of daughter aversion among Muslims. The last one, while invoking religion, highlights a positive attribute of Muslims. All three lines of argument lack substance. In addition, contra the minority group hypothesis, there is no evidence of an increase in Muslim fertility during periods of greater perception of threat to the community.

Data Sources: National Fertility Health Surveys

Countries: India

Subjects/Variables: Indians; Hindu and Muslim

Discipline: Demography

Bhat, P.N. Mari; Xavier, A.J. Francis

Bhat, P. N. M., & Xavier, A. J. F. (2005). Role of Religion in Fertility Decline: The Case of Indian Muslims. *Economic and Political Weekly*, 40(5), 385-402.

Abstract: The fertility of Muslims, which was about 10 per cent higher than that of Hindus before independence, is now 25 to 30 per cent higher than the Hindu rate, and the difference according to religion is larger than the difference between the forward and depressed Hindu castes and tribes. This paper subjects the micro data from the National Family Health Surveys to a multivariate analysis to assess the contribution of socio-economic factors to the fertility differential by religion. It also explores the possible reasons for the large, residual effect of religion on fertility, and causes for the religious disparities in socio-economic conditions. The paper concludes with an assessment of the implications of the current demographic trends for the future population sizes of the two religious groups.

Data Sources: National Family Health Surveys of 1992-93 (NFHS-1) and 1998-99 (NFHS-2)

Countries: India

Subjects/ Variables: Hindu and Muslim women of age beyond 40

Discipline: Demography

Bhatia, P.S.

Bhatia, P. S. (1990). Population growth of various communities in India: myth and reality. *Demography India*, 19(1), 121-129.

Abstract: Hindus and Muslims in India have almost the same mean female age at marriage in rural areas (around 16.5 years) as well as in urban areas (around 17.5 years). Hindus and Muslims are also very close in percentage of married women aged 15-49 (75% rural and 83% urban). Polygamous marriages are 15.25% for tribal, 7.97% Buddhists, 6.72% Jains, 5.8% Hindus, 5.73% Muslims. Disapproval of family planning was highest among Muslims

Data Sources: Census 1971; All India Surveys, Operations Research Group, 1970, 1980

Countries: India

Subjects/ Variables: Indians; Hindu, Muslim, Buddhist, Jain, tribal, Christian

Discipline: Demography

Billings, John S.

Billings, J. S. (1890). Vital Statistics of the Jews in the United States. *Census Bulletin*(19), 3-23.

Abstract: Survey of 10,618 Jewish families (60,630 Jews) as at December 31, 1889, including a wide range of demographic variables. The survey was made only of religious Jews (based on synagogue records) resident in the US for at least 5 years, in order to compare their characteristics to religious Jews in Europe. The Jewish birth rate was lower than the non-Jewish one.

Data Sources: Survey of 10,618 Jewish families (60,630 Jews) as at December 31, 1889

Countries: US

Subjects/Variables: Jews

Discipline: Statistician

Blake, Judith

Blake, J. (1966). The Americanization of Catholic Reproductive Ideals. *Population Studies*, 20(1), 27-43.

Abstract: The present study singles out for analysis the family-size ideals of Catholics in relation to the ideals of their Church and of non-Catholics. The paper falls into two parts: One, the ideals and norms concerning family size as expressed by the Catholic papacy and clergy; and, two, the actual lay attitudes as ascertained empirically through national surveys.

Data Sources: Gallup Polls (1952, 1957, 1959), Gallup Youth Survey 1961, American Institute of Public Opinion Research and Roper Associates; Growth of American Families Studies 1955 and 1960 (University of Michigan-Scripps Foundation)

Countries: United States

Subjects/Variables: US Catholic, non-Catholic

Discipline: Demography

Blake, J. (1984). Catholicism and Fertility: On Attitudes of Young Americans. *Population and Development Review*, 10(2), 329-340.

Abstract: It has not always been possible, in the data available with regard to family size, to distinguish between practicing Catholics and nominal ones. Hence, the convergence and divergence of "Catholic" fertility during this century in North America may have been due, in part, to compositional effects among Catholics-differences in devoutness associated with other attributes such as ethnicity or rural background. Recent data do allow us to segregate practicing Catholics from nominal Catholics. The data used by Westoff and Jones permitted a distinction by frequency of taking Communion, as did those analyzed by Mosher and Hendershot. Westoff and Jones found no difference in the total marital fertility rate by frequency of Communion; Mosher and Hendershot found a large difference. The present analysis of high school sophomores and seniors, surveyed in 1980, supports the conclusion that differences between Catholics and non-Catholics in fertility-related variables persist. Practicing Catholics, as compared with non-Catholics, expect larger families, rate having children as more important, are more traditional in defining the maternal role, and know less about birth control. By and large, practicing religious Catholics who attend Catholic schools diverge the most from non-Catholics in their response to fertility-related questions

Data Sources: Subsample of 29,495 students from the first (1980) wave of the National Center for Education Statistics Study, "High School and Beyond"

Countries: United States

Subjects/Variables: US students; Catholic, non-Catholic; religiosity (attendance, self-assessment, schooling)

Discipline: Demography

Blume, Michael

Blume, M. (2009). The Reproductive Benefits of Religious Affiliation. In E. Voland & W. Schiefenhövel (Eds.), *The Biological Evolution of Religious Mind and Behavior*. Berlin: Springer.

Summary: As the brain of early humans expanded, they gained increasing abilities of considering cooperative tasks – finally including reproduction. The subsequent, probably convergent evolution of religious beliefs and related behaviors such as burials and offerings among *Homo sapiens* and among *Homo neanderthalensis* illustrates that religious abilities evolved as a logical consequence: perceived supernatural agents like ancestors or Gods are experienced as observing streams of tradition conferring values and communal trust, rewarding cooperative adherents and punishing transgressors. They advocate reproductive motivation as well as marriage. Believers may signal their trustworthiness to each other by costly obligations and rituals dedicated to the supernatural agents. Religion-related genetic dispositions as well as demographically successful traditions are thus favoured by direct and kin selection and by sexual selection, as shown by the Swiss Census 2000 and international demographic data.

Data Sources: Swiss Census 2000

Countries: Switzerland

Subjects/ Variables: Whole population

Discipline: Religious Studies

Blume, M. (2010). Von Hayek and the Amish Fertility: How religious communities manage to be fruitful and multiply - A case study. In U. Frey (Ed.), *The Nature of God: Evolution and Religion* (pp. 159-175). Baden: Tectum.

Summary: An evolutionary hypothesis formulated by Friedrich August von Hayek (1899-1992) about successful religions bestowing 'reproductive advantages' upon their adherents has been validated by numerous studies during the last years. On average, religious people tend to have higher fertility than their secular neighbours, leading to contemporary and complex developments in modern and shrinking populations. But to state correlations doesn't explain them. On the basis of the peculiar (but not singular) demographic expansion of the Amish, a religious community which achieved very high birth rates for centuries while refusing converts, the proximate mechanisms at work at the individual, social and institutional levels are explored exemplarily.

Data Sources: Discussion of earlier studies

Countries: United States

Subjects/ Variables: US Amish

Discipline: Religious Studies

Blume, M. (2014). *Religion und Demografie: Warum es ohne Glauben an Kindern mangelt*. Sciebooks.

Bok, Willy.

Bok, W. (1981). Aspects de la limitation des naissances dans la société juive traditionnelle. In R. Gubbels (Ed.), *Société et procréation: les facteurs sociaux qui l'influencent*. (pp. 75-118). Bruxelles: Editions de l'Université de Bruxelles.

Summary: While some Jewish norms could have encouraged family limitation, more important were the typical Jewish social conditions and political constraints.

Countries: France

Subjects/Variables: Jews

Bonmariage, Joseph; Gérard, Hubert

Bonmariage, J., & Gérard, H. (1970). Fécondité, religiosité et doctrine catholique: Étude exploratoire. *Recherches Économiques de Louvain / Louvain Economic Review*, 36(4), 291-308.

Abstract: Analysis of the direct influence on fertility of the Catholic Church's doctrine of procreation, on the basis of a sample of 326 married Belgian Catholic women. There are no significant attitudes to abortion, sterilization or contraception among the various levels of religiosity and religious orientation. 61.66% of the respondents consider that the Church encourages an average family, i.e., three children.

Data Sources: Interviews collected in 1966

Countries: Belgium

Subjects/Variables: 326 once-married Belgian-born Catholic women (marriage age 20-29, married for less than 20 years), regularly attending Sunday Mass

Discipline: Economics

Boonstra, O. W. A.; Van der Woude, A. M.

Boonstra, O. W. A., & Van der Woude, A. M. (1984). *Demographic transition in the Netherlands: a statistical analysis of regional differences in the level and development of the birth rate and of fertility, 1850-1890*. (Vol. 24). Utrecht: HES Publishers.

Summary: Controlling for variables such as mortality, the agrarian system (clay or sandy soil), the balance of migration, illiteracy, and population density, the study demonstrates that religion explains a large amount of local variation in marital fertility (1850-1890).

Data Sources: Dutch municipalities between 1850 and 1890

Countries: Netherlands

Subjects/Variables: Dutch

Discipline: Demography

Borooah, Vani K.

Borooah, V. K. (2004). The politics of demography: a study of inter-community fertility differences in India. *European Journal of Political Economy*, 20, 551-578.

Abstract: The purpose of this paper is to examine differences in fertility between Hindu and Muslim women in India with a view to shedding light on an issue that both polarises and inflames academic and political opinion in India: how much of the higher fertility rate of Muslim women is due to differences between the communities in their responses towards fertility-influencing factors and how much is due to differences between them in their endowments of such factors? The answer to this question is based on an econometric analysis of data for over 28,000 currently married women,

drawn from rural households across India. The sample of women was divided into three mutually exclusive groups: Hindus, Muslims and scheduled castes/tribes (Dalits). An econometric equation, with the number of live births to each woman as the dependent variable, was estimated, and the size of the coefficient, on each of the determining variables, was allowed to vary according to the community of the woman. After comparing the high-fertility central, and the low-fertility southern, regions of India, the results suggest that slightly over a half of the observed births surplus of Muslims over Hindus was due to differences between Muslims and Hindus in their responses toward fertility-influencing factors.

Data Sources: Subsample from survey of 33,230 rural households by National Council of Applied Economic Research (NCAER) in January–June 1994

Countries: India

Subjects/ Variables: Over 28,000 currently married women, drawn from rural households across India; Hindus, Muslims and scheduled castes/tribes (Dalits)

Discipline: Economics

Borooah, Vani K.; Iyer, Sriya

Borooah, V. K., & Iyer, S. (2005). Religion, Literacy, and the Female-to-Male Ratio. *Economic and Political Weekly*, 40(5), 419-427.

Abstract: This paper proposes a new explanation for religious differences in fertility in India by incorporating the issue of gender bias into the debate. It reports the results from an econometric investigation of the factors influencing the sex ratio at birth and among currently living children, by religion and by caste, for a sample of over 10,000 women. The investigation paid particular attention to religion and caste by subdividing the sample into Hindu, Muslim and dalit women who had all terminated their fertility. It enquired whether the effect of different variables on the sex ratio varied according to the religion and caste of the women. The econometric analysis found that a husband being literate served to raise the sex ratio - both at birth and of currently living children - but that the effect of husbands' literacy was stronger for Muslims and dalits than it was for Hindus. In other words, while the illiteracy of husbands exacerbated 'son preference' (and its obverse, 'daughter aversion'), the preference for sons (and the aversion to daughters) exercised a stronger hold on Hindu families than it did on Muslim and dalit families.

Data Sources: National Council of Applied Economic Research (NCAER) survey, January–June 1994 (Shariff 1994)

Countries: India

Subjects/ Variables: 10,548 currently married women who had terminated their fertility; Hindu, Muslim, dalit

Discipline: Economics

Bose, Ashish

Bose, A. (2005). Beyond Hindu-Muslim Growth Rates: Understanding Socio-Economic Reality. *Economic and Political Weekly*, 40(5), 370-374.

Abstract: It is important to go beyond the population growth rate figures of Hindus and Muslims and give a thought to other demographic, economic and social variables. From a study of the census data from 49 districts around the country with a substantial Muslim population, it appears that more than religion, it is the geographical location and economic conditions prevailing there that influence the condition of the people.

Data Sources: 2001 Census report on religion, The First Report on Religion Data (2001)

Countries: India

Subjects/ Variables: Indians; Hindus, Muslims

Discipline: Demography

Bouvier, Leon Francis

Bouvier, L. F. (1971). *The Effect of Catholicism on the Fertility of Rhode Island Women: 1968-1969*. Brown University, Ph.D.

Summary: The study examines whether Catholicism remained an important determinant of fertility in the latter 1960s. The findings are based on a comparison of Catholics and non-Catholics in a sample survey of Rhode Island couples in 1968-1969. Generally, Catholics are likely to have had, to desire, and to expect somewhat larger families than non-Catholics. Path analysis examined four independent variables in addition to religion: educational attainment; labour force activity, children ever born, and children expected. Education is negatively related to religion. Labor force activity is not affected by either religious affiliation or educational attainment. The number of children ever born is related negatively to labor force participation and educational attainment, but positively to religion. Educational attainment is negatively, and labour force participation and religion are positively, related to expected family size. The actual fertility of Rhode Island women is lower than that noted in any of the earlier studies. This is true of both Catholics and non-Catholics. However, this decrease has been more manifest among non-Catholics. The family size expectations of Catholics in Rhode Island have, however, declined substantially since the early 1960s whereas the non-Catholics show little evidence of changing plans. Thus the evidence strongly suggests that convergence has been taking place in the latter part of the decade though it is not complete. Catholics are almost as likely as non-Catholics to be practising birth control.

Data Sources: Sample of couples from Rhode Island

Countries: United States

Subjects/ Variables: Sample of 973 once-married couples, with the wife under the age of 50, in Rhode Island

Discipline: Demography

Bouvier, Leon Francis; Rao, Seth L.N.

Bouvier, L. F., & Rao, S. L. N. (1975). *Socioreligious factors in fertility decline*. Cambridge, MA: Ballinger Publishing Company.

Summary: Correlation of the influences of society and religion on family planning practices, with particular emphasis on the role of the Roman Catholic Church. Working with a wide array of variables --including ethnicity, female labor force participation, age at marriage and socio-economic

status -- the authors present a comprehensive analysis of changing attitudes and behavior with respect to various aspects of family planning and birth control.

Countries: United States

Bowers, Donald W.; Hastings, Donald W.

Bowers, D. W., & Hastings, D. W. (1970). Child-spacing and wife's employment status among University of Utah graduates: 1940-1941. *Rocky Mountain Social Science Journal*, 7(2), 125-136.

Brañas-Garza, Pablo; Neuman, Shoshana

Brañas-Garza, P., & Neuman, S. (2006). *Is Fertility Related to Religiosity? Evidence from Spain*.

BonnSummary: The paper explores the relationship between religiosity and fertility among Catholics in Spain, thereby answering the question whether the two parallel trends of dramatic drops in fertility and in religiosity are inter-related. It looks at current religiosity as well as exposure to religiosity during childhood. A unique, rich, data set is employed. It includes various dimensions of religiosity: respondent's religious affiliation; if he is Catholic - his current mass attendance (six levels) and his current prayer habits (eleven levels); spouse's religious affiliation; parental (maternal and paternal) and respondent's mass attendance when the respondent was a child (nine levels); Catholic education during childhood (yes/no). The multifacet data on religiosity (rather than a single dichotomous variable) facilitates a sophisticated analysis with rigorous conclusions. The sample is restricted to married Catholic (female and male) respondents who were raised by Catholic parents, and are married to a Catholic spouse, in order to have a homogenous sample and to focus on the effect of the level (intensity) of religiosity (rather than religious affiliation) on fertility. Fertility is related to the various dimensions of religiosity- first using cross-tabulation and then using OLS regression. We find that fertility is not related to current intensity of religiosity. Exposure to religious activities during childhood has a significant effect on fertility of women (but not men): interestingly a father who was actively attending mass services has a positive effect on his daughter's future fertility (increasing the number of kids by about 0.8) while the mother's active mass participation has a reverse negative effect (leading to a decrease of one kid). Own participation in mass services during childhood has a positive effect on fertility- leading to an increase of 0.6 kids if the girl attended mass services intensively. This study indicates the significance of childhood experience in shaping the 'taste for children'. It also suggests that there is no direct link between the fast secularization in Spain and the decline in birth rates.

Data Sources: The Spanish Fertility Survey 1985 and 1999; Centro de Investigaciones Sociológicas (Center for Sociological Research, Spain), International Social Survey Program: Religion II, supported by UNESCO

Countries: Spain

Subjects/ Variables: Spanish Catholics who grew up in households composed of two Catholic parents.

Discipline: Economics

Brañas-Garza, P., & Neuman, S. (2007). Parental Religiosity and Daughters' Fertility: The Case of Catholics in Southern Europe. *Review of Economics of the Household*, 5(3), 305-327.

Abstract: Preferences, including preferences for children, are shaped during the formative years of childhood. It is therefore essential to include exposure to religious practice during childhood in an attempt to establish a link between religiosity and fertility. This path has not been explored in the documented literature that looks at the relationship between current religiosity and fertility. The International Social Survey Programme: Religion II (ISSP) provides the data base. It includes information on maternal/paternal/own mass participation when the respondent was a child (nine levels each), as well as on his current churchgoing (six levels) and prayer habits (eleven levels). These variables are included as explanatory variables in 'fertility equations' that explain the number of children of Catholic women in Spain and Italy. The core findings are that exposure to religiosity during the formative years of childhood, has a pronounced effect on women's 'taste for children' that later on translates into the number of her offspring. In Spain, the two parents have major opposite effects on women. Most striking is the negative effect of the mother's intensity of church attendance on her daughter's fertility: Women who were raised by an intensively practicing mother have on average one child less than their counterparts who were raised by a less religious mother. On the other hand, an intensively practicing father encourages the daughter to have more children (by about 0.8, on average). The Italian sample confirms the statistically significant negative effect of the mother's religiosity. The father's religious conduct has apparently no effect on Italian women's birth rates. Current religiosity seems to be irrelevant, both in Spain and in Italy. It follows that religiosity and fertility are interrelated but the mechanism is probably different from the simplistic causality that is suggested in the literature.

Data Sources: International Social Survey Program: Religion II (ISSP)

Countries: Spain and Italy

Subjects/Variables: Selection from 2488 Spanish respondents (women and men) and 1008 Italian respondents; 207 Spanish and 123 Italian married Catholic women younger than 46 who were raised by two Catholic parents and have a Catholic husband; religiosity

Discipline: Economics

Breton, Roland

Breton, R. (1988). Religion et évolution démographique en Inde. *Population*, 43(6), 1089-1122.

Abstract: This study of demographic change in India over a century of detailed censuses, shows characteristic behaviour in each socio-religious community, although within the context of its own traditions, and susceptible to more or less rapid change. For example, the highest growth rates at the time of the British Raj, were recorded among Christians, but since independence, birth rates among them have clearly begun to fall, much as in the West. Other communities have tended, each in its own fashion, towards slower growth, but much more gradually, notably the Moslems. The transition of India towards a regime of increasingly controlled fertility has occurred at very different rates in different religious groups and provinces.

Data Sources: Censuses 1881-1981

Countries: India

Subjects/Variables: Indians; Hindus, Muslims, Christians, Sikhs, Buddhists, Jains, Parsees, Jews

Discipline: Geography

Brose, Nicole

Brose, N. (2006). Gegen den Strom der Zeit? Vom Einfluss der religiösen Zugehörigkeit und Religiosität auf die Geburt von Kindern und die Wahrnehmung des Kindernutzens / Against the current of the times? The influence of religious affiliation and religiosity on the birth of children and on perceptions of the benefit of children. *Zeitschrift für Bevölkerungswissenschaft*, 31, 257–282.

Abstract: The view is repeatedly expressed in sociological family research that social norms and values determine decisions regarding family formation and expansion. It is however by no means always evident to what degree norms and values are more the cause or the effect of reproductive behaviour. Considering the latter possibility to be correct, one would expect to find a greater willingness to found and expand a family among those who stand opposed to the spread of a less family-orientated lifestyle. Such a potential for opposition might be most common in a Christian environment. This study hence attempts to explore the issue of whether persons of a Christian affiliation have so far become decoupled from the trend towards smaller numbers of children. The conclusions of this survey indicate that Protestants and Catholics have an average of 0.25 more children than persons with no religious affiliation, even after controlling for socio-economic characteristics. This relationship is even more pronounced if indicators of religiosity are also accounted for in addition to religious affiliation. Beyond this aspect, the survey is to provide a starting point for indicating mechanisms giving rise to the correlation between religious affiliation and the number of children. Two particular hypotheses are to be subject to empirical study in this context: The positive effect of religion on the number of children is (a) the result of higher expectations as to the emotional benefit of children (value anticipation hypothesis), and (b) both an expression and a consequence of greater willingness to marry and/or of a less pronounced tendency towards separation or divorce (marriage affinity hypothesis).

Data Sources: First and third waves of the Family Surveys [Familiensurvey], 1988 & 2000 (Deutsches Jugendinstitut)

Countries: Germany

Subjects/ Variables: West German women aged 18 to 45, excluding non-Christians and immigrants; religiosity (worship frequency, self-assessment of importance of God)

Discipline: Sociology

Brown, Callum G.

Brown, C. G. (2012). Family and Religion *Religion and the Demographic Revolution: Women and Secularisation in Canada, Ireland, UK and USA since the 1960s* (pp. 172-216). Woodbridge: Boydell Press.

Summary: This chapter considers, through a wide variety of data across four nations, how demographic and religious indicators were related. The two moved in close tandem, with liberal trends in demography being inversely related to religious indicators—whether over religious adherence in toto or conservative church adherence—and positively related to no religionism. The influence of religious change upon the Second Demographic Transition, postulated by Lesthaeghe, has been significantly affirmed by these data for these four countries. However, there is considerable

scepticism amongst some demographers that it is possible to be so certain as to what factors bring the transition about.

Data Sources: Historical statistics, 1920-2003

Countries: Ireland, USA, Canada, United Kingdom

Brown, John C.; Guinnane, Timothy W.

Brown, J. C. G., Timothy W. (2002). Fertility transition in a rural, Catholic population: Bavaria, 1880-1910. *Population Studies*, 56(1), 35-50.

Abstract: The decline of human fertility that occurred in Europe and North America in the nineteenth century, and elsewhere in the twentieth, remains a topic of debate largely because there is no accepted explanation for the event. This paper uses district-level data from Bavaria to study the correlates of the decline of fertility in that German kingdom in the nineteenth century. Bavaria's fertility transition was later and less dramatic than in other parts of Germany (especially Prussia). Our results for Bavaria indicate that the European Fertility Project was right about the role of religion and secularization, but missed an important role for the economic and structural effects stressed by economic historians. Catholicism and related belief systems (as measured here by voting conduct) were closely associated with high fertility that did not decline appreciably in this period. But areas that experienced the kind of economic development that implies increased opportunities for women had the most rapid fertility decline.

Data Sources: Published Bavarian statistics from 152 exclusively rural districts (Bezirksimter) and 24 exclusively urban districts (Unabhingige Stadte)

Countries: Germany

Subjects/ Variables: Bavarians (mostly Catholic, rural), 1850-1914.

Discipline: Economics

Brugeilles, C.

Brugeilles, C. (1998). *La fécondité et les comportements reproductifs à la frontière Mexique/États-Unis* (Vol. Thèse de Doctorat en Sociologie): Université Paris III-Sorbonne Nouvelle.

Buber-Ennser, Isabella; Skirbekk, Vegard

Buber-Ennser, I., & Skirbekk, V. (2016). Researchers, Religion and Childlessness. *Journal of Biosocial Science*, 48(3), 391-405.

Abstract: This study analysed childlessness and religion among female research scientists in the Austrian context. The aim of the study was to investigate the role of religion in intended childlessness and realized childlessness. The analysis was based on a representative sample of Austrian women aged 25–45 (n=2623), with a specific sample of female research scientists aged 25–45 (n=186), carried out in the framework of the Generations and Gender Survey conducted in 2008/09. The results indicate that religious affiliation and self-assessed religiosity are strongly related

to fertility. Multivariate analyses reveal that education has no explanatory power in terms of explaining intended childlessness, once religious affiliation and self-assessed religiosity are taken into consideration.

Data Sources: Generations and Gender Survey, 2008/09

Countries: Austria

Subjects/Variables: Women aged 25–45 (n=2623), with a specific sample of female research scientists aged 25–45 (n=186); Catholic, Protestant, Orthodox, other; religiosity

Discipline: Demography

Buissink, John D.

Buissink, J. D. (1971). Regional Differences in Marital Fertility in the Netherlands in the Second Half of the Nineteenth Century. *Population Studies*, 25(3), 353-374.

Abstract: In the Netherlands, as in other countries, substantial regional differences in the birth rate have always been the rule rather than the exception. Of course, differences in crude birth rates may be attributed to a number of possible reasons, not all of them of primary demographic interest. For instance, according to the census of 31st December 1899, the number of women per 1,000 men in the province of Drenthe was only 924; in the province of Zuidholland the corresponding number was 1,073. It is clear that, *ceteris paribus*, the crude birth rate in Zuidholland would be about 7% higher than in Drenthe at that time. In such a case, the difference could reflect differences in economic development or job opportunities, factors not devoid of demographic significance, but only indirectly so.

Data Sources: Censuses of 19th November 1849 and 31st December 1859

Countries: Netherlands

Subjects/Variables: Dutch population

Discipline: Demography

Bulbulia, Joseph A.; Shaver, John H.; Greaves, Lara; Sosis, Richard; Sibley, Chris

Bulbulia, J. A., Shaver, J. H., Greaves, L., Sosis, R., & Sibley, C. (2015). Religion and Parental Cooperation: An Empirical Test of Slone's Sexual Signaling Model. In D. J. Slone & J. A. Van Slyke (Eds.), *The Attraction of Religion: A New Evolutionary Psychology of Religion* (pp. 29-62). London: Bloomsbury.

Summary: Sexual signaling theory posits that religions evolved, at least in part, to support mate discrimination. We can obtain initial evidence for sexual signaling models of religion by focusing on sex differences in behavior, and by assessing the associations of signaling behaviors (prayer, church attendance) with fertility. The present study examines two cooperative traits relevant to human mating: fidelity and social reputation, and investigates the links between religious behaviors that identify these traits and their association with fertility. It asks the question: why might church attendance in New Zealand function as an honest signal of one's cooperative commitments to a religious social network? According to Slone's model, church not only functions as a venue to display social commitment and receive social prestige, but also functions as a setting for attracting

new mates. Hence, Slone's model predicts a mixed population among frequent church-goers: those who have succeeded in reproducing and remain committed to the religious group, as well as those who wish to display the magnitude of their religious commitments to potential mates. That is, the congregation of a given church should consist of a population of successful breeders alongside of a population of lonely hearts. Of the 3,736 participants who reported whether or not they had children from the previous wave 3 NZAVS survey, 28 percent (a total of 1,045) reported having no children. 31 percent of the sample that did not identify with a religion reported having no children (715/2,319) while 23 percent of the religion-identified sample who responded to this question also reported no children (330/1,417). We found that religious affiliation was positively associated with fertility. The expected number of children in the nonreligious identified population (with a romantic partner) at baseline was 1.95 and expected zero-deflation was $pr = .34$. The expected number of children among those who identified with a religion (and had partners) was 2.26; expected zero-deflation was $pr = .40$. In the population that prays at the average sample rate (11 times per week) there was an expectation of 2.27 children. Among the population who prays 35.37 times per week (a one standard deviation increase), the expected number of offspring was 2.41. In the population that attends church at the average sample rate (2.08 times per month) there was an expectation of 2.27 children. Among the population who attends church 5.40 times per month (a one standard deviation increase), the expected number of offspring was 2.41.

Data Sources: New Zealand Attitudes and Values Study

Countries: New Zealand

Subjects/Variables: 3,736 participants

Discipline: Religious Studies

Bumpass, Larry L.; Westoff, Charles F.

Bumpass, L. L., & Westoff, C. F. (1970). *The Later Years of Childbearing*. Princeton: Princeton University Press.

Burch, Thomas K.

Burch, T. K. (1966). The fertility of North American Catholics: A comparative overview. *Demography*, 3(1), 174-187.

Abstract: Post-war research on differential fertility in the United States has documented the greater fertility of Catholics in relation to non-Catholics. At the same time, it has revealed great differences in fertility between different groups of Catholics. In addition, it has established differences in marital patterns, which can affect general fertility. In general, the relationship between Catholicism and fertility behavior presents problems.

Contrary to the experiences of those investigations, this work tries to make a general comparison of the fertility of Canadian and US Catholics. The existing data do not allow as detailed and systematic comparison as is desirable, but at least they allow for the following tentative conclusions: (1) In both the United States and Canada, Catholics tend to have greater fertility than non-Catholics, In Canada, this difference has decreased in recent years, while in the United States it has persisted and perhaps

has even increased. Canadian Catholics have a slightly higher fertility than Catholics in the United States. (2) The French-Canadian Catholics now manifest a level of fertility similar to that of their Anglo-Protestant neighbors. This relatively low fertility is the combined product of matrimonial patterns (late marriages and relative high proportion of singles) and the decline in marital fertility. (3) Among Catholics in the United States and among some non-French Catholics in Canada, matrimonial patterns are similar to those of the general population, which has had an effect on the general fertility of those groups. The important role played by the characteristic matrimonial patterns in determining the fertility of the French Canadians seems to be unique among North American Catholics, with the possible exception of persons of French-Canadian origin in the United States and of the descendants of Irish Catholics in the United States. (4) Data taken from the Canadian census of 1961 suggest that in Canada, as in the United States, Catholics of Irish origin are relatively highly fertile compared to other major ethnic groups; However, in the United States there is a continued greater fertility among people of Hispanic-American origin, a small but growing minority group.

Data Sources: (US) the Family Growth in Metropolitan America Study at Princeton, the Growth of American Families Study at the Scripps Foundation and the University of Michigan, fertility of married women from the March 1957, 1960 United States census data on the fertility and marital status of persons of foreign stock of Italian, Irish, Polish, and Mexican origin; persons of Puerto Rican origin or parentage; persons of Spanish surname in the southwestern United States Current Population Survey, *Official Catholic Directory*; (Canada) 1961 Census and vital statistics

Countries: United States and Canada

Subjects/ Variables: Whole population

Discipline: Demography

Bush, Lester E.

Bush, L. E. (1976). Birth Control Among the Mormons: Introduction to an Insistent Question. *Dialogue: A Journal of Mormon Thought*, 10, 12-44.

Abstract: Historical overview of Mormon policies on childbearing and contraceptives. The study concludes that High Mormon fertility is more a consequence of value Mormonism places on children than of polemics against birth control.

Data Sources: Historical overview

Countries: United States

Subjects/ Variables: US Mormons

Discipline: Medical history

Byers, Edward

Byers, E. (1982). Fertility Transition in a New England Commercial Center: Nantucket, Massachusetts, 1680-1840. *The Journal of Interdisciplinary History*, 13(1), 17-40.

Abstract: From the 18th century, Quakers dominated the religious and much of the cultural life of Nantucket, Massachusetts. In the decades before the Revolution, Nantucket became the

most important whaling center in the world. Rise in female age at first marriage accounted for 55 percent of the decrease in complete family size between the periods 1680-1739 and 1740-1779; 68 percent between 1740-1779 and 1780-1839. But in the first four decades of the nineteenth century, when mean family size fell by almost a child, female age at first marriage was also falling, thus creating the potential for more children per family. Clearly, some other factor must have been at work to create this downward shift in mean family size. The data indicate that family limitation began to be practiced on Nantucket by the 1740s - decades earlier than in other New England communities. The increasing absorption of families into the commercial economy provided a basis for a new orientation toward family life and economic activity. The commercialization and accompanying urbanization of Nantucket created a new set of circumstances that worked to change attitudes so that fewer children were wanted, and also raised the relative cost of rearing those children. In order to provide for and maintain their families during the absence of their husbands, many eighteenth-century Nantucket women went beyond traditional female activities to manage family and business finances and engage independently in some line of trade. Eighteenth-century Quakerism would surely have reinforced these trends. Not only did male Quakers consider women their spiritual equals, but Quaker women played a prominent role in the church by speaking at meetings, writing tracts, and taking up missionary activities. Like other Quakers, Nantucket women established and ran a relatively independent monthly meeting. Finally, Quaker ideology may have strengthened existing desires for fewer children through its assumption of childhood innocence. This belief in childhood innocence implies a certain amount of malleability, and as a result, parents may have been encouraged to play a more active role in shaping their children's future. To ensure their children's success in both the material and spiritual arenas, parents on Nantucket may have decided that more time for each child was needed and so limited the size of their families.

Data Sources: Nantucket's vital records

Countries: United States (Massachusetts)

Subjects/Variables: White population of Nantucket, Massachusetts, from the beginning of white settlement in the late seventeenth century through the "golden era" of whaling (1820-1845); 1873 reconstructed families (1680-1840)

Discipline: History

Bygrunhanga-Akiiki, A.B.T.

Bygrunhanga-Akiiki, A. B. T. (1974). Religion and planned parenthood in Africa. In J. S. Pobee (Ed.), *Religion, Morality, and Population Dynamics* (pp. 124-139). Legon, Ghana: University of Ghana Population Dynamics Programme.

Bystrov, Evgenia

Bystrov, E. (2012). The Second Demographic Transition in Israel: One for All? *Demographic Research*, 27(10), 261-298.

Abstract: This article explores family behaviours and attitudes in Israel over the last decades through the lens of the Second Demographic Transition (SDT). Israel is divided by religious affiliation, the level of religiosity, ethnic origin and timing of immigration. Although fertility transition to

replacement level among certain societal groups has been previously shown, the question of how the transition unfolds in other domains remains open. The goal of this paper is to highlight the diversity of marital and fertility transitions and non-transitions among various groups of this heterogeneous society, and to compare Israel's transitions to European ones. The data sources which are used are cross-national large scale surveys, national representative surveys, and Population Register data. The data were disaggregated by religion, religiousness and ethnic origin. Emancipative value change, postponement of marriage, alternative living arrangements and a growing variety of fertility regimes were analyzed. A full range of pre-transitional, transitional, and post-transitional elements was found among the groups. Such sign of the SDT as growing childlessness was not found, and the spread of other features as unmarried cohabitation and non-marital childbearing was found limited. Population composition effects were isolated. It was found that the level of religiosity and the country of origin are important factors which differentiate family behaviours and attitudes. The connection between value orientation of the groups within Israel and their family behaviours is discussed. The socio-structural and institutional constraints that might impede further progression of the Second Demographic Transition in Israel are also discussed. Further research directions are suggested.

Data Sources: Population Register of vital statistics from 1949 onwards, published annually in the Statistical Abstract of Israel; Social Survey data collected annually since 2002 by the Israel Central Bureau of Statistics; Israel national survey data of the Guttman Center (former Israel Institute of Applied Social Research, various years); and cross-national survey data of the International Social Survey Programme (ISSP) (various years), European Social Survey (ESS) 2002 and 2008, and World Values Survey (WVS) 2001

Countries: Israel

Subjects/Variables: Adult Israelis

Discipline: Sociology

Bystrov, E. (2016). Religiosity, nationalism and fertility among Jews in Israel revisited. *Acta Sociologica*, 59(2), 171–186.

Abstract: This paper focuses on competing explanations of childbearing behaviour among Jews in Israel. Despite evidence of the second demographic transition in Israel, total fertility has not declined during the last three decades, unlike in most western high-income democracies. Two alternative explanations in the literature address this phenomenon. One is religiosity and the other is a nationalist sentiment at the aggregate level – both driving the high fertility rates. Using structural equation modelling, the current study tests the association of each of these two factors with fertility. Religiosity and nationalism were constructed as latent variables based on individual-level observed measures. Supporting previous studies at the aggregate level, the current analysis confirms that religiosity is the main determinant of fertility at the individual level, whereas nationalism has an effect on fertility only due to its high connection with religiosity. Parsimonious and comprehensive models of Jewish fertility in Israel and further research directions are suggested.

Data Sources: Sample from the 2009 and 2010 Guttman Center Democracy Surveys, the Guttman Center of The Israel Democracy Institute

Countries: Israel

Subjects/Variables: Women aged 25–55 (n=588); political attitudes, religious identity, level of observance of the religious tradition, and socio-demographic characteristics

Discipline: Sociology

Caldwell, John Charles; Caldwell, Pat

Caldwell, J. C. C., Pat. (1987). The cultural context of high fertility in sub-Saharan Africa. *Population and Development Review*, 13(3), 409-437.

Abstract: Fertility remains high and stable throughout sub-Saharan Africa, and there is no certain evidence of any national fertility decline. The explanation is not solely lack of development or ineffectiveness of family planning programs; almost 20 years ago some countries were relatively well developed and had introduced national population programs. The explanation lies largely in a religious belief system and an accompanying social structure that have accorded both spiritual and economic rewards to high marital fertility. Traditional religion is still important in framing behaviour, even though two-thirds profess to be either Christian or Muslim. The essence of the traditional belief system is the importance attributed to the succession of the generations, with the old tending to acquire even greater and more awe-inspiring powers after death than in this world and with the most frequent use of those powers being to ensure the survival of the family of descent. Because of the weakness of the conjugal link, men do not feel the full economic burden of their reproductive decisions, while women are ultimately so dependent on their children that they have good reason to fear having too few. This essay explores the context of high African fertility as well as signs of destabilization in this high-fertility system on both the individual and national level.

Data Sources: Summary of studies of African fertility

Countries: Sub-Saharan Africa

Discipline: Demography

Caldwell, J. C. C., Pat. (1990). Cultural forces tending to sustain high fertility. In G. T. F. Acsadi, G. Johnson-Acsadi, & R. A. Bulatao (Eds.), *Population Growth and Reproduction in Sub-Saharan* (pp. 199-214). Washington, DC: The World Bank.

Summary: High fertility rates in Sub-Saharan Africa (SSA) are based on a "culture, molded by religion, that encourages repeated childbearing and abhors sterility at any stage." The major components include: 1) traditional religion and its effect on fertility; 2) barrenness, subfecundity and child death; 3) changing beliefs and culture; 4) political leadership and fertility control; 5) land tenure; 6) the SSA African family; 7) safety in numbers; 8) prestige; and 9) birth control. In this comprehensive and historical review of the basic socio-cultural and religious issues in SSA, Western readers will learn a great deal about the belief systems and worldview of Africans, and understand the Africans sensitivity towards modern contraception. "The engine of change" for health and reproductive behavior will be the secularization of the society by external cultural forces. "Secularization" in this case refers to the slow removal of certain thoughts and behavior from people's religious beliefs. Education and modernization will accelerate change in Africa's religious and cultural belief systems.

Data Sources: Summary article

Countries: Sub-Saharan Africa

Discipline: Demography

Caldwell, John Charles; Orubuloye, I.O.; Caldwell, Pat

Caldwell, J. C. O., I.O., & Caldwell, P. (1992). Fertility Decline in Africa: A New Type of Transition? *Population and Development Review*, 18(2), 211-242.

Abstract: Until the late 1980s, the only region not participating in a decline in fertility was sub-Saharan Africa. Findings largely emerging from the Demographic and Health Surveys (DHS) program have shown falls of 15-25% in Botswana, Zimbabwe, and Kenya and 10% in Nigeria. Botswana, Zimbabwe, and Kenya alone have infant mortality rates below 70 per 1000 live births, and exhibit unusually high levels of education, and unique levels of contraceptive usage. The World Bank identifies the main reason for the earlier resistance to fertility decline as underdevelopment. The reasons in other studies may be grouped under four headings: (1) African traditional society and religion stressed the importance of ancestry and descent; (2) polygyny leads to the separation of reproductive decision-making and the cost of childbearing; (3) communal land tenure meant that large families could demand a greater share of the land and resulted in higher production and better physical safety; (4) family planning programs were nonexistent or weak. But each of these have been eroding as the old rural system collapses. Christianity, Islam, and Western education have undermined much of traditional society, even the reverence for ancestors. The sub-Saharan transition is likely to be different from that in Asia due to differences in constraints on premarital and extramarital sexuality, differences in marital stability, and different emphases on the need and reasons for birth spacing.

Data Sources: 1990 Ado-Ekiti Fertility Study; joint Ondo State University-Australian National University research program on health transition and AIDS

Countries: Nigeria (Ondo State)

Subjects/ Variables: Ado-Ekiti women, aged 18-49

Discipline: Demography

Caldwell, John Charles; Caldwell, Pat

Caldwell, J. C., & Caldwell, P. (1990). High Fertility in Sub-Saharan Africa. *Scientific American*, 262(5), 118-125.

Abstract: The persistence of high fertility in sub-Saharan Africa, while all other world regions have been able to control population growth, represents a grave threat. Traditional explanations for this phenomenon--e.g., lower levels of income, education, health, and urbanization--are not adequate, given the fact that many Asian countries have been able to reduce fertility in the face of the same obstacles. It is suggested, instead, that the primary cause of sub-Saharan Africa's high fertility can be found in its social and family patterns. Central cultural precepts include the notions that many descendants must be produced to ensure the survival of lineage, the equation of female virtue with the production of a large number of children, the stronger influence of the lineage than the nuclear family, and a belief in the power of ancestral spirits. Given the overriding importance of lineage and the relative weakness of emotional and economic conjugal links, the factors believed to be producing lowered birth rates in other developed countries (e.g., the high costs of child raising and the negative impact of large family size on the standard of living in that family) are not operable in sub-Saharan Africa. Most African fathers receive far more from their children, in terms of loyalty and support, than they expend on them, giving them little motivation to restrict fertility. Women's growing determination to extend their current economic independence into the domain of reproduction represents the most likely source of change in sub-Saharan Africa's fertility patterns. Also essential is reduced infant and child mortality through integrated health services-family planning programs. Progress can be expected to be slow, however, given the persistence of the African traditional social structure and belief system.

Data Sources: Summary article

Countries: Sub-Saharan Africa

Discipline: Demography

Caldwell, John Charles; Reddy, Palli Hanumantha; Caldwell, Pat

Caldwell, J. C., Reddy, P. H., & Caldwell, P. (1988). *The Causes of Demographic Change: Experimental Research in South India*. Wisconsin: The University of Wisconsin Press.

Summary: Reproduction of the following papers:

"The determinants of Fertility Decline in Rural South India", *India's Demography: Essays on the Contemporary Population*, ed. Tim Dyson and Nigel Crook (New Delhi: South Asian Publishers, 1984), 187-207;

"The Family Planning Programme at the Local Level", *The Demographic Transition in Asia*, ed. Gavin W. Jones (Singapore: Maruzen Asia, 1984), 111-124;

"The Causes of Marriage Change in South India" *Population Studies* 37, no. 3 (1983): 343-361;

"The Determinants of Family Structure in Rural South India" *Journal of Marriage and the Family* 46, no. 1 (1984): 215-229;

"The Social Component of Mortality Decline: An Investigation in South India Employing Alternative Methodologies" *Population Studies* 37, no. 2 (1983): 185-205;

"Educational Transition in Rural South India" *Population and Development Review* 11, no. 1 (1985): 29-51;

"The Support of the Aged in Rural Karnataka". Conference organized by T. Nair, University of Kerala, January 1985;

"Periodic High Risk as a Cause of Fertility Decline in a Changing Rural Environment: Survival Strategies in the 1980-83 South Indian Drought" *Economic Development and Cultural Change* 34, no. 4 (1986): 677-701;

"The Causes of Demographic Change in Rural South India", *Population and Development Review* 8, no. 4 (1982): 689-727.

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Campbell, Arthur A.

Campbell, A. A. (1963). Concepts and techniques used in fertility surveys *Emerging techniques in population research: Proceedings of a round table at the thirty-ninth annual conference of the Milbank Memorial Fund, September 18-19, 1962 at the Carnegie Endowment International Center*. New York: Milbank Memorial Fund.

Summary: Review of information required in interview surveys, techniques used, estimates of success, procedural lessons learned. Examines Indianapolis studies, Princeton Study, Detroit Area Study, G.A.F. survey. Discusses expected and desired family size, use and effectiveness of contraception, independent variables.

Data Sources: Review of studies

Countries: United States

Discipline: Demography

Castles, Francis G.

Castles, F. G. (2003). The world turned upside down: below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries. *Journal of European Social Policy*, 13(3), 209-227.

Abstract: Over the past two decades, a decline in birth rates in advanced industrialized societies to levels well below those required for population replacement has been accompanied by a major change in the cross-national incidence of fertility. This has, in turn, given rise to a massive transformation in traditional cross-national patterns of relationships between fertility and other variables. Whereas previously the countries with the highest period fertility rates were those in which family-oriented cultural traditions were most pronounced and in which women's labour market participation was least, these relationships are now wholly reversed. Traditional values were measured by the degree of Catholic adherence and the infrequency of divorce. This study uses data for 21 OECD countries to provide a more thorough and systematic mapping of the linkages between fertility, cultural values, economic structure and social policy than has hitherto been attempted in the literature, while simultaneously addressing some of the theoretical and methodological issues that arise in explaining a reversal of this magnitude. It argues that seemingly anomalous linkages with cultural traditions and employment structure are consequences of women's changing work and family preferences and of cross-national differences in the adoption of family-friendly public policy.

Data Sources: World Christian Encyclopedia (1982) and for 1995 from World Christian Encyclopedia (2001); OECD Labour Force Statistics 1980–2000 (2001); Unesco Statistical Yearbook

Countries: 21 OECD countries

Discipline: Sociology

Chabé-Ferret, Bastien

Chabé-Ferret, B. (2013). The Importance of Fertility Norms: New Evidence from France. *Discussion Paper*, 2013(12).

Abstract: I enrich the findings according to which cultural proxies such as past total fertility rates in the country of origins or number of siblings have a sizable effect on the fertility choice of second generation migrants. I use the TeO survey that interviewed individuals established in France from different origins to investigate whether the effect of fertility norms fades away with assimilation in the host country. In particular I find that women who are in a relationship with a non-native, who were born to two migrant parents and whose family has settled in France more recently are more sensitive to the norm. Still, a significant effect of past fertility rates resists the introduction of many controls like characteristics of partners and religion, though with a smaller magnitude. Finally, by using a duration model, I document that the fertility norm has a positive effect on the hazard rate to have a third child but not for previous birth orders, which suggests some other determinants of fertility dominate for earlier births.

Data Sources: Trajectoire et origines (TeO) survey, 2008, INED and INSEE; World Bank data; United Nations Demographic Yearbook, 1997, table 4

Countries: France

Subjects/ Variables: 16,500 first and second generation immigrants and people from the French overseas territories, control group of 3900 native French

Discipline: Economics

Chakrabarty, M.; Guilmoto, C.Z.

Chakrabarty, M., & Guilmoto, C. Z. (2005). An Analysis of the Determinants of Fertility Behaviour in South India at the Village Level. In Z. G. Christophe & S. I. Rajan (Eds.), *Fertility Transition in South India* (pp. 324–356). New Delhi: Sage.

Chamie, Joseph

Chamie, J. (1976). *Religious fertility differentials in Lebanon*. Ann Arbor: The University of Michigan.

Chamie, J. (1977). Religious differentials in fertility: Lebanon, 1971. *Population Studies: A Journal of Demography*, 31(2), 365–382.

Abstract: The principal objects of this study are the description and explanation of the effects of religious affiliation on fertility in the multi-religious society of Lebanon. The data are derived from the 1971 National Fertility and Family Planning Survey which is the first probability sample ever taken of Lebanese couples with wives aged 15-49 years. The present inquiry yields two major results. First, significant fertility differences do exist among Muslims and among Christians. To speak of Muslim-Christian fertility differences is, therefore, misleading. Secondly, religious fertility differentials, based on cumulative fertility, are dependent on the level of wife's education. At low levels of wife's education, differentials are great; at high levels, religious differentials in fertility are insignificant. These findings are believed to be of importance not only to researchers concerned with religious fertility differentials, but also to those concerned with framing population policies in countries where religious composition is a sensitive matter.

Data Sources: The 1971 National Fertility and Family Planning Survey of Lebanon (the Lebanon Family Planning Association), based on a 10% sub-sample of the 1970 Government household survey, reported in République Libanaise, Direction Centrale de la Statistique, *L'Enquête par Sondage sur la Population Active au Liban* (1972)

Countries: Lebanon

Subjects/ Variables: 2,795 currently married Lebanese women aged 15-49 years; Catholics, non-Catholic Christians (esp Maronite, Orthodox), Sunni, Shiites, Druze

Discipline: Demography

Chamie, J. (1981). *Religion and Fertility: Arab Christian-Muslim Differentials*. Cambridge: Cambridge University Press.

Charles, Enid

Charles, E. (1941). Cultural Differences in Family Size *The Changing Size of the Family in Canada* (pp. 63-92). Ottawa: Edmond Cloutier.

Summary: The chapter examines the differentials in Canadian fertility, based on the Eighth Census of Canada: (1) differences in religion, mother-tongue and birthplace; (2) differences in residential location and education.

Data Sources: Eighth Census of Canada

Countries: Canada

Subjects/Variables: Whole population

Discipline: Demography

Chatters, Linda M.; Taylor, Robert Joseph

Chatters, L. M., & Taylor, R. J. (2005). Religion and families. In V. L. Bengtson, A. C. Acock, K. R. Allen, P. Dilworth-Anderson, & D. M. Klein (Eds.), *Sourcebook of family theory and research* (pp. 517–530). Thousand Oaks: Sage.

Chattopadhyay, Aparajita; Bhagat, R.B.; Roy, T.K.

Chattopadhyay, A., Bhagat, R. B., & Roy, T. K. (2004). Hindu-Muslim Fertility Differentials: A Comparative Study of Selected States of India. In T. K. Roy, M. Guruswamy, & P. Arokiasamy (Eds.), *Population, Health and Development in India: Changing Perspectives* (pp. 138–156). Jaipur: Rawat Publishers.

Summary: Irrespective of rural or urban stay, Muslims have higher fertility compared to all the Hindu subgroups. Literacy, standard of living, work status of women, media, exposure, women's decision-making power in health care, and the presence of a health centre within the village are significant predictors of fertility. Higher fertility among Muslims cannot be attributed to either socio-economic differentials or to the lack of access to health care services. The minority hypothesis premised on insecurity could not be substantiated fully due to our limited analysis. While religion remains an important factor influencing fertility, it largely depends on its interactions with other socio-political and cultural aspects that determine differences in fertility levels. The way people practice religion and follow their religious beliefs are more important than the religious theology per se. Any limiting effects of Islam on fertility decline are short term if socioeconomic conditions change and accessible family planning services are supplied. Thus, the rapid fertility decline in Bangladesh in recent years is a pointer to the fact that the particularised notions of Muslim religion in resisting fertility control and the practice of family planning are not always true.

Data Sources: Samples in Kerala, West Bengal, and Uttar Pradesh

Countries: India

Subjects/Variables: Indians; Muslim, Hindu

Discipline: Demography

Chattopadhyay, Aparajita; Goswami, Baishali

Chattopadhyay, A., & Goswami, B. (2007). Status of Women in Two Bengals: Evidence from Large Scale Surveys. *Journal of Biosocial Science*, 39, 276-286.

Abstract: Greater female autonomy is mirrored through better performance in the major demographic and social indicators. This study attempts to capture the effect of religion on the status of women considering 'Greater Bengal'. There is much evidence suggesting that when cultural factors are constant, religion does not have a significant effect on any demographic issue. In this paper, the validity of this proposition is examined using two data sets, namely NFHS II (98–99) and BDHS 2000. It is clear from the analyses that not only region but also religion has a distinct effect on the status of women. In West Bengal, the religious gap for all the indicators considered is pretty high, whereas in Bangladesh the gap is not that wide. A state-level population policy is needed in West Bengal to act as a social leveller.

Data Sources: National Family Health Survey II (NFHS II, 1998–99); Bangladesh Demographic and Health Survey (BDHS 1999–2000).

Countries: India, Bangladesh

Subjects/Variables: Ever-married women in West Bengal (India) and Bangladesh; Hindu, Muslim

Discipline: Geography, Demography

Chaudhury, Rafiqul Huda

Chaudhury, R. H. (1971). Differential Fertility by Religious Group in East Pakistan. *Social Biology*, 18(2), 188-191.

Abstract: The present brief study examines the level of Muslim natality in East Pakistan relative to that of other groups, principally Caste Hindus and members of the Schedule Caste Hindus. According to child-woman (ever-married) ratio, Muslim natality is found to be the highest in comparison to Caste and Schedule Caste Hindus. The relatively lower fertility of Muslims in comparison to Caste Hindus found according to child-woman (currently married) ratio is due to a disproportionate number of currently married women in the age group 20-39 between Muslims and Caste Hindus. The findings throughout uphold the lowest fertility as pertaining to the Schedule Caste Hindus, and this is the most significant finding of the study. The other important finding of the study is that the Caste Hindus' fertility does not differ significantly from Muslim fertility.

Data Sources: District Census of East Pakistan, 1961 (Government of Pakistan, 1961)

Countries: Bangladesh

Subjects/Variables: Bangladeshis; Hindu, Muslim

Discipline: Demography

Chaudhury, R. H. (1982). *Social Aspects of Fertility: With Special Reference to Developing Countries*. New Delhi: Vikas Publishing.

Summary: This book investigates a probable socio-economic determinant of fertility that might be amenable to policy manipulations in developing countries, and Asia and Africa in particular. Topics include value of children, son preference, family structure, female status, religion and ethnicity,

infant mortality. The study examines the hypothesis that whether religious/ethnic values promote large families, children are economically valuable to parents, and the cost of raising children is low as responsibility is borne by members of the extended family. Chapter 5 examines how far faith in a particular religion determines one's fertility behaviour independent of the effect of one's socio-economic status. The chapter also explores the independent effect of religiosity on fertility.

Data Sources: Existing studies

Countries: Developing countries in Asia and Africa; Buddhism, Hinduism, Islam, Christianity (esp Catholicism)

Discipline: Development Studies

Chaudhury, R. H. (1984). Hindu-Muslim differential fertility: How much religion and how much socio? *Social Action*, 34(3), 251–273.

Abstract: Neither Hinduism nor Islam promote high fertility norms. The explanations for Hindu-Muslim differential fertility may be explained by the following conditions: (1) universal marriage and low age at marriage among Muslims; and (2) lower participation of Muslim women in modern secular education and market activity, etc. These factors are not Muslim-specific. As the socio-economic condition of a person improves, it tends to reduce fertility, irrespective of whether one is a Muslim or not. Fertility declines from 4.15 to 2.04 for Muslims and 4.21 to 1.58 for Hindus. Fertility of a more highly educated Muslim woman is likely to be as low or even lower than that of her Hindu counterpart when she is exposed to a modern environment (i.e., urban areas), but not when exposed to the traditional environment (i.e., rural areas).

Data Sources: Bangladesh Fertility Survey (BFS) 1975

Countries: Bangladesh

Subjects/ Variables: 6,515 ever-married women under the age of 50; Muslim, Hindu

Discipline: Demography

Cheskis, Rena

Cheskis, R. (1980). *Jewish identification and fertility: An analysis of subgroup fertility and differentials*. Denver: Population Association of America.

Chou, Ru-Chi; Brown, Susannah

Chou, R.-C., & Brown, S. (1968). A Comparison of the Size of Families of Roman Catholics and Non-Catholics in Great Britain. *Population Studies*, 22(1), 51-60.

Abstract: In a recent study of family size ideals in the D.S.A. it was found that in the 1960s the mean ideal family size of Catholics was about half a child higher than the mean ideal size of non-Catholics. This note describes an analysis of similar data for married women in Great Britain, derived from an investigation undertaken in 1966 for the Population Investigation Committee. A difference in ideal family size, which was of the same order as the American difference, was found; and, in addition, the actual fertility of Catholics was compared with that of others.

Data Sources: Social Survey (Gallup Poll), 1966

Countries: England, Scotland, Wales

Subjects/Variables: 526 married women, half of whom were Roman Catholic; Catholic and non-Catholic

Discipline: Demography

Christensen, Harold T.

Christensen, H. T. (1945 -1946). Factors in the size and sex composition of families: A survey of student opinion. *Proceedings of the Utah Academy of Sciences, Arts, and Letters*, 23.

Abstract: We investigate what college students think, or how they feel, regarding the size and composition of their future families. Students were asked about desired number of sons and daughters, practice of birth control, and sex preference. The average desired family was 4 1/3 children, with a preference for males, and most favour birth control.

Data Sources: Three-page questionnaire to the "courtship and marriage classes" of the author and Ariel S. Ballif of Brigham Young University

Countries: United States

Subjects/Variables: 1200 college students

Discipline: Demography

Christensen, H. T. (1947 -1948). Mormon Fertility: A Survey of Student Opinion. *American Journal of Sociology*, 53(4).

Abstract: Mormon fertility is responsive to both religious and socioeconomic pressures; while maintaining itself at a level significantly above that of the rest of the nation, it is, at the same time, paralleling the general downward trend. Sampled Mormon university students desire larger families than do non-Mormons by about 50 per cent, but families smaller, nevertheless, than those that they came from. Slightly over half believe in birth control within marriage, a figure that is probably higher than for their ancestors but lower than for contemporary non-Mormons. The expense of child-rearing is given as the major reason for wanting to limit the family.

Data Sources: Survey of student opinion made in courtship and marriage classes at Brigham Young University during the academic year 1946-1947

Countries: United States (Utah)

Subjects/Variables: 1385 unmarried Mormons

Discipline: Sociology

Coale, Ansley J.

Coale, A. J. (1973). The Demographic Transition Reconsidered. *Proceedings of International Population Conference* (pp. 53-57). Liege: International Union for the Scientific Study of Population.

Summary: The demographic transition relates to the changes in fertility and mortality as a traditional society is transformed to an industrial society. A reexamination of the theories behind the demographic transition using extensive data points to the inadequacy of this theory to explain trends in fertility. Extreme differences in fertility have been found among different cultures within the same socioeconomic conditions, living in the same region. These have been due to differences in age of

marriage and marital fertility. Preconditions for a sustained decline in marital fertility are: 1) that fertility must be within the calculus of conscious choice, 2) reduced fertility must be perceived as advantageous; and 3) effective techniques must be available. Although limited, the demographic transition theory does illustrate that modernization is needed to bring about a reduction in fertility through changing attitudes and through making large families disadvantageous. One of the necessary preconditions of fertility decline in Europe was the moral acceptance of birth control by the church.

Data Sources: European Fertility Project

Countries: Europe

Discipline: Demography

Cohen, Robert

Cohen, R. (1981). The Demography of the Jews in Early America. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 144-159). Leiden: Brill.

Summary: Fertility among Jewish women was moderately high but not extremely so. Because they already lived in cities, the lack of availability of land as a determinant of fertility (with urban migration) was not such a factor for Jews.

Data Sources: Family reconstitution from censuses

Countries: US (New England)

Subjects/Variables: 498 Jewish families in US married before 1820

Discipline: Demography

Cohen, Steven Martin; Ritterband, Paul

Cohen, S. M. R., Paul. (1981). Why Contemporary American Jews Want Small Families: An Interreligious Comparison of College Graduates. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 209-231). Leiden: Brill.

Summary: The shift from traditionalism to modernity had greater impact on the fertility behaviour of Jews than of non-Jews. For those for whom religiosity implies participation in a distinct sub-culture reinforced by contact with fellow believers, older norms persist and continue to influence fertility desires. This is particularly so for Jews and Catholics, but not Protestants.

Data Sources: National Opinion Research Center survey of 35,000 Spring 1961 graduates (repeated by 4,868 graduated for each wave, 1961, 1962, 1963, 1964, 1968). Fertility is positively correlated with religious service attendance and sex-role differentiation, as measures of traditionalism, for Catholics and Jews. Thus low Jewish fertility arises from their high level of secularism, and high Catholic fertility from their high level of religiosity.

Countries: United States

Subjects/Variables: US Jews

Discipline: Demography

Compton, P.A.

Compton, P. A. (1976). Religious Affiliation and Demographic Variability in Northern Ireland. *Transactions of the Institute of British Geographers*, 1(4), 433-452.

Abstract: Significant demographic disparities exist between Roman Catholics and Protestants in Northern Ireland. The larger size of Roman Catholic families is not a product of low Protestant fertility but, on the contrary, of a very high Roman Catholic birth rate. The traditional Irish custom of delaying age at marriage is still an important factor limiting the size of Roman Catholic families, although birth control is becoming increasingly accepted as Roman Catholic attitudes change. The fertility disparity between the two communities has traditionally been offset by a higher Roman Catholic rate of emigration, and although this is still the case, the differential is narrowing and the proportion of Roman Catholics in the total population has risen substantially during the last 25 years. If present trends are maintained, a Catholic majority is indicated sometime during the first half of the next century, and there is thus substance in the Protestant fear of being overtaken in the 'demographic numbers race'. Demographic differentials therefore aggravate inter-community distrust in the Province. The higher rate of Catholic emigration not only disrupts family ties, but lends superficial credence to the charge of discrimination on the ground of religion, as does a higher rate of unemployment. That these adverse features may have some association with high birth rates and large families tends to be overlooked; after all the population of the Irish Republic suffer from similar problems.

Data Sources: 1971 Northern Ireland Census

Countries: Northern Ireland

Subjects/Variables: Whole population

Discipline: Geography

Compton, P. A. (1978). Fertility differentials and their impact on population distribution and composition in Northern Ireland. *Environment and Planning A*, 10, 1397-1411.

Abstract: The geographical variability of fertility in Northern Ireland is described and related to the factors of religious denomination, social class, and proportion of the population who are married. Although the substantial differences in birthrate from one region to another have a significant impact on population composition, it is concluded that internal migration rather than natural increase is the more important component of regional population growth and changing population distribution.

Data Sources: 1971 Census

Countries: Northern Ireland

Subjects/Variables: The average number of children born to ever-married women aged fifty to fifty-nine years at the time of the census

Discipline: Geography

Coogan, Thomas Francis

Coogan, T. F. (1946). *Catholic Fertility in Florida: Differential Fertility Among 4,891 Florida Catholic Families* (Vol. 20). Washington, DC.: The Catholic University of America Press.

Summary: Description and analysis of a census of the St Augustine dioceses (comprising most of Florida). Mixed marriages have a lower rate of fertility compared with marriages between two

Catholics. Religiosity measured by mass attendance (but not by making Easter Duty and receiving Eucharist) is significantly positively correlated with fertility.

Data Sources: Census of the dioceses of St. Augustine (all of Florida except five northwestern counties)

Countries: United States

Subjects/Variables: 4,891 white Catholic wives 15-44 years, married at age 30 or earlier whose husbands were 40 years or under; religiosity (attendance at Mass, reception of Eucharist, making their Easter Duty)

Discipline: Social Science

Coombs, Lolagene C.; Freedman, Ronald

Coombs, L. C., & Freedman, R. (1979). Some Roots of Preference: Roles, Activities and Familial Values. *Demography*, 16(3), 359-376.

Abstract: This paper examines some of the connecting links between modernization in a developing society, particularly urbanization and increased education for women, and preferences for number of children. Using 1973 Taiwan data, preferences for smaller families are found to be consistently related to modern attitudes and behavior in the three domains examined: intra-familial husband-wife role relationships, extra-familial activities of the wife, and familial and religious values relating the family to the larger institutional setting. Modernization of these attitudes, behaviors, and values has an impact on reproductive goals independent of their association with structural variables. The wife's outside activities and exposure to modern influences through the mass media are especially important linkages, having a particularly strong mediating effect in the education effect on preferences. Intra-familial relations appear to be of less importance. Modernization of familial and religious values mediates between urbanization and family size preferences. The measure of preference used is a scale value which has been found in other research to be more predictive of reproductive behavior than the conventional single-valued statement of number of children wanted. As the level of contraceptive use rises in developing societies, family size preferences increasingly become a factor in birth rates, and understanding the sources of change in these preferences takes on added importance. The policy implications of these findings are discussed.

Data Sources: 1973 island-wide survey in Taiwan, Taiwan Provincial Institute of Family Planning (fourth in a series, 1965-1973)

Countries: Taiwan

Subjects/Variables: 5,588 wives in the reproductive ages (20-39); religiosity (observance of ceremonies for husband's grandparents; observances for ancestors; importance of location of ancestors' graves)

Discipline: Demography

Corjin, Martin; Liefbroer, Aart C.; Gierveld, Jenny de Jong

Corjin, M., Liefbroer, A. C., & Gierveld, J. d. J. (1996). It Takes Two to Tango, Doesn't It? The Influence of Couple Characteristics on the Timing of the Birth of the First Child. *Journal of Marriage and the Family*, 58, 117-126.

Abstract: Empirical research on factors influencing fertility behavior usually focuses on characteristics of women only. In this study, the timing of the first childbirth is studied using information about characteristics of both partners. Couples were classified according to level of religious commitment and level of education. The context specificity of the determinants of childbearing is examined by comparing couples with and without cohabitation experience. The sociocultural specificity is studied using data from the Netherlands and Flanders. Results from hazard models based on a representative sample of young couples (N = 1,438) show, in general, that in Flanders a sphere-of-interest rule of decision making and in the Netherlands an egalitarian rule are at play in the decision on the timing of the first birth among couples. Contextual differences show that more specific theories on factors influencing the family formation process are needed.

Data Sources: The Dutch Survey on Social Integration of Young Adults (SI), Department of Organizational Psychology and the Department of Social Research Methodology of the Vrije Universiteit in Amsterdam (1987, 1991); the Flemish Family and Fertility Survey (NEGO V), the Center for Population and Family Studies in Brussels (1991)

Countries: Netherlands, Belgium (Flanders)

Subjects/ Variables: 1,775 young Dutch adults born in 1961, 1965 and 1969; sample of Belgian men and women born between 1951 and 1970

Discipline: Demography

Courbage, Youssef

Courbage, Y. (1991). Les transitions démographiques des Musulmans en Europe orientale. *Population (French Edition)*, 46(3), 651-677.

Abstract: The Muslim population of Eastern Europe consist mainly of autochthonous converts, or remnants of former Turkish communities. Except in Yugoslavia, it is difficult to arrive at a precise estimate of their numbers. In this paper, the author has used old data in an attempt to piece together Muslim population trends, at the cost of having to make do with some approximations. The changes introduced by socialist regimes have not resulted in the elimination of demographic differentials, particularly those associated with religion. Demographic transition appears to have occurred earlier among European Muslims than among their co-religionists in other parts of the world. However, in all European Muslim communities birth rates appear to be higher than those of their Christian neighbours, though to a varying extent. Are these differentials a direct result of the pronatalism of Islam, or are they rather an effect of the social, economic, and cultural backwardness that characterizes European Muslims? An alternative interpretation of the figures in their historical context suggested that the higher birth rates of Muslims may be the reaction of a minority population which feels threatened by the majority, and which is reactant to adopt its cultural values.

Data Sources: Official statistics, estimates

Countries: Albania, Bulgaria, Yugoslavia

Subjects/ Variables: Albanian Muslims (Sunnite, Bektachi), Christians (Orthodox, Catholic); Bulgarian Muslims (Turks, Romanies, Pomaks), other; Yugoslavian Muslims (Slavs [Serbs, Croats, etc], Albanians, Turks, Romanies

Discipline: Demography

Courbage, Y. (1992). Demographic Transition among Muslims in Eastern Europe. *Population: An English Selection*, 4, 161-186.

Abstract: The presence of Islam in the Balkans, a vestige of the Ottoman Empire, is a reminder that the Mediterranean fringe is a region over which waves of cultural, economic and political exchange have ebbed and flowed for thousands of years. These waves have often led to conflict between those riding the crest and those ridden over. But their action throughout the centuries will necessarily have an integrating effect on the whole of this Mediterranean region (when this has not already been achieved). Youssef Courbage shows how, despite the lack of statistical data, it is possible to draw a picture of the Muslim populations of Eastern Europe. The fact that they represent a minority in numerical or political terms may perhaps explain their still high fertility levels, as a line of defence taken by a community which feels it must struggle for survival.

Data Sources: Official statistics, estimates

Countries: Albania, Bulgaria, Yugoslavia

Subjects/ Variables: Albanian Muslims (Sunnite, Bektachi), Christians (Orthodox, Catholic); Bulgarian Muslims (Turks, Romanies, Pomaks), other; Yugoslavian Muslims (Slavs [Serbs, Croats, etc], Albanians, Turks, Romanies

Discipline: Demography

Coward, John

Coward, J. (1980). Recent Characteristics of Roman Catholic Fertility in Northern and Southern Ireland. *Population Studies*, 34(1), 31-44.

Abstract: In this study census and vital registration data are used to analyse and compare Roman Catholic fertility in Northern Ireland and the Republic of Ireland. While Roman Catholic fertility is relatively high in both areas the birth rate amongst Roman Catholics has been generally higher in Northern Ireland than in the Republic. This difference, which was particularly marked in 1961, can be attributed to the higher levels of marital fertility and nuptiality amongst Northern Irish Catholics. An analysis of average family size amongst couples married between 1946 and 1971 also points to the higher fertility of Northern Irish Catholics. It is argued that the high levels of Catholic fertility in both countries can be attributed to certain characteristics common to both populations, such as the strength of the Roman Catholic Church, high levels of emigration and the relative lack of modernisation and economic development. In addition, it would appear that the differences between Roman Catholic marital fertility in Northern and Southern Ireland are not completely explained by variations in age structure, duration of marriage, age of wife at marriage, levels of childlessness or occupation, and it is suggested that the minority status of Northern Irish Catholics has played a small but important contributory role in accounting for their higher level of fertility.

Data Sources: 1971 Census, 1971 Census Fertility Reports for Northern and Southern Ireland

Countries: Ireland, Northern Ireland

Subjects/ Variables: Catholics in Ireland and Northern Ireland

Discipline: Geography

Creighton, Phyllis

Creighton, P. (2009). Anglican Faith and Reasoning: Wrestling with Fertility Issues. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times*. London: Jessica Kingsley Publishers.

Summary: A scrutiny of the Lambeth Conferences over time reveals that the Anglican approach to fertility issues tends to be pragmatic. The Anglican view of the use of contraception, which underwent a process from rejection to approval, exemplifies this best. The volume of studies published by the Anglican Churches in order to adjust the core Anglican values on centrality of marriage, the child's well-being and the individual's responsibility towards society in fertility issues is not only impressive but has also exerted an important impact on the laws in different countries.

Phyllis Creighton describes in Chapter 2 the approaches of the Anglican Churches to issues such as abortion, surrogacy and sex selection.

Data Sources: Theoretical discussion

Cross, Harold E.; McKusick, Victor A.

Cross, H. E., & McKusick, V. A. (1970). Amish demography. *Social Biology*, 17(2), 83-101.

Data Sources: Written survey of 9,724 Ohio Amish living in Holmes and immediately adjacent counties

Countries: United States

Subjects/Variables: US Amish

Discipline: Demography

Das, Narayan; Pandey, Divya

Das, N., & Pandey, D. (1985). Fertility differentials by religion in India: an analysis of 1971 census fertility data. *Canadian Studies in Population*, 12(2), 119-136.

Abstract: The association between religion and marital fertility, based on Indian census fertility data, has been explored. The results indicate that religion has a significant effect on marital fertility in India. Of the various religious groups studied, Buddhists were found to have the highest fertility, followed by Christians, Muslims, Hindus and Sikhs; Jains exhibited the lowest fertility. Religious differential in fertility persisted even after controlling for the effect of several major indices of social and economic development, such as, urbanisation, women's education and age at marriage.

Data Sources: 1% sample of 1971 Indian census

Countries: India

Subjects/Variables: Indians; Buddhists, Christians, Muslims, Hindus and Sikhs, Jains

Davis, Kingsley

Davis, K. (1946). Human Fertility in India. *American Journal of Sociology*, 52(3), 243-254.

Abstract: India's population problem might be solved if her traditionally high fertility could be reduced. The present analysis assesses the possibility of such a reduction in the next two or three

decades. The birth rate in the past shows no definite downward trend. The rural-urban differential shows no increase in the gap between city and country. A study of religious and caste differentials according to social status, occupation, and literacy shows no displacement of institutional by deliberate controls. No downward trend is imminent under present conditions.

Data Sources: Censuses 1881-1941

Countries: India

Subjects/Variables: Indians; Hindu, Muslim, Tribal

Discipline: Demography

Day, Lincoln H.

Day, L. H. (1964). Fertility Differentials among Catholics in Australia. *The Milbank Memorial Fund Quarterly*, 42(2), 57-83.

Abstract: We have been able to demonstrate the existence of substantial fertility differentials between various subgroups of Catholic wives. In most instances, the differentials within this religious category are in the same direction as those to be found among Western populations generally: Rural wives have a higher fertility than urban, while the fertility of both has undergone a substantial decline over the past several decades. Substantial differences were also found between various nationality groupings. Among those Catholic wives most recently finished with their childbearing (ages 40-49 in 1954) and married before the age of 26, the Polish-born had a median issue less than half of that among the Netherlands-born, the national grouping with the highest median, and but two thirds of that among their counterparts born in Australia, the British Isles, or Italy - each of which had essentially the same median. There can be little doubt that being a Roman Catholic is (at least in Western countries) associated with group differentials in fertility. The stand of the Roman Catholic Church on various matters pertaining to childbearing would imply this, even without empirical evidence of the fact. Nevertheless, as our study of Australian materials has shown, Catholics are by no means a monolithic entity with respect to fertility.

Data Sources: 1954 Census, Australian Bureau of Census and Statistics

Countries: Australia

Subjects/Variables: Australian Catholic married women; Australian Catholics by country of birth

Discipline: Demography

Day, L. H. (1965). Family Size and Fertility. In A. F. Davies & S. Encel (Eds.), *Australian Society: A Sociological Introduction* (pp. 156-167). New York: Atherton Press.

Summary: The main groups differences in the size of Australian families are that rural dwellers have more children than city dwellers; Catholics have more than non-Catholics; the Dutch-, Greek- and Italian-born more than Australian born; and the British- and Polish-born fewer. The difference between Catholics and non-Catholics is not so great as the rural/urban difference. Apart from women 70-74 (among whom the Catholic excess is but 10%), the excess of Catholic over Protestant natality varies from 19-24%.

Data Sources: 1954 Census

Countries: Australia

Subjects/Variables: 88,428 women (20% of women 40 years and over, currently married, living with husband of at least 15 years)

Discipline: Demography

Day, L. H. (1965). Family and fertility. In A. F. Davies & S. Encel (Eds.), *Australian Society: A Sociological Introduction* (pp. 156-167). Melbourne: Cheshire.

Day, L. H. (1968). Natality and Ethnocentrism: Some Relationships Suggested by an Analysis of Catholic-Protestant Differentials. *Population Studies*, 22(1), 27-50.

Abstract: Although Catholic pro-natalism serves to increase natality, it does so only under two conditions - when: (1) there exists a high level of economic development; that is, a climate in which one could reasonably expect both the predisposition and the opportunity for effective natality control to be most widespread: and (2) the persons at whom the pro-natalist teaching is directed define themselves as members of a group constituting a numerically and politically important, but not dominant, minority of the population. In the absence of these two conditions, pro-natalist doctrine in itself seems unlikely to have much effect on natality. It would seem to work through an intervening variable: a variable the presence of which is indicated by the two national attributes of a relatively high level of economic development and a minority status for the Catholic population. If there is, in fact, a causal connection between Catholic doctrine and Catholic natality, it would work through the intervening variable of ethnocentrism coupled with the feeling of being threatened as a group. I should suggest that such feelings might go a long way toward accounting for the comparatively higher natality of rich vs. poor Catholics in the United States (and possibly in other countries, as well); for almost by definition, contacts outside his own ethnic or religious group will be more frequent for the rich person than for the poor. From these contacts will come a greater awareness of being different, of being an outsider; one possible consequence of which could be that the person affected becomes more receptive to the values and attitudes associated with membership in his group.

Data Sources: United Nations, Demographic Yearbook, 1959, Table 12; Lee Jay Cho 1964

Countries: Christian countries

Subjects/Variables: Catholics

Discipline: Demography

Day, L. H. (1984). Minority-Group Status and Fertility: A More Detailed Test of the Hypothesis. *The Sociological Quarterly*, 25(4), 456-472.

Abstract: To date, tests of the minority-group status hypothesis relating to fertility have embodied a number of shortcomings - often in the nature of the data used, sometimes in the techniques of analysis, as well. Australian data particularly suited to a test of this hypothesis support it, but only when minority status is combined with pronatalism. In the absence of pronatalism, minority/majority fertility differences can instead be readily accounted for in terms of group differences either in socioeconomic composition or in the distribution of more specifically individual attributes.

Data Sources: 1971 Australian census

Countries: Australia

Subjects/Variables: Married Australian women 40+ years of age who commenced their current marriages before age 26, excluding Aborigines (n=759,925); Catholic and non-Catholic

Discipline: Demography

De Jong, Gordon F.

De Jong, G. F. (1965). Religious Fundamentalism, Socio-Economic Status, and Fertility Attitudes in the Southern Appalachians. *Demography*, 2, 540-548.

Abstract: The theories referring to differential fertility argue with insistence that religion and the socio-economic position are the most important factors in relation to attitudes and behavior versus fertility. However, most studies only consider differences in fertility among Protestants, Catholics and Jews. The efforts aimed at differentiating attitudes and behavior in terms of fertility according to the importance of the different orientations of the Protestant religion have not been very successful. Using data from the survey conducted in the southern Appalachians, a scale of religious beliefs was constructed that are significantly related to attitudes towards fertility. The importance of such beliefs subsists even when the socio-economic position, age and residence are measured statistically by means of a multiple correlation analysis.

Data Sources: Survey of social and economic characteristics and attitudes of Southern Appalachian Mountain residents, 1958

Countries: United States

Subjects/ Variables: 1,466 respondents from 190 counties within 7 states (excluding Catholics, Jews, non-whites): Alabama, Georgia, Kentucky, North Carolina, Tennessee, Virginia, and West Virginia; fundamentalist orientation

Discipline: Demography

de la Croix, David; Delavallade, Clara

de la Croix, D., & Delavallade, C. (2017). Religion, Fertility, and Growth in South-East Asia. *International Economic Review*.

Abstract: We investigate the extent to which religions' pronatalism is detrimental to growth via the fertility/education channel. Using censuses from South-East Asia, we first estimate an empirical model of fertility and show that having a religious affiliation significantly raises fertility, especially for couples with intermediate to high education levels. We next use these estimates to identify the parameters of a structural model of fertility choice. On average, Catholicism is the most pro-child religion (increasing total spending on children), followed by Buddhism, while Islam has a strong pro-birth component (redirecting spending from quality to quantity). We show that pro-child religions depress growth in the early stages of growth by lowering savings, physical capital, and labor supply. These effects account for 10% to 30% of the actual growth gaps between countries over 1950-1980. At later stages of growth, pro-birth religions lower human capital accumulation, explaining between 10% to 20% of the growth gap between Muslim and Buddhist countries over 1980-2010.

Data Sources: Pooled census data

Countries: South-East Asian countries for which religious affiliation is available as an individual variable (Cambodia, Indonesia, Malaysia, Philippines, Thailand, and Vietnam)

Subjects/ Variables: South-East Asians; Catholics, Buddhist, Muslims, no religion

Discipline: Economics

de Wolff, P.; Meerdink, J.

de Wolff, P., & Meerdink, J. (1957). La fécondité des mariages a Amsterdam selon l'appartenance sociale et religieuse. *Population (French Edition)*, 12(2), 289-318.

Abstract: De Wolff and Meerdink conducted research on the fertility of marriages by religion and social condition in Amsterdam, taking into account the birth order and the interval between births.

Data Sources: 1947 Census

Countries: Netherlands; Catholic, Calvinist, Reformed, no religion

Subjects/ Variables: Amsterdam women aged 15-49

Discipline: Demography

DeHart, William A.

DeHart, W. A. (1941). Fertility of Mormons in Utah and Adjacent States. *American Sociological Review*, 6(6), 818-829.

Abstract: The Mormons have been noted for their large families, but whether is a result of religious influences or simply a derivative of frontier conditions and other socioeconomic factors has not been clearly demonstrated. This study represents an attempt to test the hypothesis that affiliation with the Mormon Church is associated with high fertility when other factors are controlled. The study finds conclusive evidence for the influence of the Mormon religion on determining population fertility. (1) Except for Utah, the proportion of Mormon residents in the counties correlates with fertility much higher than any other variables; (2) As the control over the variables affecting fertility becomes more complete, either by using partial correlation formulas or by a special selection of the counties, the correlation of fertility with the Mormon population is increased; (3) variables such as the plane-of-living index and the percentage of urban population which ordinarily correlate well with fertility are obscured in significance until the percentage of Mormon inhabitants in the counties is statistically controlled; (4) As the differences in the proportion of Mormons become increasingly greater between counties, the fertility differentials become more pronounced

Data Sources: Fifteenth Census of the United States; data from Records of the Works Projects Administration, Washington, D.C.

Countries: United States

Subjects/ Variables: Mormons from 60 counties located in the Central Intermountain area Utah (28), Idaho (26), Wyoming (3), Nevada (3)

Discipline: Demography

Della Pergola, Sergio

Della Pergola, S. (1968). La popolazione Ebraica d'Italia: Caratteristiche demografiche, economiche e sociali. *Genus*, 24, 135-175.

Della Pergola, S. (1980). Patterns of American Jewish Fertility. *Demography*, 17(3), 261-273.

Abstract: The 1971 National Jewish Population Survey provides cross-sectional data on achieved fertility, detailed birth histories, and other information on family formation for a countrywide representative sample of 5,303 ever-married women. Cohort analysis shows that-although at lower levels-Jewish fertility has followed the general trends of American population.

Data Sources: 1971 National Jewish Population Survey

Countries: US

Subjects/Variables: Jews

Discipline: Demography

Della Pergola, S. (1983). *La trasformazione demografica della diaspora ebraica*. Torino: Loescher.

Della Pergola, S. (1997). La popolazione ebraica in Italia nel contesto ebraico globale. In C. Vivanti (Ed.), *Storia d'Italia* (Vol. 11. Gli ebrei in Italia, II. Dall'emancipazione a oggi). Torino: Einaudi.

Della Pergola, S. (2009). Actual, Intended, and Appropriate Family Size Among Jews in Israel. *Contemporary Jewry*, 29(2), 127-152.

Abstract: Israel's population reflects a unique combination of large-scale immigration and comparatively high fertility. Demographic trends impact on Israel's regional and global relations. With a current measure of 3.9 children for Muslims and 2.8 for Jews in 2007, Israel's fertility stands much above European, American, and some Mid-Eastern countries. This article examines fertility patterns and attitudes among Jews (79% of Israel's total population) based on a 2005 national survey of women and men at reproductive ages, married or in stable unions. Different demographic, socioeconomic and cultural contexts affect Jewish fertility levels in Israel. The impact of countries of origin and socioeconomic differences greatly diminished over time. Cultural factors, primarily religiosity, continue to be important determinants of a relatively high and stable quest for children. We compare actual, intended, and appropriate (according to the self-perception of respondents) family sizes. Diffuse gaps exist between ideal perceptions (focusing on 3–4 children) and actual performances (2–3 children). Significant gaps also exist between intended and appropriate family size, in both directions—the intended being either higher or lower than the perceived appropriate. Analysis of these discrepancies may provide important clues on the determinants of fertility norms and decisions, and on future family policies.

Data Sources: National survey of attitudes and behaviors concerning family size, end of 2004 to January 2005, Jewish Agency for Israel Demographic Initiative

Countries: Israel

Subjects/Variables: About 1000 Jewish women aged 25 to 45 and 500 Jewish men aged 25 to 50, all married or in stable unions; demographic, socioeconomic and Jewish identity background variables

Discipline: Demography

Derosas, Renzo

Derosas, R. (2006). Between identity and assimilation: Jewish fertility in nineteenth-century Venice. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 177-206). Dordrecht: Springer.

Summary: Derosas contrasts the reproductive behavior of a large sample of Jews and Catholics in mid-nineteenth-century Venice, drawing mainly on population-register data. The author tests the hypothesis that high fertility represents an obstacle to full integration into the majority, persistent separation from the majority should result in higher fertility to ensure group preservation, and group identification and segregation imply a greater commitment to religious ideology and a stronger social

control on religious norms. Assuming that residential choices express different degrees of integration, Derosas contrasts the fertility patterns of Catholics and Jews and, within the Jewish population, those of Jews who had abandoned the Ghetto with those remaining in it. Overall, results confirm the minority status hypothesis. The Jews who settled outside the Ghetto were more inclined to adopt forms of fertility control, while those who remained in the Ghetto displayed higher fertility than the Catholic majority. From a general point of view, this suggests that the anticipation of fertility limitation by the European Jews was an outcome of their integration into the larger society to which they belonged.

Data Sources: Population registers (1850-1869), including 31,200 individuals.

Countries: Austria.

Subjects/Variables: Jews; Catholics in Venice (mid-19th century).

Discipline: History

Derosas, Renzo; Poppel, Frans van

Derosas, R., & Poppel, F. v. (Eds.). (2006). *Religion and the Decline of Fertility in the Western World*. Dordrecht: Springer.

See entries for:

Poppel, Frans van and Renzo Derosas. Introduction. (pp. 1-20).

Lynch., Katherine A. Theoretical and analytical approaches to religious beliefs, values, and identities during the modern fertility transition. (pp. 21-40).

Goldscheider, Calvin. Religion, family, and fertility: What do we know historically and comparatively? (pp. 41-58)

Schellekens, Jona and Frans van Poppel. Religious differentials in marital fertility in The Hague (Netherlands), 1860-1909. (pp. 59-82).

Kok, Jan and Jan Van Bavel. Stemming the tide. Denomination and religiousness in the Dutch fertility transition, 1845-1945. (pp. 83-106)

Benz, Ernest. Family limitation among political Catholics in Baden in 1869. (pp. 107-132).

McQuillan, Kevin. The evolution of religious differences in fertility: Lutherans and Catholics in Alsace, 1750-1860. (133-146).

Praz, Anne-Françoise. State institutions as mediators between religion and fertility: A comparison of two Swiss regions, 1860-1930. (pp. 147-176).

Derosas, Renzo. Between identity and assimilation: Jewish fertility in nineteenth-century Venice. (pp. 177-206).

Thornton, Patricia and Sherry Olson. The religious claim on babies in nineteenth-century Montreal. (pp. 207-234).

Gauvreau, Danielle. Religious diversity and the onset of the fertility transition: Canada, 1870-1900. (pp. 235-258).

Kertzer, David I. Religion and the decline of fertility: Conclusions. (pp. 259-269).

DeVotta, Neil

DeVotta, N. (2002). Demography and Communalism In India. *Journal of International Affairs*, 56(1), 53-70.

Abstract: Population growth rates, when disaggregated along religious lines, provide fodder for religious extremists, who may use the figures to fan communalism. To examine how these observations apply in India, it is useful to analyze (i) the genesis of the numbers game in India (ii) the Hindu-Muslim demographic differential in India and the possible reasons for it and (iii) how the subcontinent's partition combined with Hindu fundamentalism have enabled Hindu extremists to manipulate fear of the supposedly philoprogenitive urge of the Muslims and threaten India's secular credentials.

Data Sources: Review article

Countries: India

Subjects/ Variables: Muslim and non-Muslim Indians

Discipline: Politics

Dharmalingam, A.; Navaneetham, K.; Morgan, S. Philip

Dharmalingam, A., Navaneetham, K., & Morgan, S. P. (2005). Muslim-Hindu Fertility Differences: Evidence from National Family Health Survey-II. *Economic and Political Weekly*, 40(5).

Abstract: This paper examines Muslim-Hindu differences in the desire for an additional child and the use of contraceptives. It uses data from the National Family Health Survey carried out in 1998-99 and employs multivariate and multilevel regression models in data analysis. Results show that Muslim-Hindu differences in the desire for additional children and use of contraceptives are pervasive across India and almost invariant across states and districts. This is consistent with the findings from our analysis of data from the first NFHS in 1992-93. However, Muslim-Hindu differences have narrowed between 1992-93 and 1998-99. It is thus argued that Muslim-Hindu fertility behaviour seems to be moving towards convergence. The pervasiveness of Muslim-Hindu differences in reproductive behaviour calls for complementary 'global explanations'.

Data Sources: National Family Health Survey-II (NFHS-II)

Countries: India

Subjects/ Variables: Indians; Hindu, Muslim

Discipline: Sociology

Dharmalingam, Arunachalam; Morgan, S. Philip

Dharmalingam, A., & Morgan, S. P. (2004). Pervasive Muslim-Hindu Fertility Differences in India. *Demography*, 41(3), 529-545.

Abstract: Using the 1993 Indian Family and Health Survey, we examined Muslim-Hindu differences in (1) the parity-specific intent to have another child and (2) given a stated intent for no more children, reports of the current use of contraceptives. We found that Muslims are much more likely than Hindus to intend to have additional children and, among those who do not want more children, Muslims are much less likely than Hindus to use contraceptives. These findings are robust to model specification and pervasive across the states of India. This national study provides the

context within which local studies should be enmeshed and begs for general (as opposed to place-specific) explanations for these pervasive differences.

Data Sources: 1992-1993 National Family Health Survey of India (NFHS-I); interviews

Countries: India

Subjects/Variables: Muslim and Hindu Muslim married women under 40 years

Discipline: Sociology

Dobroszycki, Lucjan

Dobroszycki, L. (1981). The Fertility of Modern Polish Jewry. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 64-77). Leiden: Brill.

Summary: Most historical statistical materials are very problematic and misleading in respect of Polish Jews. In the 19th and especially 20thC, Jews had lower fertility than the country's general population. Factors contributing to lower fertility are the much higher urban population, later age of marriage. But compared with other urban Poles, Jews had higher fertility, resulting from (1) the continuous influx of unsettled peasants in the cities who had not established families; (2) lower rates of women in urban professions, due to persistence of traditional roles; (3) avoidance of work in larger factories and offices due to Sabbath observance.

Data Sources: Censuses

Countries: Poland

Subjects/Variables: Polish Jews

Discipline: Demography

Dyck, A.J

Dyck, A. J. (1977). Religious Views. In R. M. Veatch (Ed.), *Population Policy and Ethics: The American Experience*. New York: Irvington.

Eaton, Joseph; Mayer, Albert

Eaton, J., & Mayer, A. (1953). The social Biology of very high fertility among the Hutterites: The demography of a unique population. *Human Biology*, 25(3), 206-264.

Abstract: Vital statistics on the ethnic Hutterites of North America were obtained in a general culture-personality study. Population growth is discussed in terms of the 1880 Base Line and the 1950 Benchmark. Age and sex distribution were studied, and reproduction is presented in several headings: 1) human fecundity and fertility; 2) the crude birthrate; 3) the fertility rate; 4) age specific birth rates; 5) variations of birthrates 6) completed family size; 7) nuptial age specific birthrates; 8) Hutterite fecundity; 9) number of children still possible after any given age; 10) whether Hutterite fecundity is unusually high; 11) low prevalence rate of sterility; and 12) the social-psychology of fertility. Sections on mortality and natural increase are presented. A social-psychological theory of population growth is discussed.

Data Sources: Censuses June 1880 and December 1950; family records

Countries: United States

Subjects/Variables: US Hutterites

Discipline: Demography

Eberstadt, Nicholas; Shah, Apoorva

Eberstadt, N., & Shah, A. (2012). Fertility Decline in the Muslim World, c. 1975–c. 2005: A Veritable Sea-Change, Still Curiously Unnoticed. In H. Groth & A. Sousa-Poza (Eds.), *Population Dynamics in Muslim Countries: Assembling the Jigsaw* (pp. 11-27). Berlin: Springer.

Summary: There remains a widely perceived notion that “Muslim” societies are especially resistant to embarking upon the path of demographic and familial change that has transformed population profiles in Europe, North America, and other “more developed” areas. In reality, however, fertility levels are falling dramatically for countries and sub-national populations throughout the Ummah – and traditional marriage patterns and living arrangements are undergoing tremendous change. This brief chapter will highlight some of these changes, examine some of their correlates and possible determinants, and speculate about some of their implications.

Data Sources: United Nations Population Division (UNPD); United States Census Bureau (USCB)

Countries: Islamic-majority countries

Subjects/Variables: Muslims

Discipline: Political economics

Eisenbach, Zvi

Eisenbach, Z. (1989). Changes in the fertility of Muslim women in Israel in recent years [Hebrew]. *HaMizrah Habadash*, 24, 82-102.

Ekert-Jaffe, Olivia; Stier, Haya

Ekert-Jaffe, O., & Stier, H. (2009). Normative or economic behavior? Fertility and women’s employment in Israel. *Social Science Research*, 38, 644–655.

Abstract: Women’s employment and childrearing are competing activities, which exert much pressure on their time and energy. Many studies have found that women in paid employment, especially in a demanding career, limit their fertility and have few children or none. This negative correlation was explained mainly in terms of opportunity costs and the incompatibility of women’s employment and childrearing. This study focuses on the interplay between women’s employment and fertility decisions in Israel, a socially diverse country, characterized by high levels of both fertility and female employment. We argue that in an environment which supports and encourages high fertility women’s employment activity is less consequential for family planning. The study analyzes simultaneously the decision to have a third child and the decision to work. The findings show that fertility affects negatively women’s work activity, but women’s employment has no effect on their

decision to have an additional child. Also, cultural variables affect the fertility decision but not economic considerations, while the opposite holds for the work decision.

Data Sources: 2001 national survey

Countries: Israel

Subjects/Variables: 347 Jewish women who mothered at least two children

Discipline: Demography, Sociology

El-Badry, M.A.

El-Badry, M. A. (1967). A Study of Differential Fertility in Bombay. *Demography*, 4(2), 626-640.

Abstract: This study is based on special tabulations of the "order of pregnancy," as reported on the birth certificate, according to mother's age, locality, and religion and father's state of birth and duration of stay in Bombay, India. The sample consists of 50 percent of the births registered in 1960 in Bombay (where birth registration has a fairly high degree of completeness). Despite the limitations of statistical information on the complex of factors influencing fertility, it was found that three indicators derived from the 1961 census could numerically account for 51 percent of the total variance of the parity averages in the sections of Bombay. Overcrowding (which is an indicator of the level of living) had the strongest influence and accounted alone for 44 percent of the variance. Knowledge of the religious pattern raised the percentage to 49, while inclusion of the illiteracy measure added only another two to this percentage. An assessment of fertility differences by religious groups, as well as by place of origin of the father, is then carried out. The data show significant differences among religious groups, with Moslems and Buddhists having the highest parity averages, followed by Hindus and Jains. A considerably lower level is shown by Christians, but the lowest parity level is that of the small Parsi community. Mothers whose husbands were born in the south and east were found to show the lowest parity level, while those who have north-born husbands showed the highest level. Finally, the data show consistent increase in age-standardized parity averages with increase of the duration of stay in Bombay. This pattern is observed for each of the three main geographic regions of origin. While this increase is difficult to explain on the basis of the available data, the fact that the pattern of parity differences among regions persists from one duration group to the next lends support to the conclusion that little assimilation seems to have been taking place.

Data Sources: Bombay birth reports of approximately 50% of the births registered in 1960 ("Bombay Birth Study"); 1961 Census

Countries: India

Subjects/Variables: Women aged 15-39 years in each of the 15 wards of greater Bombay; Hindu, Muslim, Christian

Discipline: Demography

Ellison, Christopher G.; Xu, Xiaohe; Ruiz, Andrea L.

Ellison, C. G., Xu, X., & Ruiz, A. L. (2017). Exploring the Effects of Fertility Change on Religiosity in the Twenty-First Century: A Cross-National Analysis. In D. L. Poston (Ed.), *Low Fertility Regimes and Demographic and Societal Change* (pp. 213-232). Cham: Springer.

Summary: Using multi-level data from the World Bank, the United Nations, the statistical yearbooks, and the cumulative World Values Survey, this chapter explores the effects of fertility change on religiosity in the 21st Century. Drawing on multiple literatures from population and religious studies, it is hypothesized that fertility declines may lead to eventual reductions in religious participation, salience, and belief. Country-level analyses from a sample of 54 countries lend credence to this hypothesis. Results indicate that the rate of fertility change is significantly and consistently associated with aggregate religious attendance, salience, and belief. Moreover, consistent with this central hypothesis, multi-level analyses show that number of children is positively associated with individual-level religious attendance, prayer, salience, and belief in God, whereas country-level fertility decline is inversely associated with each aspect of individual-level religiosity. Theoretical and empirical implications are discussed and directions for future research are outlined.

Data Sources: World Bank, the United Nations, the statistical yearbooks, and the cumulative World Values Survey

Countries: 54 countries

Subjects/Variables: religiosity

Engelen, Th.L.M.

Engelen, T. L. M. (1987). *Fertiliteit, arbeid, mentaliteit: De vruchtbaarheidsdaling in Nederlands-Limburg, 1850-1960.* Assen/Maastricht: Van Gorcum.

Engelen, T. L. M. (2009). *Van 2 naar 16 miljoen mensen: demografie van Nederland, 1800-nu.* Amsterdam: Boom.

Engelen, Th.L.M.; Hillebrand, J.H.A.

Engelen, T. L. M., & Hillebrand, J. H. A. (1986). Fertility and Nuptiality in the Netherlands, 1850–1960. *Population Studies: A Journal of Demography*, 40, 487-503.

Abstract: The modernization of reproductive behaviour in the Netherlands was late and slow in comparison to other European countries. In this paper marital fertility (Ig) and nuptiality (Im) between 1850 and 1960 are described and analysed, in this way adding the Dutch case to the studies of the European Fertility Project. In the analysis a model is used in which economy, attitudes and infant mortality are the (clusters of) independent variables, and either Ig or Im is the dependent one. To avoid multicollinearity the interdependencies of the explaining factors are eliminated. An analysis is made of both the level and the development of fertility and nuptiality. The model used fits the data well, and the distinction between level and development is of great importance. If analyzed statistically the variance in Im and Ig between the provinces can for the most part be explained by the attitudinal factor, while when analyzing the changes in nuptiality and marital fertility the economic factor has the strongest explanatory power. Religion had an explanatory value only when considering the level of fertility and nuptiality.

Data Sources: Dutch censuses (1859-1960)

Countries: Netherlands

Subjects/Variables: Whole Dutch population by population; variables: agricultural, population density, rural/urban, Roman Catholics and Gereformeerden (conservative Dutch Protestants), percentage of votes cast for socialist, communist and liberal parties, infant mortality

Ericksen, Julia A.; Ericksen, Eugene P.; Hostetler, John A.; Huntington, Gertrude E.

Ericksen, J. A., Ericksen, E. P., Hostetler, J. A., & Huntington, G. E. (1979). Fertility Patterns and Trends Among the Old Order Amish. *Population Studies*, 33(2), 255-276.

Abstract: There is no evidence of a reduction in fertility over time. Nor is there any evidence of a trend in the age at marriage for women, although in recent years the age at marriage for men has apparently risen. With a mean family size of 6.8, the Amish constitute a high-fertility population. There is some indication that their fertility has risen recently due to a decline in childlessness, and an increase in marital fertility at younger ages. Since there is little evidence of a decline in fertility, we investigated an alternative form of population control among the Amish, that of leaving the religion. The rate of leaving has increased, and is associated with a reduction in fertility.

Data Sources: Survey of 258 Amish individuals in Lancaster County, PA; the family genealogy of Christian Fisher who was born in Chester County, PA on 26 April 1757

Countries: United States

Subjects/Variables: US Amish

Discipline: Sociology

Fagley, Richard M.

Fagley, R. M. (1967). Doctrines and Attitudes of Major Religions in Regard to Fertility *Proceedings of the World Population Conference, Belgrade, 1965*. New York: United Nations.

Summary: Overview of doctrines of attitudes to fertility in Hinduism, Buddhism, Christianity, Islam

Fargues, Philippe

Fargues, P. (2000). Protracted National Conflict and Fertility Change: Palestinians and Israelis in the Twentieth Century. *Population and Development Review*, 26(3), 441-482.

Abstract: Total fertility rates ranging from barely above the replacement level among Jews born in Europe and among Christian Arab Israelis (2.13 and 2.10 respectively in 1992-96), to the highest level recorded in today's world among Palestinians of the Gaza Strip (7.73 in 1991-95). In this article, I argue that these extreme contrasts of fertility are a corollary of the long-lasting state of belligerence between Arab Palestinians and Jews that began in the wake of the Balfour Declaration of 1917. In 1924 (the first available record), the crude birth rate was 38.3 births per thousand population for the Jews, as against 55.3, 59.0, and 40.4, for the Muslim, Druze, and Christian Arab populations, respectively. During the following 30 years (1918-48), the Jewish population grew largely because of migrations from Europe, a region of low fertility. The State of Israel and the populations themselves aimed to merge Ashkenazi and Sephardi, the Jews of European and of Asian/North

African origin respectively, into a new Israeli society. The fertility of the Sephardi did not remain high for long after they settled in Israel, despite a pronatalist normative context and Zionism. On the contrary, it dropped rapidly to converge with that of immigrants of European origin. Until the late 1970s, no fertility decline had occurred in any of the three subpopulations, and regional differences were negligible. Then Israeli Arabs experienced the onset of transition; their fertility remains lower than that of Palestinians living in the West Bank and the Gaza Strip. The decline of fertility was never very steep among Arab Israelis as a whole, and its pace slackened from the mid-1980s onward to reach a low of around 4.1 children per woman around 1992. But Arab Israelis are not a homogeneous population. Religious communities among them exhibit substantial differentials, with the total fertility rate among Muslims roughly twice that of Christians over the period 1955-98. Christian Arabs have the lowest fertility in Israel while Muslim Arabs have by far the highest. After years of divergence between Israeli and Palestinian fertility trends, a convergence toward a more or less common low fertility is the most likely prospect for the future.

Data Sources: Israeli, Palestinian censuses

Countries: Israel, Palestine

Subjects/ Variables: Israelies, Palestinians; Jewish, Muslim, Christian, Druze

Discipline: Sociology

Fieder, Martin; Huber, Susanne

Fieder, M., & Huber, S. (2016). The association between religious homogamy and reproduction. *Proceedings of the Royal Society B*, 283: (20160294).

Abstract: Individuals more strongly affiliated to religion have on average more children than less religious ones. Here, based on census data of 3 658 650 women aged 46–60 years from 32 countries provided by IPUMS International and data from the Wisconsin Longitudinal Study (n = 2400 women, aged 53–57 years), we show that religious homogamy is also associated with higher reproduction in terms of a higher number of children and a lower chance of remaining childless. We argue that, together with the relationship between general religious intensity and number of children, religious homogamy has reproductive consequences. These may impact future demographic developments and could have also played a role in the biological evolution of humans.

Data Sources: Census data provided by Integrated Public Use Microdata Series (IPUMS)

International; Wisconsin Longitudinal Study (WLS): 10 317 men and women who graduated from Wisconsin high schools in 1957, born 1937–1940

Countries: 32 countries

Subjects/ Variables: 3 658 650 women aged 46-60

Discipline: Anthropology, Evolutionary biology

Finnäs, Fjalar

Finnäs, F. (1991). Fertility in Larsmo: The Effect of Laestadianism. *Population Studies*, 45(2), 339-351.

Abstract: In 1979 and 1980 total fertility (the sum of age-specific fertility rates) in Larsmo, Finland was as high as 3.68. The main reason for this high value was the presence of a revivalist movement, Laestadianism, which is opposed to contraception. It is estimated that some 40 per cent of the population of Larsmo (3500) are Laestadians.

Data Sources: Family cards compiled from church registers

Countries: Finland

Subjects/Variables: Women born between 1930 and 1970 who had belonged to the Larsmo congregation between 1968 and February 1988

Discipline: Demography

Ford, K.

Ford, K. (1981). *Socioeconomic Differentials and Trends in the Timing of Births*. Hyattsville, MD

Freedman, Ronald; Whelpton, Pascal K.

Freedman, R. W., Pascal K. (1950). Social and Psychological Factors Affecting Fertility: X. Fertility Planning and Fertility Rates by Religious Interest and Denomination. *The Milbank Memorial Fund Quarterly*, 28(3), 294-343.

Abstract: This paper is a report on the investigation of the following hypothesis: "The greater the interest in religion, the lower the proportion of couples practicing contraception effectively and the larger the planned families." This is one of a series of hypotheses being tested in the Study of Social and Psychological Factors Affecting Fertility. A slight negative relationship exists between the effective practice of contraception and degree of religious interest as determined in this study. However, this relationship is mainly a function of socio-economics status. It is not maintained with any consistency within categories based on an Index of Socio-Economic Status. Religious denomination is more closely related to effective planning than is any of the other indices of religious interest or activity which were utilized. In general the religious groups with a "liberal" theology or a background of emphasis on the "Protestant Ethic" tend to have high percentages of "effective planners." A large part, if not all, of the relationship between denomination and effective planning is a function of the distinctive socio-economic status of the different denominations.

Data Sources: Household Survey of Indianapolis: schedules filled out for 41,498 native-white couples; Intensive Study of 2589 native-white Protestant couples

Countries: US

Subjects/Variables: Members of various Christian denominations

Discipline: Demography

Freedman, Ronald; Baumert, Gerhard; Bolte, Martin

Freedman, R., Baumert, G., & Bolte, M. (1959). Expected Family Size and Family Size Values in West Germany. *Population Studies*, 13(2), 136-150.

Abstract: Married respondents under 45, male and female, were asked about their expected and desired children, and the ideal size for the averaged family in Germany. The mean number of children expected by all the married respondents under 45 years of age was 2.2. Eighty-eight per cent of the respondents consider one, two, or three children ideal in general and 79% consider this number desirable for themselves under ideal circumstances. If German couples were to have the number they consider desirable for themselves under ideal circumstances, they would average about 0.5 more children than the expected number. The concentration of expectations in a 1-3 child range applies with relatively little variation to all of the major strata considered. No less than 73% of the respondents expect 1-3 children in every stratum considered. The proportion is 80% or higher in all but three specific sub-groups (farmers, unskilled labourers, and persons with a religious preference other than Catholic or Protestant). Catholics expect, idealize, and desire more children than Protestants. Mean expected family size is about 15 % higher for Catholics (2.4) than for Protestants (2.1). The very few respondents having no religious preference or a preference other than Protestant or Catholic definitely expect fewer children than either of the two major religious groups. Close attachment to the church as indicated by frequency of church attendance is associated with higher actual and expected fertility and higher ideal and expected family size for both Catholics and Protestants, but the connection with church attendance is much more important for Catholics than for Protestants. The other variables considered are urbanization, occupation, education, income, and working wives. The common experience of work outside the home, with the sociological correlates already noted, has the effect of diminishing the ideological influence of religious differences.

Data Sources: DIVO Institut 1958 interviews of national probability sample of West German adults

Countries: West Germany

Subjects/ Variables: 1850 married respondents aged under 45; Catholic and Protestant; religiosity (attendance)

Discipline: Demography

Freedman, Ronald; Coombs, Lolagene C.; Bumpass, Larry

Freedman, R., Coombs, L. C., & Bumpass, L. (1965). Stability and Change in Expectations About Family Size: A Longitudinal Study. *Demography*, 2, 250-275.

Abstract: In three interviews conducted over the course of two years among Detroit women who had had their first, second or fourth birth, there was remarkable stability in the responses about the number of children they expected. In many individual cases there were small changes, but the effects were offset. Several social characteristics were located, especially religion and occupation; they were related to the intensity of the change, but not to the direction, so that this instability produces little net effect on overall expectations, even in the subgroups. Factors examined exerted strong influence on the stability of the expected family size and on the direction of change. A pregnancy during the period studied often caused upward trends in expectations. The woman's inability to get pregnant resulted in descending tendencies, as the spacing plans of the children were disrupted. When there was a discrepancy between the preferred number and the expected number of children, there were frequent changes in the sense of reducing such discrepancy. The results of this analysis agree with the opinion that social norms related to the size of the family tend to govern the behavior of couples, the changes are small, overlap and offset.

Data Sources: Detroit Area Study, University of Michigan

Countries: United States (Detroit)

Subjects/Variables: Married women with a first, second or fourth birth in July 1961; Catholic, non-Catholic; religiosity (attendance)

Discipline: Demography

Freedman, Ronald; Goldberg, David; Bumpass, Larry

Freedman, R., Goldberg, D., & Bumpass, L. (1965). Current Fertility Expectations of Married Couples in the United States: 1963. *Population Index*, 31(1), 3-20.

Abstract: Family size expectations in 1963 were similar in the aggregate to those previously described for 1960 and 1962. However, the proportion of expected children already born rose steadily, if slowly, between 1955 and 1963. The 1962-63 data show that Catholics at both younger and older ages have substantially higher actual and expected fertility than Non-Catholics. Catholics who attend church regularly have much higher actual and expected fertility than those who do not. The negative relationship of education to actual fertility, clearly marked for Non-Catholics, is much smaller for the Catholics. Furthermore, with respect to expectations the relationship, while negative for Non-Catholics in either age group, is positive for Catholics aged 18-29, and there is no relationship for the older Catholics. There is no significant relationship between family income and actual or expected fertility for either Catholics or Non-Catholics. There is no significant relationship between family income and actual or expected fertility for either Catholics or Non-Catholics. Again, for both Catholics and Non-Catholics expected fertility decreases sharply with greater work experience of the wife.

Data Sources: Princeton fertility study

Countries: United States

Subjects/Variables: US Catholics, non-Catholics

Discipline: Demography

Freedman, Ronald; Goldberg, David; Slesinger, Doris

Freedman, R., Goldberg, D., & Slesinger, D. (1963). Current Fertility Expectations of Married Couples in the United States. *Population Index*, 29, 366-391.

Freedman, Ronald; Whelpton, Pascal K.

Freedman, R., & Whelpton, P. K. (1950). Social and Psychological Factors Affecting Fertility: X. Fertility Planning and Fertility Rates by Religious Interest and Denomination. *The Milbank Memorial Fund Quarterly*, 28(3), 294-343.

Abstract: This paper is a report on the investigation of the following hypothesis: "The greater the interest in religion, the lower the proportion of couples practicing contraception effectively and the larger the planned families". An important theoretical basis for the hypothesis is that degree of religious interest and participation may be considered to be negatively an index of rationalism and

positively an index of the acceptance of traditional values. Or non-participation in religious institutions may involve the acceptance of norms of non-religious groups.

Data Sources: Household Survey of Indianapolis, Committee on Social and Psychological Factors Affecting Fertility, Milbank Memorial Fund

Countries: United States (Indianapolis)

Subjects/Variables: Intensive Study: restricted to 2,589 native-white Protestant couples whose marriages were contracted during 1927-1929, and were unbroken at the time of the interview in 1941, wife under 30, husband under 40 at marriage, neither previously married, couple resided in a large city most of the time since marriage, and both husband and wife had at least completed grammar school

Discipline: Demography

Freedman, Ronald; Whelpton, Pascal K.; Campbell, Arthur A.

Freedman, R., Whelpton, P. K., & Campbell, A. A. (1959). *Family Planning, Sterility, and Population Growth*. New York: McGraw-Hill.

Summary: Use of contraception is higher for Jews, followed by Protestants and then Catholics. Before the first pregnancy, 83% of Jews, 52% of Protestants, and 32% of Catholics were users of contraception. Close attachment to the Catholic Church is associated with low tendency to use contraception, but there is no such association for Protestants. But highly fecund and devout Catholics are more likely than subfecund and devout Catholics to use contraception. The Catholic-Protestant differences hold at each level of economic status or education or urban/rural location or husband's occupation. A majority of wives in each group supported family limitation under some conditions, but many more Catholics than Protestants disapproved either completely or with qualifications. Religion is the primary influence on the Catholic-Protestant differential, not other demographic characteristics. Four reasons for family limitation account for 86% of responses: economic/financial, health of wife or children, adequate child care by mother, happy family life from limitation and spacing.

Data Sources: Interviews by Survey Research Center, University of Michigan

Countries: United States

Subjects/Variables: 2,713 white married women, age 18-39, living with husbands; Protestant, Catholic, Jewish; religiosity

Discipline: Sociology; Demography

Freedman, Ronald; Whelpton, Pascal K.; Smit, John W.

Freedman, R., Whelpton, P. K., & Smit, J. W. (1961). Socio-Economic Factors in Religious Differentials in Fertility. *American Sociological Review*, 26(4), 608-614.

Abstract: Precision matching is used to test whether religious differences in fertility behavior result from socio-economic differences between the major religious groups. The 66 Jewish couples from a national sample survey of fertility are matched with Catholic and Protestant couples on duration of marriage and five socio-economic characteristics. These socio-economic controls eliminate most of the Protestant-Jewish differences for the fertility variables. However, the Catholic-Jewish

differentials are not reduced. Apparently the distinctive Catholic fertility pattern cannot be explained by the combination of socio-economic characteristics considered. The significance of these results is discussed.

Data Sources: Samples from Growth of American Families study

Countries: United States

Subjects/Variables: Jews, Protestants, and Catholics in the United States

Discipline: Demography

Frejka, Tomas; Westoff, Charles F.

Frejka, T., & Westoff, C. F. (2008). Religion, religiousness and fertility in the US and in Europe. *European Journal of Population/Revue Européenne de Démographie*, 24(1), 27.

Abstract: This article aims to assess the role of religion and religiousness in engendering higher US fertility compared to Europe. Religion is important in the life of one-half of US women, whereas not even for one of six Europeans. By every available measure, American women are more religious than European women. Catholic and Protestant women have notably higher fertility than those not belonging to any denomination in the US and across Europe. In all European regions and in the United States as well as among all denominations the more devout have more children. However, women in Northern and Western Europe who are the least religious have equivalent or even higher fertility than women in the US, and notably higher fertility than those in Southern Europe. This suggests that forces other than religion and religiousness are also important in their impact on child bearing. A multivariate analysis demonstrates that relatively "traditional" socio-economic covariates (age, marital status, residence, education, and income) do not substantially change the positive association of religiousness and fertility. Finally, if Europeans were as religious as Americans one might theoretically expect a small fertility increase for Europe as a whole, but considerably more for Western Europe.

Data Sources: European Values Survey (2000); National Survey of Family Growth (2002); World Values Surveys (1981-2001); Pew Research Center poll

Countries: US; Europe

Subjects/Variables: Whole population

Discipline: Demography

Friedlander, Dov; Eisenbach, Zvi; Goldscheider, Calvin

Friedlander, D., Eisenbach, Z., & Goldscheider, C. (1979). Modernization Patterns and Fertility Change: The Arab Populations of Israel and the Israel-Administered Territories. *Population Studies*, 33(2), 239-254.

Abstract: The fertility of several Arab sub-populations has been examined in order to identify selected aspects of the relations between socio-economic and fertility changes. All these groups experienced similar high fertility levels up to the late 1920s. However, since that period they have been exposed to varying degrees of modernization. In general there is a negative relation between socio-economic development and fertility change among these groups. The ranking of socio-economic development and fertility decline has the following order: Israeli urban Christians, Israeli

urban Moslems, Israeli rural Christians, Israeli rural Moslems, Moslems in the Administered Areas. A much more important issue is whether there is a relation between the extent of socio-economic development and the timing and speed of fertility change. There is probably no simple answer to this question because economic development affects fertility only indirectly, that is through processes of change in the family. Such indirect relationships have to be uncovered. The experience of the Arab populations discussed here is a remarkable illustration of the importance of this point, particularly that of the Israeli rural Moslem population. In this group the fertility transition has only just begun with a very modest decline which may at present even be difficult to document. Yet this group has been subject to socio-economic change for over 40 years. First education was introduced on a wide scale. Public health measures and declining mortality followed. There was a major shift from the traditional family economy to a modern market economy, from agriculture to other sectors of economic activity and incomes and standards of living rose to a level far above that of other contemporary traditional societies. The population participated in various social welfare schemes which are unknown in less developed countries. What is surprising is not that fertility has fallen slightly in the youngest marriage cohorts, but rather that this change has been delayed for so long.

Data Sources: Survey, Arab population of Israel

Countries: Israel

Subjects/ Variables: Israeli Arab Christians, Muslims

Discipline: Demography

Friedlander, Dov; Feldmann, Carole

Friedlander, D., & Feldmann, C. (1993). The Modern Shift to Below-Replacement Fertility: Has Israel's Population Joined the Process? *Population Studies*, 47(3), 295-306.

Abstract: Fertility has declined to below replacement levels in many of the modern industrialized countries during the last three decades. This decline has been explained by various modern socio-economic characteristics, such as the change in women's status, their increased participation in non-familial activities, modern consumption patterns, and increasing costs of raising 'quality' children. The Jewish population of Israel is a modern society with such characteristics. Yet, total fertility in Israel during the 1980s was at least one child higher than in most European countries. It is shown that social heterogeneity makes this an over-simplified comparison. Indeed, it is the high fertility of the orthodox population among the two major ethnic groups, combined with the decline towards below-replacement fertility of the non-orthodox, which produces the high mean fertility of the entire population. While during the 1950s and 1960s the major explanations of fertility variation were concerned with ethnicity and socio-economic status, these were replaced by religiosity in the 1970s and the 1980s.

Data Sources: Israeli birth registrations; votes for religious parties (religiosity) in 1984

Countries: Israel

Subjects/ Variables: Jewish urban population from 215 urban units; variables: high education, high income, women's employment, metropolitan residence, religiosity

Discipline: Demography

Friedlander, Dov.

Friedlander, D. (2002). Fertility in Israel: Is the transition to replacement level in sight?

Population Bulletin of the United Nations, 48/49, 403–410.

Abstract: I discuss theoretical considerations regarding fertility processes in general. Following that, I apply this theoretical framework to the various population subgroups in Israel, as a basis for the final section that attempts to assess future fertility patterns among these groups, and for the overall population of Israel.

Data Sources: Summary discussion

Countries: Israel

Subjects/ Variables: Non-religious Jews of European and US origins, Jews of Asian and African origins (religious and secular), Arabs (Muslims, Christians, Druze), ultra-Orthodox Jews

Discipline: Demography

Gaur, D.R.; Goel, M.K.; Goel, M.

Gaur, D. R., Goel, M. K., & Goel, M. Contraceptive practices and related factors among females in predominantly rural Muslim area of North India. *Internet Journal of World Health & Societal Politics*, 5(3), 2008.

Abstract: The demographic profile of South Asia is one of high levels of fertility, low ages at marriage and relatively low contraceptive prevalence. The behaviour related to reproduction are determined by cultural and religious values in some communities. Our study was planned to know the contraceptive practices among females in the reproductive age groups in rural area of Mewat, Haryana (predominantly Muslim area). 34.92% of subjects were using contraceptive methods Out of total protected females 61% were using spacing methods and 39% were using terminal methods. 43.9% were using Cu-T and was the most preferred method of contraception. No significant association of contraceptive usages was observed with age of marriage and literacy. A statistically significant association of contraceptive usage was seen with number of living children, religion and the age of female at the birth of first child.

Data Sources: Interviews

Countries: India

Subjects/ Variables: Females, aged 15-45 in rural area of Mewat, Haryana; predominantly Muslim

Discipline: Health

Gauvreau, Danielle

Gauvreau, D. (2002). La transition de la fécondité au Canada: Bilan et essai d'interprétation. *Annales de démographie historique*, 104(2), 175-199.

Abstract: The Canadian fertility transition begun in the second half of the nineteenth century was characterized by stark regional contrasts. It took place in a cultural and economic context marked by diversity, not least in the experiences of the country's two most populous provinces: Ontario, with its English-speaking Protestant majority, had among the lowest fertility levels in the country, while French-speaking, Catholic Quebec had the highest. Although these contrasts might be seen to lend weight to cultural explanations of fertility decline, this article re-evaluates such interpretations on the

basis of recent work that draws on aggregate census data, on micro-level census data, and to some extent on qualitative sources. Using this new research, the essay provides a more detailed picture of the trends and differentials that characterized fertility decline in various regions, demonstrating that the Canadian fertility experience was nothing if not heterogeneous. The study of religion, for example, reveals greater diversity than the expected Catholic/Protestant dichotomy; women's paid labor also played a role in the differentiation of reproductive experiences, as did children's school attendance and the milieu in which families lived. Although the changes that were taking place are not yet fully understood, recent advances in research on Canadian fertility have brought us significantly closer to achieving this objective.

Data Sources: Censuses and Government statistics (1861-1971)

Countries: Canada

Subjects/ Variables: All Canadians, by provinces; Catholic Quebec

Discipline: Demography

Gauvreau, D. (2006). Religious diversity and the onset of the fertility transition: Canada, 1870-1900. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World*. Dordrecht: Springer.

Summary: The study uses the nominal data of a public use sample of the 1871 and 1901 Canadian census to illustrate the diverging paths followed by people of various religious backgrounds when marital fertility rates started their decline in Canada. As was the case in Montreal, religion was not the sole factor nor did it play an isolated role in the fertility decline. Whereas within the Protestant denominations differences in fertility were rather small, much higher differences were observed among Catholics. French Catholics in particular were hardly touched by the fertility decline, whereas Catholics of Irish origin took a different path. The author relates these differences to the specific social and political situation of both groups, to their relation towards modernity, to the way in which intimate relationships were embedded in the public sphere, and to the consequences of being barred from involvement in the Church.

Data Sources: Canadian Census (1871, 1901)

Countries: Canada

Subjects/ Variables: Canadian women by Province, Religion (Anglican, Presbyterian, Methodist, Baptist, Lutheran, Catholic), habitat, ethnicity (French, Irish), birthplace, occupation, schooling, literacy

Discipline: Sociology

Gauvreau, Danielle; Gervais, Diane

Gauvreau, D., & Gervais, D. (2003). Les chemins détournés vers une fécondité contrôlée : le cas du Québec, 1930-1970. *Annales de démographie historique*, 106(2), 89-109.

Abstract: This paper aims at understanding how French Catholic couples in Quebec managed to limit the size of their families within a social and religious context particularly opposed to such practices. Using micro-level data from the 1971 census and information from in-depth interviews, the authors seek to uncover the groups most likely to circumvent Catholic rules. The article also identifies some mechanisms, at times surprisingly paradoxical, used by both couples and priests to attain their goal while staying faithful to the Church. These include the search for a more lenient confessor, variable applications of moral principles according to the situation, and justifications based on a double act

effect. However, the use of such stratagems becomes obsolete in the sixties with the availability of the pill and the publication of *Encyclique Humanae vitae*: most couples now act according to their own conscience and assume moral responsibility for the number of children they wish to have and which they actually bear.

Data Sources: 1971 Quebec fertility survey; interviews with Catholic priests, physicians, men and women

Countries: Canada (Quebec)

Subjects/ Variables: French Catholic couples in Quebec

Discipline: Demography

Gauvreau, Danielle; Gervais, Diane; Gossage, Peter

Gauvreau, D., Gervais, D., & Gossage, P. (2007). *La fécondité des Québécoises, 1870–1970: d'une exception à l'autre*. Montreal: Les Éditions du Boréal.

Countries: Canada (Quebec)

Discipline: Demography, ethnology

Gauvreau, Danielle; Laplante, Benoît

Gauvreau, D., & Laplante, B. (2016). La fécondité au Canada durant le baby-boom. Divergence et convergence des comportements. *Annales de démographie historique*, 136(2), 65-110.

Abstract: In Canada, the baby boom unfolded differently in the various provinces, particularly in the two most populous provinces of Quebec and Ontario. In the latter, the picture is the usual one, with an increase in both fertility and nuptiality which, together, are responsible for a significant increase in total fertility rates. In Quebec, where the first demographic transition was not yet complete at the onset of the baby boom, the nuptiality increase was also very strong, but married women actually gave birth to fewer children, not more, during the baby boom. In this paper, we use two pieces of retrospective information from the 1981 census—the age of women when they were first married and the number of children born to them—to investigate the differences in cohort fertility rates for married women born between 1900 and 1940, and the corresponding parity ratios. We also use multinomial logistic regression models to assess the impact of religion, ethnic origin, education, and province of residence on the fertility outcomes of these women, while taking into account their age at marriage and the duration of the marriage. Results show 1) diverging patterns for Catholic and Protestant women, yet the fertility levels in these two groups were remarkably similar for the last cohorts of women; 2) the positive impact that marrying at a younger age and having a longer marriage had on fertility, although this was not sufficient to account for the rise in Protestant fertility; and 3) the persistence of an educational gradient in fertility outcomes, even though the gap narrowed between categories. These results are generally in line with what more fine-grained analyses of the baby boom in some European countries have shown recently.

Data Sources: 1981 Census

Countries: Canada (Ontario and Quebec)

Subjects/ Variables: Canadians; Catholics of French origin, Catholics of British origin (mainly Irish), Protestants of British origin (mainly English and Scottish), and women of Jewish religion

Discipline: Sociology

Gervais, Diane.; Gauvreau, Danielle.

Gervais, D., & Gauvreau, D. (2003). Women, Priests, and Physicians: Family Limitation in Quebec, 1940-1970. *The Journal of Interdisciplinary History*, 34(2).

Abstract: The fertility transition occurred relatively later, and at a much slower pace, in Quebec than in most industrializing countries. Quantitative data can help to situate the general trends and the contributing factors. Qualitative data reveal the hostile context in which Catholic couples tried to fulfill their aspirations to have smaller families. They also show variability in the practices of clergy members.

Data Sources: 1971 Quebec fertility survey; interviews with Catholic priests, physicians, men and women

Countries: Canada

Subjects/Variables: Quebec, Canada

Discipline: Demography

Gibbons, William J.

Gibbons, W. J. (1949). The Catholic value system in relation to human fertility. In G. F. Mair (Ed.), *Studies in Population*. Princeton: Princeton University Press.

Gitelman, Zvi

Gitelman, Z. (1981). Correlates, Causes, and Consequences of Jewish Fertility in the USSR. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 33-63). Leiden: Brill.

Summary: Examines demographic trends among Soviet Jews. Lower fertility is caused by concentration in urban areas, high education levels for Jewish men and women; ethnicity (especially central Asian Jews); higher age at marriage; high level of employment of women.

Data Sources: Soviet censuses, 1959, 1970; Soviet data on Jews; general Soviet demographic studies

Countries: USSR

Subjects/Variables: Soviet Jews

Discipline: Demography

Goldscheider, Calvin

Goldscheider, C. (1967). Fertility of the Jews. *Demography*, 4(1), 196-209.

Abstract: The objectives of this paper were to review and summarize the existing literature on Jewish fertility and to discuss the highlights of data on fertility trends and differentials based on survey data

obtained on the Jewish population of the metropolitan area of Providence, Rhode Island. The literature consistently confirmed the finding of lower fertility among Jews since the 1880's in the United States and for the last seventy-five years in a variety of European countries. A review of available data on fertility trends and differentials within the Jewish population indicated contradictory and inconsistent findings. The Providence survey data pointed to changing patterns of fertility among Jews and clarified a number of seeming inconsistencies. These data suggested (1) the pre-World War II decline and post-war recovery of Jewish fertility; (2) the change from an inverse relationship of social class and Jewish fertility among first-generation Jews to a direct relationship among second- and third-generation Jews; (3) the changing relationship of religiosity and Jewish fertility, which reflects social class changes. Finally, an attempt is made to clarify the interpretation of these and related findings by placing the analysis of Jewish fertility in the context of assimilation and acculturation.

Data Sources: sample survey 1963 (1,603 Jewish households; 25% sample of the total Jewish population of Providence metropolitan area)

Countries: United States

Subjects/Variables: Jewish population of the Providence metropolitan area

Discipline: Demography

Goldscheider, C. (1971). *Population, modernization, and social structure*. Boston: Little, Brown and Company.

Goldscheider, C. (1992). Demographic Transformations in Israel: Emerging Themes in Comparative Context. In C. Goldscheider (Ed.), *Population and Social Change in Israel* (pp. 1-38). Boulder, CA: Westview.

Summary: A summary of demographic patterns in Israel. The chapter examines the effects of immigration and ethnic composition. While total fertility rates in Israel have remained relatively stable over the last 40 years, fertility of European American Jews has remained low but slightly increased, Christian fertility has steadily declined, since the 1970s there has been a significant reduction in Muslim Israeli fertility, and major reductions in the originally very high fertility levels of migrants from Asian and African countries. There has been more than one transition, from decline to baby boom to recovery.

Data Sources: Statistical Abstract of Israel

Countries: Israel

Subjects/Variables: Israelis; Jews (European-American and Asian-African), Muslims, Christians, Druze

Discipline: Demography

Goldscheider, C. (1999). Religious Values, Dependencies, and Fertility: Evidence and Implications from Israel. In R. Leete (Ed.), *Dynamics of Values in Fertility Change* (pp. 310-330). Oxford: Oxford University Press.

Summary: Fertility levels among Muslims living in Israel have been higher than for other religious-national groups in Israel. High levels were sustained until the 1970s, decreasing from 10 children in 1965 to less than 5 in 1990. Delays in the timing of marriage, increases in educational levels of women, and sharp reductions in infant and adult mortality account in part for fertility fluctuations and declines in family size. There has also been a sustained increase in the use of contraception to control family size. Changes in economic and labour force patterns of Muslim Israeli women have had an important impact on fertility levels, but male employment patterns are more central, in particular economic dependence on the Jewish Israeli economy. State controls restricting economic

opportunities and migration have left few alternatives but control of family size. Values which most influence fertility among Israeli Muslims are those relating to the centrality of the family, the roles of men and women, and the roles of parents and children. These are more important than Islamic views on contraceptive usage or ideal family size. Values do not operate in a social and political vacuum but are variables that respond to political -economic and demographic contexts.

Data Sources: Census

Countries: Israel

Subjects/ Variables: Israeli/Palestinian Muslims

Discipline: Demography

Goldscheider, C. (2002). *Israel's changing society: Population, ethnicity and development* (2 ed.). Boulder: Westview Press.

Summary: The book examines how population change, socio-economic development, immigration patterns and policy, urbanization, inequality, family and marriage, and Palestinian communities have contributed to the changing society of Israel. Chapter 5 examines the demographic issues at the forefront of the conflict between the largely Muslim Arab population and Jewish population. Arabs have had the highest fertility rates since the establishment of Israel. The chapter examines the changing levels of inequality between Arabs and Jews in Israel, the role of fertility in reinforcing levels of inequality in the Arab community, and the centrality of residential segregation in sustaining social, political, and economic dependency of Arab Israelis.

Data Sources: Overview

Countries: Israel

Goldscheider, C. (2006). Religion, family, and fertility: What do we know historically and comparatively? In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World*. Dordrecht: Springer.

Summary: Analysis of the role of the community and of religious institutions in shaping the relationship between family values, religion and fertility. Israeli Muslims maintained high fertility levels as a consequence of the segregation policy of the Israeli government, which gave rise to strong residential concentration, influence of family networks and values such as subordination of women and gender hierarchies. The study finds that variation has to be studied at the level of the communities, defined in terms of religious divisions, that the state can play a powerful role in altering fertility patterns, even when there is no direct family policy, and finally that changes in fertility are connected to other issues of demographic importance, especially migrations.

Data Sources: Goldscheider 2002

Countries: Israel

Subjects/ Variables: Muslims

Discipline: Demographics

Goldscheider, Calvin; Friedlander, Dov

Goldscheider, C., & Friedlander, D. (Pattern). Patterns of Jewish Fertility in Israel: A Review and Some Hypotheses. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 232-254). Leiden: Brill.

Summary: Examines fertility rates for three Jewish subpopulations: European-American-born, Asian-African-born, native-Israeli-born. The European-American-born population increased after WWII from 1.2 to 1.5, dropping to 1.2 in 1973. The Asian-African-born population began over 3.0, declining to 1.8 by 1973. The native-Israeli rate fluctuated during the same period, in 1973 being 12% higher than European-born and 20% lower than Asian-African-born. There are small increases in fertility for Jews in kibbutzim. Causal factors include (1) ethnicity, generation, and length of exposure to Israeli society; (2) education and social class; (3) marriage and family structural patterns; (4) changing patterns of religiosity.

Data Sources: 1961 census; Central Bureau of Statistics surveys (1973-)

Countries: Israel

Subjects/Variables: Israeli Jews

Discipline: Demography

Goldscheider, Calvin; Mosher, William D.

Goldscheider, C., & Mosher, W. D. (1991). Patterns of Contraceptive Use in the United States: The Importance of Religious Factors. *Studies in Family Planning*, 22(2), 102-115.

Abstract: Previous research has shown that the major religious communities in the US have all shifted their expected family size downward but significant differences in contraceptive use styles continue to characterize Catholics, Protestants, Jews, and those of no religious affiliation. This paper examines data from Cycle IV of the National Survey of Family Growth (1988) to extend the time period covered by previous research by comparing the emerging contraceptive use patterns and fertility expectations among women in the late 1980s with earlier cohorts from previous national studies, beginning in the 1960s. The categories of religious affiliation are extended to include specific religious denominations (fundamentalist Protestants, Baptists, and other denominations, as well as Mormons) and include measures of religiosity--church attendance, the extent of receiving communion among Catholics, and attendance at church-related schools. These data are examined for blacks, Hispanics, and non-Hispanic whites. The analysis suggests how religious affiliation and religiosity continue to be important factors in the contraceptive paths to low fertility under general conditions of controlled fertility and in the context of secularization.

Data Sources: Cycle IV of the National Survey of Family Growth (1988)

Countries: United States

Subjects/Variables: Currently married white, non-Hispanic US women aged 15-44; Protestant, Catholic, Jewish; Baptist, Fundamentalist, Mormon, Other Protestant; white, black; frequency of church attendance; religious schooling

Discipline: Sociology

Goldscheider, Calvin; Uhlenberg, Peter R.

Goldscheider, C., & Uhlenberg, P. R. (1969). Minority Group Status and Fertility. *American Journal of Sociology*, 74(4), 361-372.

Abstract: Most studies of minority group fertility assume that as assimilation proceeds the fertility of minority and majority populations will converge. Differences between minority and majority are

usually treated as temporary phenomena and often are interpreted in terms of the social, demographic, and economic characteristics of minority group members. Empirical evidence, however, does not fully support the "characteristics" explanation of Negro, Jewish, Japanese-American, or Catholic fertility. An alternative hypothesis is presented with respect to the independent effect of minority group status on fertility. Some parameters of the interrelationship of minority group status and fertility are discussed.

Data Sources: Censuses and special-sample surveys

Countries: United States

Subjects/Variables: US Blacks, Jews, Japanese-Americans, Catholics

Discipline: Demography

Goldscheider, C., & Uhlenberg, P. R. (1969). Minority Group Status and Fertility. *American Journal of Sociology*, 74(4), 361-372.

Abstract: Most studies of minority group fertility assume that as assimilation proceeds the fertility of minority and majority populations will converge. Differences between minority and majority fertility are usually treated as temporary phenomena and often are interpreted in terms of the social, demographic, and economic characteristics of minority group members. Empirical evidence, however, does not fully support the "characteristics" explanation of Negro, Jewish, Japanese-American, or Catholic fertility. The consistently lower fertility of Jews over time, in the United States and Western countries, and controlling for residence, social class, and other significant sociological and demographic variables suggests that interpretations of lower Jewish fertility based solely on the characteristics of the Jewish population is inadequate. It is quite clear that "the distinctive Catholic pattern is not a result of low social or educational status or of recent urbanization. In fact, it is most distinctive among the well-educated urban group." The evidence available on Catholic fertility irrefutably dismisses the "characteristics" hypothesis. An alternative hypothesis is presented with respect to the independent effect of minority group status on fertility. Some parameters of the interrelationship of minority group status and fertility are discussed. Under given social and economic changes and concomitant acculturation, the insecurities and marginality associated with minority group status exert an independent effect on fertility. This effect is negative when (1) acculturation of minority group members has occurred and is desired; (2) equalization of social and economic characteristics occurs and/or social and economic mobility is desired; (3) no pronatalist ideology is associated with the minority group and no norm discourages the use of efficient contraceptives. When these three conditions are met and we control for socioeconomic characteristics, minority group fertility will be lower than majority fertility. When these conditions are not met, minority fertility will be higher.

Data Sources: Review of literature, US census data

Countries: United States

Subjects/Variables: Americans; Blacks, Jews, Catholics

Discipline: Demography

Goldstein, Alice

Goldstein, A. (1981). Some Demographic Characteristics of Village Jews in Germany: Nonnenweier, 1800-1931. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 112-143). Leiden: Brill.

Summary: Age of marriage was higher for Jews compared with non-Jews in Nonnenweiler. The crude birth-rate declined from 52.6/1000 in 1826 to 12.1/1000 in 1905 - higher than non-Jewish population at first, but declining earlier.

Data Sources: The Ortssippenbuch (village genealogy) for the village of Nonnenweiler

Countries: Germany

Subjects/Variables: Jewish residents of Nonnenweiler, 1800-1931

Discipline: Demography

Goldstein, Sidney

Goldstein, S. (1970). Religious fertility differentials in Thailand, 1960. *Population Studies: A Journal of Demography*, 24(3), 325-337.

Abstract: Although the evidence supporting high fertility in Thailand is clear-cut, little is known about fertility differentials within the population. As part of a larger investigation, a special 1% tabulation of the 1960 Thai census data on number of children ever-born to married women has been analysed to determine the extent of differentials by religion and urban-rural status. The findings point to considerable differentials among Buddhists, Moslems, and Confucianists. Standardizing for age, the number of children ever-born to Moslems averaged well below the number born to Buddhists. Confucian fertility was intermediate. Within specific age groups, the number of children ever-born to Moslem women was considerably below the Buddhist average and the differentials were sharper in the higher age groups. By contrast, Confucian fertility was highest of all in the age groups under 35, but lower than the Buddhist averages among older women. Significant urban-rural differentials also exist. For both the Buddhist and the Confucian women, fertility is markedly lower in urban than in rural categories. When controlling for both age and urban-rural status, Buddhist and Confucian differences tend to be minimal. By contrast, Moslem fertility was highest in the most urban category — Bangkok — but was considerably lower and substantially below the fertility levels of Buddhists and Confucianists in all other urban-rural categories. The census data in themselves do not permit adequate analysis of the reasons for the differentials. Later age at marriage in urban places may be a significant factor in accounting for the overall differentials in urban-rural fertility ; but this relation is much less clear for specific religious groups, particularly since Moslems marry at a considerably earlier age. More frequent divorce and remarriage may lower Moslem rates. Poorer health may also be a factor.

Data Sources: 1% tabulation of the 1960 Thai census data

Countries: Thailand

Subjects/Variables: Buddhist, Muslim, and Confucianist Thais

Discipline: Demography

Goldstein, S. (1981). Jewish Fertility in Contemporary America. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 160-208). Leiden: Brill.

Summary: Jewish fertility is close to minimum needed for replacement. Analyses Age differentials, birth intervals, age at marriage, the effect of mixed marriage, socio-economic differentials.

Data Sources: Growth of American Families Studies (GAF) and Princeton Fertility Studies; US Govt Current Population Survey (CPS); community surveys in Illinois (Lazerwitz, 1966 and 1967);

National Center for Health Statistics, National Survey of Family Growth, 1973-1974; General Social

Survey, National Opinion Research Corporation (1972-); National Natality Surveys, National Center for Health Statistics (1967, 1968, 1969)

Countries: United States

Subjects/ Variables: US Jews

Discipline: Demography

Gomez, C.J.

Gomez, C. J. (1965). Religion, education, and fertility control in Latin American societies *Proceedings of the United Nations World Population Conference, Belgrade, Yugoslavia*. New York: United Nations.

González López, Greethel

González López, G. (2016). *La religion et l'usage des méthodes contraceptives au Mexique* (Vol. Doctor).

Paris: Université Sorbonne *Summary:* This thesis focuses on the relationship between fertility and religion. In a demographic approach, this thesis provides an analysis on the behavior and attitudes of Catholic couples face of family planning. It proposes to explain how they reconcile their faith with the need for birth control and how they justify their dependence or disobedience to the doctrine. Finally, one of our main objectives is to recognize the procedures by which new attitudes coexist with traditional models. Moreover, given that Mexico is a country that belongs to the set of a traditional cultural context in which its main characteristics guarantee the prevalence of unequal relations of sex and male domination, it was considered important to include in our research a gender perspective.

Data Sources: l'Enquête Nationale de la Dynamique Démographique (ENADID, 2009) et le Recensement de la Population de 2010

Countries: Mexico

Subjects/ Variables: Mexicans; Catholics, non-Catholics

Discipline: Sociology

Goodson, Patricia

Goodson, P. (1997). Protestants and Family Planning. *Journal of Religion and Health*, 36(4), 353-366.

Abstract: There is evidence supporting the hypothesis that the historically favorable views of Protestants regarding the practice of family planning are changing among selected sub-groups. Such an attitudinal shift among Protestants has been rarely investigated by social scientists. This literature review represents an initial step in examining the phenomenon. A profile of Protestants' historical views of family planning will be presented first, followed by a discussion of the recent questioning of this group's favorable attitudes towards the practice. Additionally, research literature on

contraceptive behavior and fertility patterns will provide empirical evidence supporting the hypothesis.

Data Sources: Review of historical, contemporary Protestant views on birth control, implications for fertility analysis

Discipline: Health

Gossage, Peter; Gauvreau, Danielle

Gossage, P., & Gauvreau, D. (1999). Demography and discourse in transition: Quebec fertility at the turn of the twentieth century. *The History of the Family: An International Quarterly*, 4(4), 375-395.

Abstract: This article is part of a broader research project which seeks to shed new light on Quebec's fertility decline between the 1850s and the 1950s, notably by breaking down barriers between cultural and economic explanations and between quantitative and qualitative analysis. It explores relationships between demographic trends and the public discourse around reproduction in the province at the turn of the twentieth century. Using a collection of articles selected from French-language periodicals published between 1870 and 1920, the article analyzes the reactions of certain public commentators to the prospect of fertility decline in this traditionally prolific province. They identify a shift in the public discussion of fertility in Quebec during World War I. Pride in and celebration of Quebec's large families was superseded in the dominant nationalist discourse by anxiety about diminished rates of reproduction and natalist exhortations to women who might be tempted to restrict their fertility. After documenting and identifying the reasons for this shift, the article discusses a current of opposition which appeared, if only briefly, in the pages of the controversial liberal weekly, *Le Pays*.

Data Sources: Articles selected from Canadian French-language periodicals published between 1870 and 1920

Countries: Canada (Quebec)

Subjects/Variables: Quebec, Canada

Discipline: Demography

Goyal, R.P.

Goyal, R. P. (1974). Fertility and Family Planning in Urban Delhi. In A. Bose, P. B. Desai, A. Mitra, & J. N. Sharma (Eds.), *Population in India's Development 1947-2000*. Delhi: Vikas Publishing.

Summary: The evidence suggests a downward shift in the level of fertility during the 1960s. There are significant fertility differences between different religious groups. Muslims have the highest levels of fertility, followed by Sikhs and Hindus at about the same fertility level. Education is the most important single variable showing substantial differences in the force of fertility. Contraception approval and practice is greater among Hindus and Sikhs than among Muslims.

Data Sources: Study by the Demographic Research Centre of the Institute of Economic Growth, 1969-1970; survey of railway workers 1960-1961; 1961 Census

Countries: India

Subjects/Variables: Residents of Delhi

Discipline: Demography

Greksa, Lawrence P.

Greksa, L. P. (2002). Population growth and fertility patterns in an Old Order Amish settlement. *Annals of Human Biology and Society: The journal of the Eugenics Society*, 29(2), 192-201.

Abstract: BACKGROUND: Since they are a healthy and well-nourished isolate with strong religious proscriptions against birth control, the fertility patterns of the Old Order Amish have long been studied by demographers, particularly those with an interest in natural fertility. AIM: The present report describes population growth, population structure, and fertility patterns in a little-studied Amish settlement located in northeastern Ohio, USA (Geauga Settlement). SUBJECTS AND METHODS: A directory prepared by the Geauga Settlement provides data on the dates of birth of the mother, father, and all children for 1337 families for the period up to 1 January 1993. This information was used to assess population size, population structure, fertility rates, age at marriage, age of mothers at first and last birth, and birth intervals. Estimates of total settlement size were also derived from an older directory covering the period up to 1 January 1988 and a recently published directory which covers the period up to 1 January 1998. RESULTS: The settlement consisted of 7546 individuals in 1988, 8345 individuals in 1993, and 9572 individuals in 1998. The completed marital fertility rate was 7.7 (SD 3.6) births per woman. Total fertility rate decreased by about one birth between 1909 and 1967, in association with a change in fertility patterns, with women born in more recent cohorts tending to have more of their offspring at an earlier age, both of which suggest the existence of behaviours to control fertility. On the other hand, the age at the birth of the last child remained fairly constant over this time period. CONCLUSIONS: There is some suggestion of fertility control by Amish families. However, this control appears to be independent of parity, suggesting that there is no intention to limit family size. It is therefore reasonable to conclude that the Amish in the Geauga Settlement are a natural fertility population.

Data Sources: Geauga Settlement directory

Countries: United States (Ohio)

Subjects/Variables: 1337 families in the Geauga Settlement, Ohio for the period up to 1 January 1993

Discipline: Anthropology

Guend, A.

Guend, A. (1993). Discours politique, discours religieux et transition de la fecondite en Algerie [Political discourse, religious discourse and the fertility transition in Algeria]. In I. U. f. t. S. S. o. Population (Ed.), *International Population Conference / Congres International de la Population, Montreal 1993, 24 August - 1st September* (Vol. 3, pp. 75-86). Liege, Belgium: IUSSP.

Summary: Algeria's 2 major fertility surveys, in 1960-70 and 1986, indicated that the nation has entered the second phase of the fertility transition. The total fertility rate declined from 7.8 to 5.4, female age at marriage increased from 18.3 to 24 years, and contraceptive prevalence increased from 7 to 35% among married women of fertile age. The concept of "modernization" is prominent in most theories of the fertility transition. This work examines the identification of Islam with the

traditional extended family and of modernity with the nuclear family in the light of Algeria's experience. Since before independence, Algeria's military-political and intellectual elites have had modernization as an objective, often using France as a reference model. Modernization has been seen in terms of industrialization, agricultural development, and the creation of new administrative and political institutions. There have been 3 important stages in the Algerian government's approach to the population problem. The socialist approach of the first decade of development rejected the "neomalthusian" solution and viewed economic and social development as the remedy for population problems, with family planning supported only for reasons of maternal-child health. The second phase saw the development of a government program to control demographic growth, officially announced in the 1989-84 5-year plan. The third phase resulted from the government's withdrawal of financing for development following the decline of petroleum prices. The 1985-89 5-year plan, however, analyzed the weight of population growth on economic and social development in great detail. Placing greater responsibility for education, housing, and health expenditures on households would necessarily have an impact on family structure and the status and role of women, and consequently on fertility. The type of new housing favored by the government would also influence family size norms by liberating couples from the domination of extended families and by imposing limited living quarters. There is nothing in Islamic religious discourse, defined as interpretation of the Koran and Sunna, which directly prohibits contraception. Islamic opposition to family planning springs from opposition to changes in traditional marital structures and the patrilineal extended family. The changes in these institutions, however, began in the colonial era and were encouraged by the social restructuring that took place after independence. A second source of opposition to family planning is related to exploitation of family planning as a theme for antigovernment mobilization more than of opposition to the content of family planning. This type of opposition becomes stronger as the family planning policy becomes more aggressive. Contraception has become adopted by many young Algerians who see no objection to it in their religious texts.

Data Sources: Algerian fertility surveys, 1960-70 and 1986

Countries: Algeria

Subjects/Variables: Algerians

Discipline: Demography

Guetto, Raffaele; Luijkx, Ruud; Scherer, Stefani

Guetto, R., Luijkx, R., & Scherer, S. (2015). Religiosity, gender attitudes and women's labour market participation and fertility decisions in Europe. *Acta Sociologica*, 58(2), 155-172.

Abstract: The Second Demographic Transition (SDT) theory underlines the importance of changing values and attitudes to explain the trend toward low fertility and raising female labour market participation. We contribute to this debate comparing religiosity and gender attitudes over several European countries using three waves of the European Values Study (1990, 1999 and 2008). By dealing with the issues of measurement invariance and endogeneity between values and behaviour, our results support some critiques of the SDT theory. The pace of the process of sociocultural change has not been the same across European countries and the forerunners of the SDT, that is, the most secularized and gender-egalitarian societies, now have the highest female labour market participation rates and the highest fertility. We provide evidence for a 'macro-micro paradox' regarding the role of values on family behaviours. Religiosity is positively correlated with fertility and

housewifery, while gender attitudes are only correlated with women's labour market decisions. These correlations are stronger in more traditional countries, even if aggregate fertility is lower. We stress the necessity to integrate cultural and structural explanations, suggesting the lack of family policies and the rigidity of the family formation process as possible mechanisms to unravel this paradox.

Data Sources: European Values Study (1990, 1999 and 2008)

Countries: Europe

Subjects/Variables: European men and women aged 18–54; religiosity (religious beliefs (importance of God and religion in life) and its institutional dimension (church attendance and confidence in church))

Discipline: Sociology

Gupta, Neeru

Gupta, N. (2000). Sexual initiation and contraceptive use among adolescent women in Northeast Brazil. *Studies in Family Planning*, 31(3), 228-238.

Abstract: To estimate trends and determinants of sexual initiation and contraceptive use among adolescent women in Northeast Brazil, multivariate logistic hazard models are used that draw on data from three Demographic and Health Surveys conducted there between 1986 and 1996. Educational attainment is among the variables found to be associated most consistently with differential risk of engaging in first intercourse during adolescence, including premarital intercourse, and of contraceptive use during sexual initiation. Greater frequency of attending religious services and greater exposure to television are also associated with lower rates of sexual initiation and higher use of contraceptives. Seemingly diminishing returns of education on delayed sexual activity may help explain, in part, observed increases in the absolute level of adolescent sexual experience across survey periods, however. Multilevel modeling techniques pointing to the existence of cluster-level random variances underline the need for further research into community influences on individual sexual activity.

Data Sources: Three Demographic and Health Surveys, 1986-1996 (Pesquisa Nacional sobre Saúde Materno-Infantil e Planejamento Familiar, 1986; Pesquisa sobre Saúde Familiar no Nordeste Brasil, 1991; Pesquisa Nacional sobre Demografia e Saúde, 1996)

Countries: Brazil

Subjects/Variables: Women aged 15-44, 15-24

Discipline: Demography

Gupta, Neeru; da Costa Leite, Iúri

Gupta, N., & da Costa Leite, I. (1999). Adolescent trends and determinants in Northeastern Brazil. *International Family Planning Perspectives*, 25(3), 125-130.

Abstract: Context: Much of the recent decline in Brazil's total fertility rate has been observed among women in the middle of their reproductive years. In contrast, the contribution of adolescent fertility (among 15-19-year-olds) to the total fertility rate is increasing over time. This trend is particularly accentuated in the country's Northeast region. Methods: Data from three Demographic and Health Surveys conducted in Northeastern Brazil in 1986, 1991 and 1996 are used to examine trends and

determinants of fertility behavior among adolescents in the region. Discrete-time hazard models are used to estimate the probability of a woman having a first birth during adolescence, and to evaluate individual and environmental factors that may influence personal fertility choices. Results: A young woman's level of education is the factor most strongly and consistently associated with the probability of giving birth during adolescence. In particular, an adolescent with no more than primary schooling is more than twice as likely to have had a first birth than an adolescent with at least a secondary education, even after the analysis is controlled for age, time period and other characteristics. Religious affiliation and mass media exposure did not consistently affect adolescent fertility over time in the multivariate analysis. Conclusions: The promotion of education may be the most effective means of encouraging delayed childbearing among adolescents in Northeastern Brazil. There is a need for greater research into the impact of community facilities on teenage fertility, notably health and family planning programs, that target adolescents.

Data Sources: Three Demographic and Health Surveys, 1986-1996 (Pesquisa Nacional sobre Saúde Materno-Infantil e Planejamento Familiar, 1986; Pesquisa sobre Saúde Familiar no Nordeste Brasil, 1991; Pesquisa Nacional sobre Demografia e Saúde, 1996)

Countries: Brazil

Subjects/ Variables: Brazilian women aged 15-44, 15-24

Discipline: Demography

Gutmann, Myron P.

Gutmann, M. P. (1990). Denomination and fertility decline: The Catholics and Protestants of Gillespie County, Texas. *Continuity and Change*, 5(3), 391-416.

Abstract: This article is a study of religious fertility differentials in Gillespie County, Texas, between 1850 and 1910. The results show that Protestants (Lutherans and Methodists) had significantly lower fertility than Catholics, and began to limit their fertility earlier. The results also show that the convergence of Protestant and Catholic fertility in the United States, often seen in twentieth-century data, had begun much earlier. The conclusions of the article suggest that the long process of convergence of Protestant and Catholic fertility, which was not complete until the 1970s, had more to do with the appearance of regular waves of mostly Catholic immigrants than to a long process by which Catholics very gradually came to have fertility like that of Protestants.

Data Sources: Gillespie County church data

Countries: United States

Subjects/ Variables: Historical residents of Gillespie County, Texas (1850-1910)

Discipline: Historical demography

Gérard, Hubert

Gérard, H. (1965 -1966). Les catholiques et le phénomène de la fécondité. *Justice dans le monde*, 7(4), 471-505.

Gérard, H. (1970). *Catholicisme et fécondité: Recherche exploratoire*. Louvain: Vander.

Haan, Michael D.

Haan, M. D. (2005). Studying the Impact of Religion on Fertility in Nineteenth-Century Canada: The Use of Direct Measures and Proxy Variables. *Social Science History*, 29(3), 373-411.

Abstract: A beta version of the machine-readable 1881 census of Canada is used to assess the efficacy of two proxy variables used to predict fertility: (1) the share of church seats held by various church denominations in an area and (2) the proportion of children with biblical names. Weak evidence is found for both measures, although the article questions whether these relationships can be interpreted as evidence for the importance of religious liberalization as a factor in reducing fertility.

Data Sources: 1881 Canadian census

Countries: Canada

Subjects/Variables: Canadians; religion by level of conservatism; religiosity by use of biblical names

Discipline: Sociology

Hacker, J. David; Roberts, Evan

Hacker, J. D., & Roberts, E. (2017). The impact of kin availability, parental religiosity, and nativity on fertility differentials in the late 19th-century United States. *Demographic Research*, 37(34), 1049–1080.

Abstract: Methods: Most quantitative research on fertility decline in the United States ignores the potential impact of cultural and familial factors. We rely on new complete-count data from the 1880 US census to construct couple-level measures of nativity/ethnicity, religiosity, and kin availability. We include these measures with a comprehensive set of demographic, economic, and contextual variables in Poisson regression models of net marital fertility to assess their relative importance. We construct models with and without area-fixed effects to control for unobserved heterogeneity. Contribution: All else being equal, we find a strong impact of nativity on recent net marital fertility. Fertility differentials among second-generation couples relative to the native-born white population of native parentage were in most cases less than half of the differential observed among first-generation immigrants, suggesting greater assimilation to native-born American childbearing norms. Our measures of parental religiosity and familial propinquity indicate a more modest impact on marital fertility. Couples who chose biblical names for their children had approximately 3% more children than couples relying on secular names, while the presence of a potential mother-in-law in a nearby household was associated with 2% more children. Overall, our results demonstrate the need for more inclusive models of fertility behavior that include cultural and familial covariates.

Data Sources: 1880 US census

Countries: United States

Subjects/Variables: 5,379,539 currently married women age 20–49 living with their spouse; religiosity (biblical names)

Discipline: Demography

Hacker, J. David.

Hacker, J. D. (1999). Child Naming, Religion, and the Decline of Marital Fertility in Nineteenth-century America. *The History of the Family: An International Quarterly*, 4(3), 339-365.

Abstract: Demographic historians have long suspected that cultural factors played an important role in the early decline of fertility in nineteenth-century America. Using the recently released 1850 and 1880 IPUMS samples, this article investigates correlates of marital fertility among native-born white women of native parentage, focusing on the relationship between religion and fertility. Two proxies of religious sentiment are found to be significantly correlated with marital fertility. First, county-level census data indicate that the presence of Congregationalists and Universalists was associated with lower marital fertility, while the presence of Lutherans was associated with higher marital fertility. Second, the proportion of own children with biblical names—believed to be a proxy of parental religiosity—is found to be positively associated with marital fertility. These results are consistent with the hypothesis that traditional religious beliefs were an impediment to the adoption of family limitation strategies.

Data Sources: 1850 and 1880 Integrated Public Use Microdata Series (IPUMS-USA) samples

Countries: United States

Subjects/ Variables: US; religiosity by biblically and non-biblically named children proxy

Discipline: Demography

Hackett, Conrad

Hackett, C. (2008). *Religion and Fertility in the United States: The Influence of Affiliation, Region and Congregation*. Ph.D.: Princeton University.

Summary: This study challenges previous findings while answering two questions. Do religious fertility differentials persist and vary by region? Could congregational participation have a causal influence on fertility attitudes and outcomes? I use many data sets to answer these questions, including the 2001 Congregational Life Survey (CLS). The CLS provides information on the congregational participation and children ever born to over 18,000 women age 35 to 49, who were surveyed in over 400 congregations. Using this and other large data sets, I show substantial fertility differences remain between religious traditions and their constituent denominations. Fertility patterns vary by region but, contrary to previous studies, I do not find evidence that regional differences are the result of variation in the minority group status of religious groups. I find congregational participation predicts high fertility, independent of compositional characteristics, except in the year 2002. The anomalous 2002 pattern, observed in the NSFG and the General Social Survey, may be the result of a post-September 11 period effect, which temporarily changed the composition of Americans in congregations. Selection processes attract adults inclined to have children towards congregations and they may lead adults disinclined to have children to leave congregations. I argue that congregation-centered processes encourage and sustain high fertility ideals and parity levels. Low parity women who attend congregations have high parity ideals. Congregational group participation and dense congregational friendship networks are more influential predictors of congregant fertility than Biblical literalism, worship frequency, or prayer frequency. I argue that these congregational social networks function as reference groups, which encourage childbearing.

Data Sources: 2001 Congregational Life Survey (CLS)

Countries: United States

Subjects/ Variables: 18,000 women age 35 to 49, in over 400 congregations

Discipline: Sociology

Hackett, Conrad; Stonawski, Marcin; Potančoková, Michaela; Grim, Brian J.; Skirbekk, Vegard

Hackett, C., Stonawski, M., Potančoková, M., Grim, B. J., & Skirbekk, V. (2015). The future size of religiously affiliated and unaffiliated populations. *Demographic Research*, 32(27), 829-842.

Abstract: Background: People who are religiously unaffiliated (including self-identifying atheists and agnostics, as well as those who say their religion is "nothing in particular") made up 16.4% of the world's population in 2010. Unaffiliated populations have been growing in North America and Europe, leading some to expect that this group will grow as a share of the world's population. However, such forecasts overlook the impact of demographic factors, such as fertility and the large, aging unaffiliated population in Asia.

Objective: We project the future size of religiously affiliated and unaffiliated populations around the world.

Methods: We use multistate cohort-component methods to project the size of religiously affiliated and unaffiliated populations. Projection inputs such as religious composition, differential fertility, and age structure data, as well as religious switching patterns, are based on the best available census and survey data for each country. This research is based on an analysis of more than 2,500 data sources.

Results: Taking demographic factors into account, we project that the unaffiliated will make up 13.2% of the world's population in 2050. The median age of religiously affiliated women is six years younger than unaffiliated women. The 2010-15 Total Fertility Rate for those with a religious affiliation is 2.59 children per woman, nearly a full child higher than the rate for the unaffiliated (1.65 children per woman).

Conclusions: The religiously unaffiliated are projected to decline as a share of the world's population in the decades ahead because their net growth through religious switching will be more than offset by higher childbearing among the younger affiliated population.

Data Sources: 2,500 country-specific data sources

Countries: Worldwide

Discipline: Sociology, Demography

Hakim, Abdul

Hakim, A. (2005). Fertility Trends and their Determinants in Pakistan. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 233-254). London: Hurst.

Summary: A review of population policies, reproductive health/family planning services, and the onset of fertility transition in Pakistan. Religious leaders have not tended to view the family planning programme as religiously as acceptable, and some have opposed it. Family planning is widely associated with Western culture as immoral and licentious. Age of marriage is low, and women's work outside the home is not generally highly valued. Fertility transition has only started in Pakistan.

Data Sources: Population Census of Pakistan 1998; Pakistan Fertility Survey 1970-1975; Pakistan Contraceptive Prevalence Survey 1984; Pakistan demographic and Health Survey 1986-1991; Pakistan Contraceptive Prevalence Survey 1994; Pakistan Fertility and Family Planning Survey 1992-1996

Countries: Pakistan

Subjects/Variables: Pakistanis, Muslims

Discipline: Demography

Hammel, E.A.

Hammel, E. A. (1990). A Theory of Culture for Demography. *Population and Development Review*, 16(3), 455-485.

Abstract: The concept of culture has increasingly been called into play to account for the failures of purely economic explanations of demographic behavior, especially fertility. Cultural explanations generally take the form of ethnic identifications of little explanatory value, or they focus on general, overarching institutional structures or value systems. The concept of culture has in fact a very complicated history in the discipline of its origin. This article reviews the history of the concept in anthropology, concentrating on culture as a set of symbolic understandings created between social actors who strive to maximize the net social morality of their behavioral position, within networks that are heterogeneous in their evaluations of behavior. Operationally, the virtue of ethnographic approaches for the demographic enterprise is that the actors, who know the ground, are permitted to lead the way.

Data Sources: Theoretical discussion

Haque, Ismail; Patel, Priyank Pravin

Haque, I., & Patel, P. P. (2016). Assessing Hindu–Muslim Fertility Differentials in West Bengal: Insights from the National Family Health Survey-3 Data. *Journal of Family History*, 41(2), 1-33.

Abstract: Religion, class–caste factors, and sociocultural norms influence fertility rates, largely determining reproductive behavior. Hindu–Muslim fertility differentials in West Bengal, India, are examined through characteristics and interaction hypotheses tests using National Family Health Survey-3 data. Results reveal most Hindu women have at least two births while Muslim women are likely to have at least four births, before avoiding subsequent births. Multiple classification analysis implies prevalent socioeconomic characteristics cause this fertility differential. Fertility differences are also noticed between lesser- and better-educated women groups, implying a strong religion–women education level interaction effect. The same holds true for the religion–son preference interaction effect as well.

Data Sources: National Family Health Survey-3

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Social Sciences, Geography

Hastings, Donald W.; Bowers, Donald W.

Hastings, D. W., & Bowers, D. W. (1970). Child-spacing and sex representation of Children among University of Utah graduates: 1940-1941. *Proceedings of Utah Academy of Sciences, Arts, and Letters*, 47(1), 85-99.

Abstract: A contrived population of University of Utah graduates of 1940 and 1941 were investigated for difference in fertility and child-spacing, as well as sex representation among children. A mail questionnaire was used with two mailings with 69 per cent return. Results indicated homogamous Mormon couples had high fertility and shorter time intervals between children than couples of different religious preference. Two patterns of preference for sex representation among children were ascertained.

Data Sources: 390 alumni family units

Countries: United States (Utah)

Subjects/ Variables: University of Utah alumni

Discipline: Demography

Hastings, Donald W.; Reynolds, Charles H.; Canning, Ray R.

Hastings, D. W., Reynolds, C. H., & Canning, R. R. (1972). Mormonism and Birth Planning: The Discrepancy between Church Authorities' Teachings and Lay Attitudes. *Population Studies*, 26(1), 19-28.

Abstract: This paper examines the historical position of the Mormon Church on birth planning, and such shifts in its members' attitudes and behaviour as can be documented from available data. Finally, some comments are directed toward the dilemma Church leaders face in the light of pressures of increased secularization operating within the confines of traditional theocratic structure.

Data Sources: Historical overview

Countries: United States

Subjects/ Variables: Mormons

Discipline: Historical demography

Hayford, Sarah R.; Morgan, S. Philip

Hayford, S. R., & Morgan, S. P. (2008). Religiosity and Fertility in the United States: The Role of Fertility Intentions. *Social Forces*, 86(3), 1163-1188.

Abstract: Using data from the 2002 National Survey of Family Growth, we show that women who report that religion is "very important" in their everyday life have both higher fertility and higher intended fertility than those saying religion is "somewhat important" or "not important" Factors such as unwanted fertility, age at childbearing or degree of fertility postponement seem not to contribute to religiosity differentials in fertility. This answer prompts more fundamental questions: what is the nature of this greater religiosity? And why do the more religious want more children? We show that those saying religion is more important have more traditional gender and family attitudes

and that these attitudinal differences account for a substantial part of the fertility differential. We speculate regarding other contributing causes.

Data Sources: 2002 National Survey of Family Growth (7643 women ages 15-44 years old)

Countries: United States

Subjects/Variables: 1,354 women age 20-24; religiosity

Discipline: Sociology

Heaton, Tim B.

Heaton, T. B. (1986). How Does Religion Influence Fertility?: The Case of Mormons. *Journal for the Scientific Study of Religion*, 25(2), 248-258.

Abstract: High fertility has been a distinctive feature of Mormonism for over a century. This paper takes a closer look at the determinants of Mormon fertility. Socioeconomic status does not necessarily have a negative impact on fertility, as is generally the case, implying that the effects of socioeconomic status may vary according to the religious context. Acceptance of the Mormon theology of marriage, contact with other Mormons as a reference group, and socialization in a Mormon subculture all have a positive influence on fertility. This pattern of high fertility strengthens interdependence between religion and family.

Data Sources: Questionnaire sent to 7446 adult Mormons (1981); the National Opinion Research Center's (1983) Cumulative General Social Surveys

Countries: United States

Subjects/Variables: White female Mormons with first marriage intact

Discipline: Demography

Heaton, T. B. (1989). Religious Influences on Mormon Fertility: Cross-National Comparisons. *Review of Religious Research*, 30(4), 401-411.

Abstract: This study examines patterns of religious influence on Mormon fertility in four countries. Religious ideology, religious reference groups, and socialization in a religious subculture are each avenues through which religion promotes larger families, but the patterns of influence are different in each country. The size of Mormon families relative to national patterns and the effects of independent variables on fertility vary across countries. Although pronatalism appears to be a common theme, its expression changes with cultural context.

Data Sources: Questionnaires, surveys of LDS congregants

Countries: United States, Britain, Japan, Mexico

Subjects/Variables: Mormons

Discipline: Demography

Heaton, T. B. (1992). Demographics of the Contemporary Mormon Family. *Dialogue: A Journal of Mormon Thought*, 25(3), 19-33.

Abstract: The study combines three surveys carried out in the 1980s to assess differences from Catholic, Protestant, and Jewish groups in respect of sexual behaviour, marital behaviour, and childbearing. Mormons have the largest desired family size, the highest percentage of marriages, the lowest percentage of cohabitation, and are near the extreme for several other characteristics.

Data Sources: 1982 and 1988 rounds of the National Survey of Family Growth (1982-88); the 1987 National Survey of Families and Households (1988)

Countries: United States

Subjects/Variables: US Mormons, Catholics, Protestant groups, Jews

Discipline: Demography

Heaton, T. B. (2011). Does Religion Influence Fertility in Developing Countries. *Population Research and Policy Review*, 30(3), 449-465.

Abstract: This paper examines religious group differences in fertility in developing nations. Using data from the Demographic and Health Surveys of 30 countries in Asia, Africa and Latin America, this paper documents Muslim/Christian and Catholic/Protestant differences in the number of children under age 5. The paper also considers possible explanations for these differences including level of development, religious mix, social characteristics and proximate determinants of fertility. Muslim fertility is substantially higher than Christian fertility in many countries, but the average difference between Catholics and Protestants is small. Cross-national variation in group differences is at least as large as the average difference. Although level of development, social characteristics and proximate determinants play an important role in religious differences, they do not explain cross-national variation in these differences.

Data Sources: The Demographic and Health Surveys (www.measuredhs.com)

Countries: 30 less developed countries

Subjects/Variables: Women in reproductive ages; Muslim, Protestant, Catholic

Discipline: Demography

Heaton, Tim B.; Calkins, Sandra

Heaton, T. B., & Calkins, S. (1983). Family Size and Contraceptive Use among Mormons: 1965-75. *Review of Religious Research*, 25(2), 102-113.

Abstract: Religious fertility differentials have been attributed to particularistic theology, socioeconomic composition or minority status of the groups being compared. Recent convergence in the Catholic-Protestant fertility differential illustrates the usefulness of these three explanations in explaining fertility trends. This research explores the utility of these hypotheses for explaining an apparent divergence in Mormon fertility after 1965. Of the three, the particularistic theology hypothesis seems most applicable to Mormons. Analysis of Mormons in the National Fertility Surveys of 1965, 1970, and 1975 indicate that: (1) Mormons are at least as likely to have ever used birth control as are white Protestants; (2) Mormons are less likely to be current users than either Catholics or Protestants; (3) about 50 percent of Mormons delay use until after the first child and 25 percent delay until after the second child; (4) Mormons, like the U.S. population as a whole adopt modern effective methods of contraception; and (5) when compared with the less devout, more devout Mormons have distinctive patterns of timing contraceptive use. These findings suggest that pro-family rather than anti-birth control beliefs provide the key for understanding the persistence of high Mormon fertility.

Data Sources: The 1965, 1970, and 1975 National Fertility Studies

Countries: United States

Subjects/Variables: Once married, currently married white Mormon women

Discipline: Sociology

Heaton, T. B., & Calkins, S. (1983). Contraceptive Use among Mormons, 1965–75. *Dialogue: A Journal of Mormon Thought*, 16(3), 106–109.

Abstract: Since 1965, the Utah birth rate has risen, diverging sharply from the U.S. rate which has generally stabilized. The study tests the hypothesis that the rising Utah birth rate may be a reaction to the anti-contraceptive statements published during the mid-1960s by leaders of the LDS Church. But in 1965 and 1970, the percentage of Mormon couples who had ever used birth control was comparable to that of white married Protestant couples and ten percent higher than that of Catholics. It thus appears that Mormons, like other groups, accepted advances in birth-control technology during the latter part of the 1960s. Thus, the high usage of birth control among Mormons suggests that their high fertility is the result of some factor other than acceptance of an anti-contraceptives ideology. Yet Mormons adopt contraceptive use relatively late, after the first or second child, consistent with church teachings. Perhaps only when these individuals are faced with the reality of caring for children do they reconsider the acceptability of birth control.

Data Sources: 1965, 1970, and 1975 National Fertility Studies

Countries: United States

Subjects/ Variables: Once-married, still-married white Mormon women

Discipline: sociology

Heaton, Tim B.; Goodman, Kristen L.

Heaton, T. B., & Goodman, K. L. (1985). Religion and Family Formation. *Review of Religious Research*, 26(4), 343-359.

Abstract: This paper examines religious differentials in patterns of family formation. When compared with those who state no religious preference, Catholics, Protestants, and Mormons are more likely to marry, less likely to divorce, more likely to remarry following divorce, and they have larger families. Among religious groups, Mormons tend to have the highest rates of marriage and fertility, but the lowest rates of divorce. Catholics have lower rates of marriage and divorce than Protestants. These patterns are not altered when frequency of attendance and education are included as control variables. Findings indicate that, even amidst dramatic change in family formation trends, the linkages between religion and family persist.

Data Sources: 1981 questionnaires to Mormons (n=7446); National Opinion Research Center's (1983) Cumulative General Social Survey

Countries: United States

Subjects/ Variables: Mormons

Discipline: Demography

Heaton, Tim B.; Jacobson, Cardell K.

Heaton, T. B., & Jacobson, C. K. (2015). The Social Composition of Mormonism. In T. L. Givens & P. L. Barlow (Eds.), *The Oxford Handbook of Mormonism*. Oxford: Oxford University Press.

Summary: This chapter explores the social differences between members of the Latter-day Saint Church and the larger US population in educational attainment, frequency of church attendance,

political orientation, and conservative positions on family-related issues. In some areas the gaps between Mormons and the nation are increasing, and none of the differences between the LDS and the nation appear to be converging. Nationally, education has a negative or weak relationship with social characteristics like church attendance, political conservatism, single marriage, and large ideal family size, and strong negative relationship between education and conservative family values. By contrast, for Mormons, education has a positive relationship with the other factors, and the relationship between education and church attendance is quite strong. Among Mormons, education and church attendance reinforce each other and promote political and familial conservatism. Mormonism has a religiously active, educated core that tends to be conservative in the political and family spheres.

Data Sources: General Social Surveys, National Opinion Research Organization, University of Chicago (1972 to 2010); American Religious Identification Survey (ARIS), City University of New York (2007); Pew Forum on Religion and Public Life, "Mormons in America"; Pew Forum, "US Religious Landscape Survey."

Countries: United States

Subjects/ Variables: 1400 Mormons (1972-2000)

Discipline: Sociology

Heckert, Alex; Teachman, Jay D.

Heckert, A., & Teachman, J. D. (1985). Religious Factors in the Timing of Second Births. *Journal of Marriage and Family*, 47(2), 361-367.

Abstract: This paper concerns the interrelationships between religion, religiosity, and religious education in determining the pace at which second births occur. A number of hypotheses involving main and interaction effects between these variables are stated and then tested using data from the 1973 National Survey of Family Growth and proportional hazards models. Results indicate that religiosity is more important in determining the pace at which second births occur among women who have received sectarian education or who are Catholic.

Data Sources: The 1973 National Survey of Family Growth (NSFG), conducted by the National Center for Health Statistics.

Countries: United States

Subjects/ Variables: 9,800 women 15-44 years of age who ever married or who had children of their own living in the household, excluding Blacks, women with pre-marital births; Catholic and non-Catholic; religiosity (frequency of taking communion or church attendance)

Discipline: Sociology

Heer, D.M.; Youssef, Nadia

Heer, D. M., & Youssef, N. (1977). Female status among soviet central Asian nationalities: The melding of Islam and Marxism and its implications for population increase. *Population Studies: A Journal of Demography*, 31(1), 155-173.

Abstract: Summary Marxist ideology has emphasized the rights of women to a degree perhaps unparalleled among political movements, whereas Islamic ideology has confined women to the

traditional role of wife and mother. In Soviet Central Asia these two ideologies have clashed for more than 50 years. Data from the 1959 and 1970 censuses of the U.S.S.R. are used to show three aspects of the position of Soviet women of Islamic nationality as compared with the position of Soviet women of non-Islamic nationality, namely, educational attainment relative to men, non-agricultural labour force participation relative to men, and the burden of child dependency. The hypothesis is put forward that the status of women among Soviet Islamic nationalities should be lower than among Soviet non-Islamic nationalities, but that the difference between the two groups in the various aspects of female status should diminish over time. The position of women among the Soviet Islamic nationalities was also compared with that of women in various Islamic nations with the hypothesis that female status should be higher among the former than the latter. The predictions were upheld, with the notable exception of two of the three predictions concerning the burden of child dependency occasioned by the finding that child dependency increased substantially, from 1959 to 1970 for Islamic nationalities but not for non-Islamic, and by 1970 was higher for Soviet Islamic nationalities than for the Islamic nations of the Middle East and North Africa. Several possible explanations are advanced for the above-mentioned unpredicted findings.

Data Sources: 1959 and 1970 censuses of the USSR and with data from censuses of the 1960s for Islamic nations of the Middle East and Africa

Countries: USSR

Subjects/Variables: Uzbek, Kazakh, Kirgiz, Tadzhik, Turkmen, Azerbaidzhan Republic

Discipline: Demography

Heineck, Guido

Heineck, G. (2012). The Relationship between Religion and Fertility: Evidence from Austria. *Homo Oeconomicus*, 29(1), 73-94.

Abstract: Data from the Austrian Family and Fertility Survey are used to examine the relationship between religion and fertility in Austria. Results from a Poisson hurdle model show that both women's denominational affiliation and religiosity affect the number of children born, with more articulate gradients between women with no religious affiliation and no religious belief rather than between

denominations. Unions' religious composition does not result in clear patterns, which is also the case for the effect of religion on the timing of births.

Data Sources: Family and Fertility Survey (FFS), United Nations Economic Commission for Europe (UNECE)

Countries: Austria

Subjects/Variables: Austrian females in first unions; Catholic Protestant, other religion, no religion; religiosity (strong/weak belief)

Discipline: Economics

Henry, Louis

Henry, L. (1979). Some remarks on the paper by Julia Ericksen et al., 'Fertility patterns and trends among the Old Order Amish'. *Population Studies*, 34(3), 564-564.

Abstract: Two comments on Ericksen et al 1979

Herold, Joan M.; Westoff, Charles F.; Warren, Charles W.; Seltzer, Judith

Herold, J. M., Westoff, C. F., Warren, C. W., & Seltzer, J. (1989). Catholicism and fertility in Puerto Rico. *American Journal of Public Health*, 79(9), 1258-1262.

Hleihel, Ahmad

Hleihel, A. (2011). Fertility among Jewish and Muslim Women in Israel, by Level of Religiosity, 1979-2009 **פריון של נשים יהודיות ומוסלמיות בישראל** [לפי מידת הדתיות שלהן בשנים 1979-2009] *Working Paper Series*, 60.

Abstract: The aim of this paper is to establish a multi-annual series on fertility rates and to analyse the fertility rates among Jewish and Muslim women in Israel, by levels of religiosity. The series will be based on data from the social survey conducted by the CBS during the period 2002-2009, which provide a substantial sample of Jewish and Muslim women who responded to questions about their levels of religiosity. All of the women were linked to the Population Register, and all of their births between 1979 and 2009 (by the year of birth of each child, including children that died) were reconstructed. In that way, it is possible to construct a series of estimates of specific fertility rates by age as well as estimates of total fertility rates by the women's levels of religiosity, using the birth history method. The assumption underlying the calculation of fertility estimates by levels of religiosity based on reconstruction of the women listed in the Population Register and their births was that level of religiosity remains constant over time. Examination of the difference between the level of religiosity in the woman's parental home at the age of 15 versus the woman's level of religiosity at the time of the survey clearly showed that the above-mentioned assumption of constancy in religiosity is correct only among 64% of the researched people. However, the impact of changes in levels of religiosity on fertility levels was found to be insignificant. Among the Jewish women, the series of estimates for total fertility and specific fertility by age in 1979-2009 were calculated according to five levels of religiosity, as examined in the social survey: ultra-Orthodox, religious, traditional-religious, traditional non-religious, and non-religious/secular. The results revealed a positive correlation between the woman's level of religiosity and her level of fertility: the more religious the woman was, the higher her level of fertility.

Similarly, among the Muslim women, the series of estimates for total fertility and specific fertility by age in 1979-2009 were calculated according to three levels of religiosity, as examined in the social survey: very religious, religious, and non-religious (including those whose response was "not so religious"). In contrast to the Jewish women, no clear correlation was found between the Muslim women's levels of religiosity and their levels of fertility. The differences that existed were minimal, and the levels of fertility among the "religious" Muslim women were higher than they were among the "very religious" women.

The main contribution of this study lies in the establishment, for the first time, of a multi-annual series on fertility rates by level of religiosity. This series has been lacking in the public discourse on

differences between various religious groups in Israel – particularly with regard to differences in fertility rates among ultra-Orthodox women versus other groups.

Data Sources: Israel Social Surveys, Israel Central Bureau of Statistics, 2002-2009 (7500 individuals annually)

Countries: Israel

Subjects/ Variables: Jewish and Muslim; Jewish ultra-Orthodox, religious (Dati), traditional and religious, traditional and not very religious, not religious; Muslim religiosity

Discipline: Demography

Hleihel, A. (2017). Fertility among Jewish Women in Israel, by Level of Religiosity, 1979-2014 [פריון של נשים יהודיות בישראל]

1979-2014]. *Working Paper Series*, 101.

Abstract: This work is a continuation and update previous work done by the author (Hleihel 2011), which built a multi-year series of fertility rates of Jewish women in Israel according to the level of their religiosity in the years 1979-2009. The current work extends the data series in the years after 2009 and presents updated data on the fertility of Jewish women (including "others") by their religious level in 1979-2014. The current work uses social survey conducted by the Central Bureau of Statistics (CBS), which provides a large sample of Jewish women (and others) who was asked to report their level of religiosity. The full link of women to the population registry able to cover their births between the years 1979 to 2014 (by year of birth of each child, including children who have died), make it possible to measure a series of estimates of specific fertility rates by age and estimates of a total fertility rate by level of religiosity of women, using History Births Method. The use of women who sampled in the social survey to estimates fertility rates in the years 1979 to 2014 by level of religiosity based on the assumption that religiosity level of women as observed in the survey does not change over time. For Jewish women, we estimate a series of age specific fertility rates and estimates of total fertility rates in the year 1979 to 2014, by five groups of religiosity level as researched in the Social Survey: Haredi (Ultra-Orthodox) women, Religious women, Traditional-Religious women, Traditional Nor so Religious women and Not-Religious – Secular women. The results show that there is, as expected, a significant positive correlation between the level of religiosity of the woman and her fertility rate level. As more religious woman has a higher fertility rate. This work has been added an additional data series refers to the Jewish and "others" women together. This series was established by grouping "others" women with the group Non-religious / secular women and covers the period 1990-2014. Establishing a series of "Jews and others" and presenting grouped data that were not in the previous work (as Jewish women excluding Haredi women) are due to the use of previous work and the needs of the users. In the last part of the work is presented in an attempt to validate the estimates by comparing the estimates obtained directly from the use of social survey with the official data published by the Central Bureau of Statistics on the same years. This section also includes an analysis of the social survey nonresponse and its impact on the estimates of the survey.

Data Sources: Social survey conducted by the Central Bureau of Statistics

Countries: Israel

Subjects/ Variables: Jewish ultra-Orthodox, religious (Dati), traditional and religious, traditional and not very religious

Discipline: Demography

Hofstee, Evert W.

Hofstee, E. W. (1968). Population increase in the Netherlands *Acta Historiae Neerlandica* (Vol. 3, pp. 43-125). Leiden: Brill.

Hofstee, E. W. (1981). *Korte demografische geschiedenis van Nederland van 1800 tot heden*. Haarlem: Fibula-Van Dishoeck.

Hogan, Dennis P.; Berhanu, Betemariam

Hogan, D. P., & Berhanu, B. (2003). Social identity and community in the fertility of southern Ethiopia. In S. Agyei-Mensah & J. B. Casterline (Eds.), *Reproduction and Social Context in Sub-Saharan Africa: A Collection of Micro-demographic Studies* (pp. 37-64). Westport, CT: Greenwood Press.

Hogan, Dennis P.; Biratu, Belay

Hogan, D. P., & Biratu, B. (2004). Social identity and community effects on contraceptive use and intentions in southern Ethiopia. *Studies in Family Planning*, 35(2), 79-90.

Abstract: In this study, data gathered in southern Ethiopia are used to explain how ethnic and religious identities affect current or intended contraceptive use. The only compositional factors that increase the likelihood of birth limitation are having a member of the family with a higher level of education and community access to health services. Compositional factors by themselves do not explain Muslim and ethnic variations in contraceptive use and intentions. Village health and economic crises do not promote birth limitation. One normative economic factor--the practice of sons' inheritance of land from their fathers--considerably reduces the likelihood of contraceptive use, but does not account for religious and ethnic differentials. No evidence is found of a minority-status effect on contraception. Exposure to ethnic and religious diversity in the community of residence substantially increases the likelihood of emergent birth limitation, especially among the predominant Muslim Silte population.

Data Sources: The Community and Family Survey (CFS), May 1997

Countries: Ethiopia

Subjects/Variables: 2,550 women aged 15-49 in the SNNPR (Southern Nations, Nationalities and People's Region); Protestantism, Orthodox (non-Protestant) Christianity, Islam, and traditional (non-monotheistic)

Discipline: Sociology

Holmes, S.J.

Holmes, S. J. (1924). The Size of College Families: A Study of the Size of the Families of College Students in Relation to the Nationality, Religion and Education of the Parents. *Journal of Heredity*, 15(10), 407–415.

Abstract: The data on the relationship between religion and size of family show that in families in which both parents are Protestants the average number of children is 3.48, while the families in which both parents are Catholic the average number of children is 4.44. Those students whose parents' religion is given as Hebrew belong to families intermediate in size, between those of Protestants and Catholics, namely 3.73. One would not be justified in attributing these differences in family size to the influence of religion alone. It is not improbable that the other factors involved are the more important. The Catholic parents are to a considerable degree of foreign extraction. Social status, tradition and education play an important part in determining the differences in the birth supply of these different groups. In mixed marriages, where the father was Protestant the average number of children was 3.16, and where the father was Catholic it was 3.00.

Data Sources: Record cards, Department of Physical Education, University of California

Countries: United States (California)

Subjects/ Variables: Families of university students

Hout, Michael; Greeley, Andrew; Wild, Melissa J.

Hout, M., Greeley, A., & Wild, M. J. (2001). The Demographic Imperative in Religious Change in the United States. *The American Journal of Sociology*, 107(2), 468-500.

Abstract: U.S. Protestants are less likely to belong to "mainline" denominations and more likely to belong to "conservative" ones than used to be the case. Evidence from the General Social Survey indicates that higher fertility and earlier childbearing among women from conservative denominations explains 76% of the observed trend for cohorts born between 1903 and 1973: conservative denominations have grown their own. Mainline decline would have slowed in recent cohorts, but a drop-off in conversions from conservative to mainline denominations prolonged the decline. A recent rise in apostasy added a few percentage points to mainline decline. Conversions from mainline to conservative denominations have not changed, so they played no role in the restructuring.

Data Sources: The General Social Survey (GSS) of 1974-98

Countries: United States

Subjects/ Variables: Persons 25 years and over; Conservative (Baptists, Pentecostals, and members of the Church of Christ and Assemblies of God) and Mainline (esp Episcopalians, Presbyterians, Methodists, most Lutherans) Christians

Discipline: Sociology

Hubert, Sandra

Hubert, S. (2014). *The Impact of Religiosity on Fertility: Comparative Analysis of France, Hungary, Norway, and Germany*. Wiesbaden: Springer.

Summary: The goal is to provide evidence that religiosity has a positive effect on the realized number of children. The study is based on a design of several European countries with differing

demographic and denominational patterns, institutional and legal contexts, social norms, degrees of religious vitality, and state-church relations. The countries are systematically compared with each other resulting in a cross-country study, from 1950-2010, covering the second demographic transition. The theoretical approach relies on the economic theory of the family. Religiosity promotes fertility both directly and indirectly. The direct effect refers to denomination-specific norms and rules with respect to family behavior as well as religious socialization, identification with one's own religious tradition and other affiliates, the religious network, and organizational characteristics (theological strictness, hierarchy of the structure, communicability of teachings). The indirect effect was derived from the religious composition of a couple that either stabilizes a marriage or endangers its stability. A pronounced stability was supposed to promote a higher number of children. Confidence in marital stability has for several reasons been assumed to be especially elevated if both spouses are either religious Catholics or Muslims. Couples with a heterogamous religious affiliation and religiosity or in which both partners are unaffiliated may be confronted with insecurity and decisions enforcing compromises. The aggregated influence of religiosity on fertility depends on the population share of religious individuals. The national level of religious vitality itself is affected by three historical-cultural patterns that interact with each other: the degree of modernization, state-church relations, and the dominating denominational cultural tradition. Modernization processes or a high degree of modernization and church-hostile politics (e.g. in socialist states) lower religious vitality. Concerning the last pattern, predominantly Catholic countries show a higher religious vitality than countries with a Protestant imprint. Several reasons have been discussed. For example, a higher degree of internal rationalization can be ascribed to Protestantism and it has a stronger anchorage in contemporary societies. Moreover, it is more individualistic. In contrast, Catholicism is more conservative in its theological perspective and the church is the mediator between God and the affiliates which raises the frequency of attendance. Church traditions have normative orientation power. France is an exception: although most people are affiliated to the Catholic Church, religiosity is at a very low level.

Data Sources: Generations and Gender Study (GGS, wave I)

Countries: France, Hungary, Norway, East and West Germany

Subjects/Variables: Europeans; Protestants, Catholics, Muslims; religiosity

Discipline: Economics

Hull, Terence H.

Hull, T. H. (2005). Reproductive Health Trends in Islamic Countries. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 56-80). London: Hurst.

Summary: Summarises the main indicators and trends of fertility and other important reproductive health behaviour for Muslim-majority countries. Examines demographic implications of the Islamic teachings about proximate (or intermediate) determinants of fertility (including methods of birth control, management of pregnancy and childbirth, construction of sexual behaviour across the life-cycle). While there are fundamental differences in cultural practices among Muslims across the world, religious teachings relating to marriage and gender relations tend to support early and near universal marriage, early childbearing, male prerogative in fertility decision-making.

Data Sources: UN World Population Prospects

Countries: 47 Muslim-majority countries

Subjects/Variables: Muslims

Discipline: Demography

Hussain, Nazmul; Owais, Saba

Hussain, N., & Owais, S. (2016). Socio-religious communities and fertility patterns in West Bengal, India. *Development in Practice*, 26(1), 102-114.

Abstract: This article explores the fertility differential of different religious groups across various socio-economic characteristics. The article is based on primary data collected from a field survey of 2,590 households in the Malda district of West Bengal in India. This article explores whether it is the affiliation to a particular religion or the disparity in socioeconomic determinants among Muslims and non-Muslims that affects the fertility status of these socio-religious communities. The mean number of children ever born (MCEB) is used to measure fertility. The analysis shows that there is a major variation in the impact of various socio-economic variables on the number of children ever born among different religious groups. The study findings will be helpful for policymakers regarding the planning for management of different demographic processes.

Data Sources: Field survey

Countries: India

Subjects/ Variables: 2,590 households in the Malda district of West Bengal in India; Muslim, non-Muslim

Discipline: Social Science

Hyman, Paula

Hyman, P. (1981). Jewish Fertility in Nineteenth Century France. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 78-93). Leiden: Brill.

Summary: It is extremely difficult to study Jewish fertility in France, given that the French government collected very little information on religious affiliation. Fertility for women aged 41-45 fell from 3.69 children in 1808-1809 to 2.04 in 1872. Factors include wide-scale urbanization (74% in villages of less than 200 inhabitants in 1808, 19% in 1846 for Alsatian Jews). There are significant regional variations, more important than ethnicity. The slightly higher fertility rate compared with Gentile French may be due to lower mortality and marriage-age rates.

Data Sources: Departmental archives of Lower Rhine (Alsace-Lorraine), municipal archives of Bordeaux, 19th century

Countries: France; Sephardic Jews of Bordeaux, Ashkenazi Jews of Alsace-Lorraine

Subjects/ Variables: French Jews

Discipline: Demography

Hülsken, Marloes

Hülsken, M. (2010). *Kiezen voor Kinderen? Vrouwentijdschriften en hun lezeressen over het katholieke huwelijksleven, 1950-1975*. Hilversum: Verloren.

Summary: Investigation of the way in which women's magazines about maternity, family size, birth control and sexual morality influenced their Catholic readers. The book examines the women's magazines *Beatrijs*, *Libelle en Margriet*, and the magazine of the Katholiek Vrouwengilde, *Doorkijk*, 1950-1975, and includes interviews with 25 women readers.

Data Sources: Dutch Women's magazines

Countries: Netherlands

Subjects/Variables: Dutch Catholic women

Discipline: History

Immerman, Ronald S.; Mackey, Wade C.

Immerman, R. S., & Mackey, W. C. (2003). Religion and Fertility. *Mankind Quarterly*, 43(4), 377-408.

Abstract: Religions of the 21st and 22nd centuries will have one of three main trajectories. (1) Religions can encourage gender egalitarianism and encourage occupational mobility for women (and men). Such religions will be associated with fertility levels well below replacement level and will enjoy only limited longevity. (2) Religions can be indifferent to gender roles and, thereby, other parameters; e.g., ecological circumstances, such as subsistence farming, would determine levels of fertility of the community's members. Or (3) religions can encourage gender complementarity wherein women are confined primarily to the mother role with minimal opportunities outside of that role. Ceteris paribus, such religions will be associated with fertility levels above replacement level and enjoy extended longevity across generations. Without commenting upon desirability, there is a strong intuition that cultural formulae that result in levels of fertility above replacement value will supplant or displace cultural formulae that result in levels of fertility below replacement value. The supplanting would be a constant. The only variable would be time.

Data Sources: Yearbook of American and Canadian Churches, 1925-2001

Countries: US, Canada

Subjects/Variables: Episcopalians, Lutherans, Presbyterians, Unitarian-Universalists, Jews, the Reorganized Church of the Latter Day Saints (currently The Community of Christ), Mennonites, Southern Baptists, Old Order Amish, the Hutterite Brethren, the Latter Day Saints (the Mormons), Shakers (1920s-1990s)

Discipline: Demography

Iqbal, Mohammad; Noble, Ray

Iqbal, M., & Noble, R. (2009). Islamic Identity and the Ethics of Assisted Reproduction. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 86-110). London: Jessica Kingsley Publishers.

Summary: In Islam there are two principal denominations, the Sunni and the Shia'a, although there is no central authority to decide on fertility issues. The first and principal source to guide Muslims on these issues is the holy Qur'an. While the Qur'an does not provide explicit answers to problems of family formation, it is

expected that each generation exercises judgment to find solutions to the problems that arise. However, according to the Qur'an, a free individual is someone who belongs to two entities, to the larger community of Islam and to the family. Being part of a family and having responsibilities, duties and obligations towards the family are central values in Islam. Procreation in Islam is a sign of God's will and a large family is perceived to be a blessing. In Chapter 3 Mohammad Iqbal and Ray Noble identify additional sources that guide Islamic thinking and actions: Sunnah, the Prophet's actions, Hadith, the Prophet's sayings and Shariah, the jurists' decisions. Based on core Islamic values and these sources, they then specify Islamic views of birth control and family planning, abortion and artificial reproductive technologies, pre-implantation genetic diagnosis and selection of embryos, surrogacy and human cloning.

Data Sources: Theoretical discussion

Iyer, Sriya

Iyer, S. (2002). Understanding Religion and the Economics of Fertility in India. *Centre of South Asia Studies Occasional Paper, 2.*

Abstract: This paper explores the impact of religion on women's fertility in India. Religion is conceptualised as affecting demography in two ways: through its philosophical content, and in terms of the socio-economic 'characteristics' of different religious groups. Systematic comparison of Islam and Hinduism shows little difference in their theological positions on demographic issues, with the exception of their position on birth control. Econometric methods explore the impact on fertility of religion and other socio-economic factors, using data from a micro-demographic survey of 201 rural Hindu, Muslim and Christian households in the south Indian state of Karnataka. The econometric methods show that there are statistically significant differences in the effects of various socio-economic factors on the number of children-ever-born between Hindus, Muslims and Christians, suggesting that religious groups may need to be targeted differently by policy-makers in order to influence demographic decision-making.

Data Sources: Micro-demographic survey of 201 rural Hindu, Muslim and Christian households in the south Indian state of Karnataka.

Countries: India

Subjects/ Variables: 201 women who belonged to five villages in the taluk and Ramanagaram town. A total of 187 adult married women and 14 adult single women were interviewed; 111 Hindus, 75 Muslims and 15 Christians

Discipline: Economics

Iyer, S. (2002). *Demography and Religion in India*. Delhi: Oxford University Press.

Summary: The all-India total fertility rate (TFR) for Muslims is considerably higher for Muslims than for Hindus. For women aged 15-49, it is 5.8 versus 4.2 (1999 figures). The study provides a theoretical discussion of religion and fertility in the context of population policy in particular and development policy more widely. It also adopts a micro-demographic approach to studying the determinants of fertility in a small cluster of communities in rural Karnataka, south India, and combines this approach with economic and econometric analysis. The study provides an account of the interplay between economic, demographic, and religious factors which influence women's age at first marriage, contraceptive adoption, and fertility. In addition to the proximate determinants of fertility (age at first marriage, decision to use contraception), and socio-economic variables (eg.

education, income, age, access to infrastructure), the study examines the role of religion under both the 'particularized theology' and 'characteristics' hypotheses. Chapter 2 provides an overview of religion, economic development, and population policy in India. Chapter 3 presents a theoretical discussion of the relationship between religion and demography. Chapter 4 discusses the anthropological study - information about Ramanagaram taluk, the data set, and the sampling methodology. Chapter 5 presents the 'census' information on the 201 women interviewed. Chapters 6-8 present the main theoretical findings of the research on religion and the proximate determinants of fertility and relate them to the results from the main empirical analysis of the data, which was undertaken both quantitatively and qualitatively. Neither the theology or characteristics effect differs significantly between Hindus and Muslims as regards their marriage age or decision to use contraception. But there are differences in socio-economic characteristics such as female education, access to fuel infrastructure, son-preference. Yet the socio-economic characteristics affect religious groups in India in different ways, which has important implications for population policy.

Data Sources: Sample of 201 rural Hindu, Muslim, and Christian women, questionnaire

Countries: India

Subjects/Variables: Indians; Hindu, Muslim, Christian

Discipline: Economics

Iyer, S. (2002). Religion and the Decision to Use Contraception in India. *Journal for the Scientific Study of Religion*, 41(14), 711-722.

Abstract: This article investigates two hypotheses put forward to explain the effect of religion on the decision to use contraception in India. The first hypothesis is the "pure religion effect," that the intellectual content of religion influences contraceptive behavior. This hypothesis is explored by examining women's views on the theological content of Islam and Hinduism in relation to birth control, provided by a sample of 186 rural Hindu and Muslim women from southern India. The second hypothesis examined is the "characteristics" hypothesis, that religious differences in contraceptive adoption are explained by socioeconomic characteristics of religious groups. This is tested by a logit model that shows that there is no statistically significant difference between Hindus and Muslims in the effect of religion on contraceptive adoption, after controlling for socioeconomic characteristics. Taken together, the qualitative and quantitative findings have significant implications for religious groups and for population policies in India.

Data Sources: A micro-level data set was collected in five villages and the town of Ramanagaram, in Ramanagaram taluk, Karnataka

Countries: India

Subjects/Variables: 111 Hindu households, 75 Muslim households, and 15 Christian households

Discipline: Economics

Jaffe, A. J.

Jaffe, A. J. (1939). Religious Differentials in the Net Reproduction Rate. *Journal of the American Statistical Association*, 34(206), 335-342.

Abstract: Fertility of the Roman Catholic population: The evidence reviewed in this study (for the period 1920 to 1935) revealed no clear cut differentials between the net reproduction rates of the Catholic and non-Catholic populations. In general, the Italian born and the native born of Italian extraction have higher rates than other groups. The Catholic Irish, Polish, and the groups of

miscellaneous nationalities, on the other hand, have rates about equal to or somewhat lower than the rates of comparable non-Catholic groups. Fertility of the Jewish population: The net reproduction rates of both the foreign born and native born Jewish populations, in general, tend to be somewhat lower than rates of economically comparable Protestant stock. This is especially evident in the data of the city of Chicago.

Data Sources: Chicago data from United States Census of Population data and the United States Birth Statistics Reports

Countries: United States

Subjects/Variables: Foreign-born Irish, Italian, Polish Catholics resident in Chicago

James, K.S.; Nair, Sajini B.

James, K. S., & Nair, S. B. (2005). Accelerated Decline in Fertility in India since the 1980s: Trends among Hindus and Muslims. *Economic and Political Weekly*, 40(5), 375-383.

Abstract: This study finds that fertility among Muslims follows nearly the same pace of transition as that of Hindus, particularly when an accelerated decline in fertility in the country is taking place. Based on the experience both from the west and other developing countries, there is no reason to believe that fertility transition will stall once the process sets in. Therefore, the scepticism about fertility transition among Indian Muslims is unwarranted. The paper also analyses the proximate determinants of fertility among Hindus and Muslims as against the socio-economic differentials as causes for the differences in reproductive behaviour.

Data Sources: Sample Registration System survey, 1984; NFHS in 1992-93 and 1998-9

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Janssen, Susan G.; Hauser, Robert M.

Janssen, S. G., & Hauser, R. M. (1981). Religion, Socialization, and Fertility. *Demography*, 18(4), 511-528.

Abstract: Longitudinal data from a large sample of Wisconsin men and women are used to examine the effects on fertility of religious and secular socialization, including farm upbringing. Analyses of children ever born (CEB) and of parity progression show that current religious choice is more important in explaining fertility than is religion of orientation or denomination of secondary school. The effects of current and background religion are additive, and the effect of current religion is the same for men as for women at each parity progression. Catholic religious background affects fertility primarily by increasing the likelihood of having a third or fourth child; its indirect effects on fertility operate through religious schooling and current religious affiliation. Unlike religious background, the positive influence of farm background on fertility persists among men and women, even when current farm employment is controlled.

Data Sources: Large sample of Wisconsin's 1957 high school seniors; follow-up survey in 1975 on each respondent's religion, marital and fertility history, and career attainments

Countries: United States

Subjects/Variables: Wisconsin: 3,420 males and 3,816 females; Catholics and non-religious
Discipline: Demography

Jayasree, R.

Jayasree, R. (1989). *Religion Social Change and Fertility Behaviour: A Study of Kerala*. New Delhi: Concept Publishing.

Summary: A gap of research exists to explain the exceptionally low fertility in the economically poor state of Kerala (a crude birth rate of 24 per 1000 live births). This book studies the determinants of fertility behaviour across the three major religious groups (Hindus, Muslims, and Christians): age at marriage, contraception, breastfeeding, birth interval, socio-economic factors, value of children, social change in the population of the Travancore Region of Kerala. During the last half-century, Hindus have progressed, modernized and improved their quality of life, but the Christians and Muslims still lag behind. Age at marriage was somewhat higher for Hindu women (2) than Christians (18.4) and Muslims (17.9), and shows a negative association with fertility. Couples with a better socio-economic status manifest a lower fertility against counterparts in the lower strata, and Hindus have a better socio-economic status. Hindus give least value of the three religions to children. Minor breastfeeding differences had little influence in explaining variations. The longest birth interval was among Hindus, but was not an independent factor. Hindus are the highest adopters of contraception (78.2%), followed by Muslims (70.2%) and Christians (57.1%), and so a major factor for differential fertility. Path analysis shows that education, opportunity cost, value of children, and age of marriage.

Data Sources: Sample of Trivandrum District, with three villages each from three community development blocks (Athiyannoor, Chirayinkil and Vellanadu)

Countries: India (Kerala)

Subjects/Variables: 1000 eligible couples from Trivandrum District, Kerala, with interviews of wives only

Discipline: Sociology

Jeffery, Patricia; Jeffery, Roger

Jeffery, P., & Jeffery, R. (2000). Religion and Fertility in India. *Economic and Political Weekly*, 35(35-36), 3253-3259.

Abstract: The recent contribution by Moulasha and Rama Rao (1999) to the debate on the relationships between religion, fertility and family planning, uses National Family Health Survey data in misleading ways. By failing to consider regional patterns in the distribution of Hindus and Muslims they exaggerate the role of religious group membership in understanding fertility differences. They give spurious credence to arguments that suggest that Islam in some way encourages higher fertility, they fail to consider issues of risk and uncertainty faced by religious minorities, and they come to unwarranted policy conclusions. In order to understand inter-religious fertility differences, analyses must be based on the understanding of specific social, economic and political contexts.

Data Sources: National Health Fertility Survey, 1992-93

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Jeffery, P., & Jeffery, R. (2002). A Population Out of Control? Myths About Muslim Fertility in Contemporary India. *World Development*, 30(10), 1805-1822.

Abstract: This paper describes and criticizes myths about the scale and causes of fertility differentials between Hindus and Muslims in India. These ideas, associated with Hindu nationalist organizations, also have a more general common-sense quality. The paper challenges these views by examining how demographers have addressed Hindu–Muslim fertility differences, considering the impact of regional differences, variations in socioeconomic position, and occupation. We further suggest that these elaborate statistical analyses on large-scale data sets are not readily sensitive to local-level variations. Our micro-level research findings are used to illuminate both Hindu Right political rhetoric and the limitations of macro-level demographic analyses.

Data Sources: Fieldwork in Bijnor in 1982–83

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Jeffery, P., & Jeffery, R. (2006). *Confronting Saffron Demography: Religion, fertility, and women's status in India*. Gurgaon: Three Essays Collective.

Jeffery, Patricia; Jeffery, Roger; Jeffrey, Craig

Jeffery, P., Jeffery, R., & Jeffrey, C. (2008). Disputing Contraception: Muslim Reform, Secular Change and Fertility. *Modern Asian Studies*, 42(2-3), 519–548.

Abstract: In South Asia, Muslim reformers have often attempted to ‘rationalize’ and gentrify the everyday behaviour of ordinary Muslims. Yet, despite the existence of discussions of contraceptive techniques in the yunan-itibb curricula of 19th century India and the apparent affinity between rationalism and fertility regulation, contraception was rarely discussed in public debates involving Muslim reformers. In this paper we discuss some of the relationships between elite debates among Muslim leaders and the grassroots behaviour of villagers in rural Bijnor, in western Uttar Pradesh. Villagers’ voices are ambiguous, with fears for mother and child health surfacing as often as concerns for religious orthodoxy and one’s destiny in the afterlife. In addition, many of the villagers’ views of Islam were much more restrictive than those of the locally accepted authoritative voices: although the staff at Daru’l ‘Ulum, Deoband, saw much modern contraception as an unwelcome sign of modernity, their discussions of the acceptability of family planning circled round notions of majburi [compulsion], repentance, and the unfathomable mercy of Allah. We conclude that focusing on local notions of Islam to understand the fertility behaviour of rural Muslims is less fruitful than considering a “political economy of hopelessness” that, increasingly since 1947, affects many Muslims in north India.

Data Sources: Fieldwork

Countries: India

Subjects/Variables: Sunni Muslims, Bijnor district in north-western Uttar Pradesh

Discipline: Sociology, Geography

Jeffery, Roger; Jeffery, Patricia

Jeffery, R., & Jeffery, P. (1997). *Population, Gender and Politics: Demographic Change in Rural North India*. Cambridge: Cambridge University Press.

Summary: Roger and Patricia Jeffery's book is the result of extensive fieldwork in two villages in Bijnor District, western Uttar Pradesh in North India. They examine the demographic processes in two castes - the Hindu Jats and the Muslim Sheikhs - and ask why there are higher levels of fertility among the Sheikhs. The authors conclude that explanations can be only partially attributed to narrowly economic concerns, to gender relationships or to religion. Rather, the different economic and political interests and positions of the two groups within the locality are the defining factors. Given their marginalization from the formal urban economy, the Sheikhs have little incentive, for example, to have small families or to invest in the education of their children. In contrast, the Jats - who are locally dominant - are using birth control and educating their children for as long as possible. In the final chapter, the authors demonstrate the significance of their analysis for a wider understanding of the problems of population and politics in India generally.

Data Sources: Fieldwork in Bijnor District, 1982, 1985, 1990-1991

Countries: India

Subjects/Variables: Bijnor District, in the northern Indian state of Uttar Pradesh

Discipline: Demography

Jeffery, R., & Jeffery, P. (2005). Saffron Demography, Common Wisdom, Aspirations and Uneven Governmentalities. *Economic and Political Weekly*, 40(5), 447-453.

Abstract: 'Saffron Demography' has been instrumental in perpetuating myths relating to claimed differences between Hindu and Muslim populations. This paper examines this by now 'common wisdom' in the light of contemporary demographic reality in India. Based on extensive research in a western Uttar Pradesh district, it argues that the scale of Hindu-Muslim demographic differences has been exaggerated, and that the explanations provided for these differences are equally pernicious. Instead, it attempts an understanding of these 'causes' leading to differences in fertility through an analysis of the kind of governmentality seen in post-independence India and argues for new policy initiatives that avoid the punitive victim-blaming approach that has thus far been the norm.

Data Sources: Fieldwork in Bijnor District

Countries: India

Subjects/Variables: Bijnor district, western UP; Hindus, Muslims

Discipline: Demography

Jejeebhoy, Shireen J.; Sathar, Zeba A.

Jejeebhoy, S. J., & Sathar, Z. A. (2001). Women's Autonomy in India and Pakistan: The Influence of Religion and Region. *Population and Development Review*, 27(4), 687-711.

Abstract: Our findings, based on a sample from Pakistan's Punjab Province and from two Indian states, indicate that women's autonomy—in terms of decision-making, mobility, freedom from threatening relations with husband, and access to and control over economic resources—is highly

constrained in Pakistan and in north and south India. In the more gender-stratified settings of Uttar Pradesh and Punjab, autonomy is largely the result of factors that traditionally confer status, notably family structure or absence of controls implicit in co-residence with mother-in-law and size of dowry, along with economic activity (in Uttar Pradesh) and a secondary education (in Punjab). In contrast, in the more egalitarian setting of Tamil Nadu, education and to a lesser extent economic activity are powerful determinants of almost every indicator of autonomy. In comparison, the influences of religion and nationality are less consistent and powerful. There is little support for the argument that Muslim women are disadvantaged in terms of autonomy, at least when compared to Hindu women from the same region. Also, a comparison of Hindu and Muslim women in the Indian sample, and a comparison of Indian and Pakistani women in the pooled sample suggest that, once region is controlled, levels of autonomy are not very different among Hindus and Muslims

Data Sources: Interview survey of Punjab (Pakistan) and Uttar Pradesh and Tamil Nadu (India)

Countries: India, Pakistan

Subjects/Variables: 800 currently married women aged 15–39; Hindu, Muslim

Discipline: Demography

Johnson, Nan E.

Johnson, N. E. (1980). A response to Rindfuss. *American Journal of Sociology*, 86, 375-377.

Abstract: A response to the preceding article by Rindfuss (1980). Contrary to Rindfuss, the minority group status does not only relate to changes over time. There are four different approaches. (1) fertility levels of minority and majority groups in the same country arise from a minority-status effect, eg, Van Heek 1956; (2) differences in a group's fertility between two countries (in one of which it is a minority and in one it is not) arise from its minority status, eg, Day 1968; Kennedy 1973; (3) countries with larger minority groups should have higher fertility, eg, Van Heek 1956; (4) minority status would produce group differences in rates of change, eg, Van Heek 1956; Kennedy 1973.

Data Sources: Theoretical discussion

Discipline: Sociology

Johnson, N. E. (1982). Religious Differentials in Reproduction: The Effects of Sectarian Education. *Demography*, 19(4), 495-509.

Abstract: College-educated Catholic women in the 1976 National Survey of Family Growth had higher actual and expected fertility than did college-educated Protestants. Moreover, Catholic colleges or universities had a pronatalist effect on alumnae. Thus, a significant part of the higher Catholic than Protestant cumulative fertility among college-educated women arose from the greater propensity of such Catholics to attend sectarian schools and colleges. The implications are explored.

Data Sources: 1976 National Survey of Family Growth (NSFG Cycle 11)

Countries: United States

Subjects/Variables: 8,611 females resident in United States

Discipline: Sociology

Johnson, N. E. (1993). Hindu and Christian fertility in India: A test of three hypotheses. *Biodemography and Social Biology*, 40(1-2), 87-105.

Abstract: Three hypotheses interpret differences in human fertility among religious groups. The Particularistic Theology Hypothesis (Goldscheider 1971:273) stresses the pronatalist influence of doctrines forbidding artificial contraception and emphasizing the importance of sons, while the Characteristics Hypothesis (Roy, 1989; Schermerhorn, 1978) focuses on the antinatalist effect of urban residence, higher education, and late age at marriage. But the Minority Status Hypothesis (Goldscheider, 1971; Goldscheider and Uhlenberg, 1969) argues that such antinatalist effects may be stronger for a minority than a majority, since better-educated, late-marrying urbanites have greater chances for upward mobility. Minority groups with these advantages may have much lower fertility than similar people in the majority group if antinatalism is seen as a way to counter prejudice and move up. I tested these three hypotheses with data from the 1981 Census of India, from which I calculated mean numbers of children ever born per wife aged 35-44. I standardized the mean for differences between Hindu and Christian women by urban residence, education, age, and length of marriage. The standardized fertility rates of Hindus and Christians were similar in 25 states/union territories. Only in Meghalaya, Mizoram, and Nagaland did the Hindu religious minority have a lower standardized birth rate than the Christian majority; but the Muslim minority had one like the Christians'. This pattern was most consistent with the Characteristics Hypothesis.

Data Sources: 1981 Indian census

Countries: India

Subjects/Variables: Indians; Hindu, Christian, Muslim.

Discipline: Sociology

Johnson, Nan E.; Burton, Linda M.

Johnson, N. E., & Burton, L. M. (1987). Religion and Reproduction in Philippine Society: A New Test of the Minority-Group Status Hypothesis. *Sociological Analysis*, 48(3), 217-233.

Abstract: Most previous tests of the religious-minority-group status hypothesis have sought explanations of Catholic pronatalism in more developed countries settled by Europeans or European immigrants. The present pilot study departed from that tradition by focussing on Protestant antinatalism in a lesser developed country settled by Malay and Chinese immigrants. This study of 366 unmarried college students in the central and southern Philippines found that Protestant respondents came from higher socioeconomic origins than did Catholic respondents. The Protestant men desired many fewer sons and daughters than did Catholic men, even when these differences in origins were controlled. The Protestant women did not want many fewer sons but did want many fewer daughters than the Catholic women wanted. Protestant respondents were less likely than the Catholics to view the instrumental roles of sons and daughters as the most salient advantages of having children. Protestants were much more likely than Catholics to think a married couple should start contraception before the first birth and much less likely to think that artificial methods of family planning were against God's will. The results suggest that support for the religious-minority-group status hypothesis is not limited to minorities with explicitly pronatalist creeds or to religious groups in more developed nations or nations with an indigenous European culture.

Data Sources: English-language questionnaire self-administered by 519 college students in January-March 1985

Countries: Philippines

Subjects/Variables: Filipino college students; Catholic and Protestant

Discipline: Sociology

Johnson, Nan E.; Nishida, Ryoko

Johnson, N. E., & Nishida, R. (1980). Minority-Group Status and Fertility: A Study of Japanese and Chinese in Hawaii and California. *American Journal of Sociology*, 86(3), 496-511.

Abstract: Since there is a racial majority in California but not in Hawaii, these two states provide a natural experiment for testing the minority-status theory of fertility. The following propositions were deduced from the theory: (1) no net differences in Japanese, Chinese, and white fertility in Hawaii; (2) lower Japanese and Chinese than white fertility in California; (3) lower Japanese and Chinese fertility in California than in Hawaii. Support for the first and third propositions and partial support for the second proposition in 1970 census public-use samples suggest that minority status may have depressed the fertility of currently married Japanese and Chinese women in California. The implications are explored.

Data Sources: 1970 census 1% public-use sample (5% questionnaire) of Hawaii and California

Countries: United States

Subjects/Variables: Native-born Japanese, Chinese, and white women who were currently married and living with their spouses, non-Hispanic women and spouses, 14-44 years old; 471 respondents from Hawaii and 16,671 from California

Discipline: Sociology

Jones, Gavin W.; Karim, Mehtab S.

Jones, G. W. K., Mehtab S. (2005). Introduction. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 1-8). London: Hurst.

Summary: Reviews hypotheses on religion and reproduction and studies on Muslim fertility. Introduces the book's studies into the six largest Muslim-majority countries: Indonesia, Pakistan, Bangladesh, Turkey, Iran, and Egypt. Religion's influence occurs at a number of levels: development of official population policy; laws and regulations; attitudes of individuals to early marriage, desired number of children, contraception; attitudes of family planning administrators and fieldworkers; societal attitudes to female autonomy, education, participation in workforce; etc. Actual religious attitudes rather than official theology is emphasised.

Data Sources: Overview

Countries: Indonesia, Pakistan, Bangladesh, Turkey, Iran, and Egypt

Subjects/Variables: Muslims

Discipline: Demography

Jones, Gavin W.; Nortman, Dorothy

Jones, G. W., & Nortman, D. (1968). Roman Catholic fertility and family planning: A comparative review of the research literature. *Studies in Family Planning [The Population Council]*, 1(34), 1-27.

Abstract: In view of the Roman Catholic Church's traditional ban on artificial methods of birth control (again upheld in Pope Paul VI's July 29 Encyclical, "Of Human Life"), the public as well as scholars in various disciplines have long been interested in various aspects of Catholic fertility. To satisfy this interest and meet the need for information on this subject, two staff members of the Population Council, Gavin Jones and Dorothy Nortman, have brought together the available empirical data on Catholic fertility, family size ideals, knowledge and attitudes toward fertility matters, and the practice of contraception.

Most of the 600 million Roman Catholics in the world live in Europe and the Americas, although Catholics are to be found in every continent and probably in every country. Since they live under a great diversity of social and economic conditions, about half in the developed countries where birth rates are generally low and about half in the developing countries where birth rates are generally high, and in each case sometimes as an overwhelming majority and sometimes as a very small minority of their nation, the result of this collection of empirical data is an interesting survey of differentials between

Catholics and non-Catholics in a wide variety of settings and among Catholics themselves around the world.

Data Sources: U.N. *Population and Vital Statistics Report*; 1968 *National Catholic Almanac*, Doubleday and Co., 1968; *The Statesman's Yearbook 1967-1968*, Macmillan and Co., Ltd., London, 1967; Germany, Federal Republic. *Statistisches Jahrbuch für die Bundesrepublik Deutschland 1966*. Statistisches Bundesamt, Wiesbaden; national surveys of ideal family size

Countries: Europe, North America, South American, Australia and New Zealand

Subjects/Variables: Catholics by nation, and various non-Catholic groups per nation

Discipline: Demography

Jones, Rachel K.; Darroch, Jacqueline E.; Singh, Susheela

Jones, R. K., Darroch, J. E., & Singh, S. (2005). Religious differentials in sexual reproductive behaviors of young women in the United States. *Journal of Adolescent Health*, 36(2), 279-288.

Joshi, A P , ; Srinivas, M.D.; Bajaj, J.K.

Joshi, A. P., Srinivas, M. D., & Bajaj, J. K. (2003). *Religious Demography of India*. Chennai: Centre for Policy Studies.

Summary: Examines trends in Indian religious composition, between "Indian Religionists", Muslims, and Christians. Predicts that Indian Religionists are likely to turn into a near minority by 2050 or thereabouts. Yet also states that they will continue to have a share of about 85% of the population and likely to remain a majority in the foreseeable future. Notes that growth in Other Religionists in India are not geographically uniform

Data Sources: Indian censuses

Countries: India, Pakistan, Bangladesh

Subjects/Variables: Muslims, Hindus, Christians

Discipline: Demography

Karim, Mehtab S.

Karim, M. S. (1997). *Reproductive Behavior in Muslim Countries*. Calverton, MD
Summary: Reproductive behaviour in selected Muslim countries shows no clear pattern in either contraceptive use or fertility. While socio-economic factors may have played an important role in early fertility reductions in Muslim countries, effective family planning programs seem to have become the more important factor in achieving fertility transition. There appears to be no typical pattern of reproductive behaviour which could be described as "Islamic". Islam as such seems to be neither a hindrance nor a stimulating factor in fertility decline, at the global level.

Data Sources: Demographic and Health Surveys (DHS) Program

Countries: Egypt, Morocco, Niger, Senegal, Bangladesh, Pakistan, Indonesia, Jordan, Turkey

Subjects/Variables: Muslims in Muslim-majority countries

Discipline: Health Sciences

Karim, M. S. (2005). Islamic Teachings of Reproductive Health. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 40-55). London: Hurst.

Summary: Analysis of the importance of the effect of Islamic scriptures and fiqh on proximate determinants of fertility in Muslim-majority countries: female age at marriage, use of contraception, practice of induced abortion, prevalence and duration of breastfeeding.

Data Sources: Theoretical

Discipline: Demography

Kaufmann, Eric

Kaufmann, E. (2006). *Breeding for God: Religion Returns to Europe*. *Prospect*, 128.

Kaufmann, E. (2013). Sacralization by Stealth? The Religious Consequence of Low Fertility in Europe. In E. Kaufmann & W. B. Wilcox (Eds.), *Whither the Child?: Causes and Consequences of Low Fertility* (pp. 135-156). Abingen: Routledge.

Summary: The pious in secularizing societies resist the transition to lower fertility more than the nonreligious, regardless of income or education. Paradoxically, secularization seems to be self-limiting, in that it sets the stage for a demographically induced return of religion. The religions that prosper best in secular Western environments are not traditional, but pronatalist sects like Holland's Orthodox Calvinists or America's Ultra-Orthodox Jews.

Data Sources: World Values Survey; IIASA, World Population Program, 2007-2009; UK Home Office

Countries: Europe

Subjects/Variables: Europeans; Secular, Christian, Muslim

Discipline: Politics

Kaufmann, Eric; Goujon, Anne; Skirbekk, Vegard

Kaufmann, E., Goujon, A., & Skirbekk, V. (2012). The End of Secularization in Europe?: A Socio-Demographic Perspective. *Sociology of Religion*, 73(1), 69–91.

Abstract: Much of the current debate over secularization in Europe focuses only on the direction of religious change and pays exclusive attention to social causes. Scholars have been less attentive to shifts in the rate of religious decline and to the role of demography—notably fertility and immigration. This article addresses both phenomena. It uses data from the European Values Surveys and European Social Survey for the period 1981–2008 to establish basic trends in religious attendance and belief across the 10 countries that have been consistently surveyed. These show that religious decline is mainly occurring in Catholic European countries and has effectively ceased among post-1945 birth cohorts in six Northwestern European societies where secularization began early. It also provides a cohort-component projection of religious affiliation for two European countries using fertility, migration, switching, and age and sex-structure parameters derived from census and immigration data. These suggest that Western Europe may be more religious at the end of our century than at its beginning.

Data Sources: The European Values Surveys of 1981, 1990, 1999–2000, 2008 and European Social Survey of 2004

Countries: Spain, Belgium, Ireland, France, the Netherlands, Britain, Denmark, Norway, Iceland, and Sweden

Subjects/Variables: Europeans

Discipline: Politics

Kaufmann, Eric; Wilcox, W. Bradford

Kaufmann, E., & Wilcox, W. B. (2015). *Whither the child? Causes and consequences of low fertility*. Colorado: Paradigm Publishers.

Kaufmann, Eric.

Kaufmann, E. (2008). Islamism, Religiosity and Fertility in the Muslim World. *European Population Conference*.

Abstract: Religious politics, in which there is a dominant cleavage separating believers (especially if literalist) from moderate believers and nonbelievers is important in Muslim countries in the Middle East, Africa and Asia. Will Muslim societies become secular or continue to become more religious? Within the religious majority, are Islamists (supporters of Sharia Law) more fertile than non-Islamist Muslims? How are these trends affected by modernization? Social scientists have not been very attentive to the role that demography - notably fertility and migration - plays in the secularization/religious revival story. Work on religious fertility in Muslim countries is particularly scarce. This paper summarizes existing work, then analyzes data from the World Values Survey of 1999-2000, supplemented by the Youth, Emotional Energy, and Political Violence survey of 2005 in

Egypt and Saudi Arabia. It performs multivariate analysis on three dependent variables: fertility, Islamism and religiosity, to provide a glimpse into the demographic future of Islamism, moderate Islam and secularism in the Muslim world.

Data Sources: World Values Survey, 1999-2000; Youth, Emotional Energy, and Political Violence survey, 2005, in Egypt and Saudi Arabia

Discipline: Politics

Kaufmann, E. (2010). *Shall the religious inherit the Earth? Demography and politics in the twenty-first century*. London: Profile Books.

Summary: Quasi-populist overview of differentiation in fertility rates between different religious and non-religious populations. The book claims that, far from declining, the religious are expanding their share of the population: in fact, the more religious people are, the more children they have. The cumulative effect of immigration from religious countries, and religious fertility will be to reverse the secularisation process in the West. Not only will the religious eventually triumph over the non-religious, but it is those who are the most extreme in their beliefs who have the largest families. Within Judaism, the Ultra-Orthodox may achieve majority status over their liberal counterparts by mid-century. Islamist Muslims have won the culture war in much of the Muslim world, and their success provides a glimpse of what awaits the Christian West and Israel. Based on a wealth of demographic research, considering questions of multiculturalism and terrorism, Kaufmann examines the implications of the decline in liberal secularism as religious conservatism rises - and what this means for the future of western modernity.

Data Sources: Based on existing demographic data

Subjects/ Variables: US Fundamentalism, Islamism, European Muslims, Jewish Ultra-Orthodox (Haredim)

Discipline: Politics

Kemkes-Grottenthaler, Ariane

Kemkes-Grottenthaler, A. (2003). More than a Leap of Faith: The Impact of Biological and Religious Correlates on Reproductive Behavior. *Human Biology*, 75(5), 705-727.

Abstract: Using a conceptual model that integrates both social and biomedical factors of causation, this paper tries to delineate the pathways through which the reproductive characteristics of a multid denominational community are characterized. In total, 5513 historical entries from family reconstitution were available. Selection of data was guided by the inclusion of information about religious affiliation. Only married couples with children as well as single mothers with the relevant information were considered. Of these, 1855 entries were of Roman Catholic (C), 1143 of Lutheran/Protestant (L/P2), and 609 of Reformed Calvinist (R) denomination. The analysis documented differential nuptiality and fertility patterns, which at first glance may be interpreted along religious lines. However, the paper attempts to show that these various sociocultural patterns associated with religious behavior are merely proximate determinants, while the ultimate causes are biological in nature (i.e., differential parental age at marriage or birth, different parity progression regimes, differences in median interpregnancy interval, as well as highly variable sibship size within the denominational groups

Data Sources: Family reconstitutions of two neighboring parishes: Dannstadt/Schauernheim (1480-1880) and Hochdorf/Assenheim (1412-1912)

Countries: Germany (County Ludwigshafen/Rhine, Rhineland-Palatinate)
Subjects/Variables: Germans; Catholic, Lutheran/Protestant, Reformed Calvinist
Discipline: Anthropology

Kennedy, Robert E.

Kennedy, R. E. (1973). Minority Group Status and Fertility: The Irish. *American Sociological Review*, 38(1), 85-96.

Abstract: Can minority group status exert an independent effect on fertility? The Irish situation suggests that it can when: the minority is relatively large, the minority's size is politically important, the minority is economically disadvantaged, and the cohesiveness of the minority is strong. Even when such conditions exist, as they apparently do in Northern Ireland, the impact of minority group status on fertility is a less important determinant of fertility than such factors as religion, rural/urban residence, or the selective impact of migration. The question is relevant not only to nations with relatively large minority groups; it also applies to countries in which minorities, while small in proportion nationally, are concentrated locally in certain states or cities.

Data Sources: Censuses: Northern Ireland and Republic of Ireland

Countries: Northern Ireland (1937-1961); Republic of Ireland (1926-1961)

Subjects/Variables: Irish Catholics and non-Catholics

Discipline: Sociology

Kennedy, R. E. (1973). *The Irish: Marriage, Fertility and Emigration*. Berkeley: University of California Press.

Kertzer, David I.

Kertzer, D. I. (1995). Political-economic and cultural explanations of demographic behavior. In S. Greenhalgh (Ed.), *Situating fertility: Anthropology and demographic inquiry* (pp. 29-52). Cambridge: Cambridge University Press.

Summary: I examine the attempts to replace more traditional economic perspectives with cultural explanation in demographic studies, in particular the Princeton European Fertility Project. This movement actually has two different (though not always clearly distinguishable) threads. In the one most commonly articulated by demographers, culture is treated as a grab-bag of non-demographic, non-economic characteristics that influence behavior without themselves being susceptible to economic or demographic explanation. In its other form, emerging largely from the ranks of anthropology (Schneider and Schneider 1984; Kertzer and Hogan 1989; Greenhalgh 1990), a political economic approach has been championed that places economic forces in a broader context that includes both political and cultural factors. In this latter approach culture is not opposed to economic factors in explanation, but rather is part of a model of the interaction of political, economic, and cultural processes which is designed to produce a better understanding of the determinants of demographic behavior.

Data Sources: Review article, with some data from Casalecchio di Reno, near Bologna, in northern Italy (1861-1921)

Countries: Europe, Africa

Discipline: Anthropology

Kertzer, D. I. (2006). Religion and the decline of fertility: Conclusions. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 259-269). Dordrecht: Springer.

Summary: Summarises the trends in demography over past half century (to 2006), in particular the attention paid to religion. Also discusses the call for more serious demographic attention to the role of culture in explaining the 'second demographic transition'. In particular, he emphasizes the variety of ways in which the political dimension directly or indirectly affects the link between religion and fertility.

Data Sources: Concluding chapter, no new empirical studies.

Khan, M.E.

Khan, M. E. (1978). *Birth Control amongst Muslims in India*. New Delhi: Manohar Publications.

Khan, M. E. (1979). *Family planning among Muslims in India: a study of the reproductive behaviour of Muslims in an urban setting*. New Delhi: Manohar.

Summary: This study is based on 330 Muslim couples randomly chosen from the Muslim dominated localities of Kanpur City. To understand differential fertility among the Muslims, the sample was divided into 2 groups differed widely in socioeconomic characteristics. Those with hereditary occupations had slightly higher fertility. General marital fertility for all Muslims was 232 per 1000. Muslim women had given birth to an average 4.8 children, with 3.9 living. Those with hereditary occupations had 1 living child more. Fertility had declined by 3.4% between 1967-73. High child mortality would seem to be an important factor in high fertility, as was the perceived economic benefits of children. Education, negatively associated with fertility, could be used as an intervening variable in its control. The majority of respondents (64-68%), male and female, wanted no further children, but only 40% were using contraception. Those who were not or had no plans to do so were generally older, illiterate, poorly exposed to mass media, and expressed fears about child mortality. Respondents did not show firm commitments to their stated ideal family sizes, but a strong preference for male children was observed. Other factors conducive to large families included religious values, self-expression, immortality, primary group ties, happiness, power and influence. All male respondents and 88% of females knew at least 1 modern contraceptive method. Knowledge of vasectomy, tubectomy and IUD was much lower, especially among women, and many complications and fears were reported about these methods. 83% of males and 64% of females approved of family planning, about 1/2 the couples having tried a method (mostly condoms). Husband-wife communication was seen as an important element in the adoption of family planning. Advertising was the most important source of family planning information among the men; their husbands were the most important source for the women.

Data Sources: Survey in Kanpur City, India

Countries: India

Subjects/Variables: 330 Muslim couples, Kanpur City, India (1967-1973)

Discipline: Demography

Kim, Doo-Sub; Song, Yoo-Jean

Kim, D.-S., & Song, Y.-J. (2007). Does Religion Matter? A Study of Regional Variations in Sex Ratio at Birth in Korea. In I. Attané & C. Z. Guilmoto (Eds.), *Watering the Neighbour's Garden: The Growing Demographic Female Deficit in Asia*. Paris: CICRED (Committee for International Cooperation in National Research in Demography).

Summary: The total fertility rate (TFR) in Korea decreased sharply from about 6.0 in the early 1960s to the replacement level (2.1 children per woman) in 1983 and has now dropped to 1.16 in 2004. The sex ratio at birth was estimated at 109.5 in 1985 and reached 115.2 in 1994. In 1994, sex ratios reached 121.4 in Taegu city, and over 120 in two provinces in Youngnam. Evidence indicates that compared to the rest of the country, Taegu city and the two provinces in Youngnam do not present any distinctive characteristics with regard to the level of fertility, family and household structure, and practice of family planning. The only common factors are that Youngnam has relatively fewer Protestant and Catholic churches, and a long history of conservative cultural traditions. In this study, it is assumed that sex ratio at birth is associated with social culture and regional characteristics, which affect an individual's values and attitudes toward son preference and sex-selective abortion. Findings from analysis of variance (ANOVA) and regression analyses at the regional level suggest that religion has stronger effects than socioeconomic factors on regional variations in sex ratio at birth. Buddhism is found to have a positive relationship with sex ratio at birth, while the prevalence of Protestant churches is negatively associated with sex ratio at birth. Yet, the effects of religion are weaker in 2000 than in 1994, due to the overall level of the sex ratio decreased in 2000. Sex ratios at birth are also found to be higher in metropolitan and urban areas than those in rural areas, and the socioeconomic level of the region shows a positive relationship to sex ratio at birth.

Data Sources: Micro-data from vital statistics, various reports on regional statistics for years 1994 and 2000, and the 2000 Korea National Fertility Survey data

Countries: Korea

Subjects/Variables: Buddhism, Protestantism, Catholicism

Discipline: Sociology, Demography

Kirk, Dudley

Kirk, D. (1955). Recent Trends in Catholic Fertility in the United States. *Current Research in Human Fertility*, 93-105.

Abstract: Summary of US Catholic vital statistics, based on Church records. The data supports the conclusions of demographers in the 1930s with reference to then current trends in Catholic fertility that the Catholic rate was falling more rapidly than the non-Catholics. But the gap in the crude birth rate has not narrowed since the 1920s, due to the Catholic contribution to the post-WWII baby boom, a consequence of greater urbanization (where the baby boom predominated).

Data Sources: Official Catholic Directory (1943-)

Countries: United States

Subjects/Variables: US Catholics

Discipline: Demography

Kirk, D. (1968). Factors Affecting Moslem Natality. In C. B. Nam (Ed.), *Population and Society* (pp. 230-243). New York: Houghton Mifflin.

Kiser, Clyde V.

Kiser, C. V. (1960). Differential fertility in the United States. In N. B. o. E. Research (Ed.), *Demographic and Economic Change in Developed Countries* (pp. 77-116). Princeton: Princeton University Press.

Summary: Provides fertility rates by religion, based on 1958 Statistical Abstract of the United States. Although Protestant and Catholic fertility rates were approximately equal, Protestants include most blacks.

Data Sources: Current Population Survey, March 1957; 1958 Statistical Abstract of the United States

Countries: United States

Subjects/ Variables: Catholics, Protestants (Presbyterian, Lutheran, Methodist, Baptist, other), Jews

Discipline: Demography

Kiser, Clyde V.; Grabill, W.H.; Campbell, Arthur A.

Kiser, C. V., Grabill, W. H., & Campbell, A. A. (1968). *Trends and Variations in Fertility in the United States*. Cambridge, MA: Harvard University Press.

Knodel, John

Knodel, J. (1974). *The decline of fertility in Germany, 1871-1939*. Princeton: Princeton Academic Press.

Knodel, John; Gray, Rossarin Soottipong; Sriwatcharin, Porntip; Peracca, Sara

Knodel, J., Gray, R. S., Sriwatcharin, P., & Peracca, S. (1999). Religion and Reproduction: Muslims in Buddhist Thailand. *Population Studies*, 53(2), 149-164.

Abstract: This study examines the contrast between Muslim reproductive attitudes and behaviour in Thailand and those of Buddhists, especially in the southern region. Results are based primarily on a large regional survey directed towards this topic and focus group discussions among Muslims in Southern Thailand. We interpret Muslim reproductive patterns from the perspectives of the major hypotheses that have been invoked in the social demographic literature to explain links between religion and fertility. These hypotheses partly explain what appears to be a complex and context-specific relationship. Nevertheless, the linkages between religion, ethnic and cultural identity, and political setting that appear to operate are more complex than can be fully explained by even a combination of the existing hypotheses.

Data Sources: 1994 Survey of Knowledge, Attitude and Family Planning Practice in the Southern Region of Thailand conducted by the National Statistical Office (NSO)

Countries: Thailand

Subjects/ Variables: 7961 single and married women aged 15-49 in the 14 provinces of southern Thailand; 5875 Buddhists, 910 Thai-speaking Muslims, 1161 Malay-speaking Muslims

Discipline: Demography

Knodel, John; van de Walle, E.

Knodel, J., & van de Walle, E. (1979). Lessons from the Past: Policy Implications of Historical Fertility Studies. *Population and Development Review*, 5(2), 217-245.

Abstract: Summary of the demographic transition in the West and historic European fertility studies.

Kojima, Hiroshi

Kojima, H. (2003). Determinants of Fertility Preferences: A Comparative Analysis of the Public Opinion Survey on Population Issues (1990/1995) and the JGSS-2000/2001. *Japanese General Social Surveys; Research Paper Collection*, 2, 1-24.

Abstract: A comparative analysis of the JGSS-2000/2001 and the 1990/1995 Public Opinion Surveys on Population Issues (conducted by the NIPSSR) for determinants of ideal family size for a Japanese family based on the same logit model. For the analyses of JGSS-2000/2001, additional independent variables related to values have been also included and the same model has been applied to analyze the determinants of necessity to have children in marriage and gender preference for children. The results for ideal family size show relatively consistent effects of basic and additional independent variables across sexes and surveys, but those for other fertility preferences have much less consistent effects. This may suggest the possible effects of sampling errors and misreporting.

Data Sources: JGSS-2000/2001 and the 1990/1995 Public Opinion Surveys on Population Issues (conducted by the NIPSSR)

Countries: Japan

Subjects/ Variables: Japanese

Discipline: Demography

Kojima, H. (2006). A Comparative Analysis of Fertility-Related Attitudes in Japan, Korea and Taiwan. *F-GENS Journal (Ochanomizu University)*, 5, 324-336.

Abstract: This is a comparative analysis of the JGSS-2000/2001/2002, the 2000 Korean National Fertility Survey (KNFS-2000) and the 2001 Taiwan Social Change Survey (TSCS-2001) on the determinants of fertility-related attitudes, including felt non-necessity to have children after marriage, son preference, a small ideal family size and felt unfavorable effects of mother's work on preschool children. Similar logit models have been applied to the micro-data from the three (or two) societies for ever-married women aged 20-64 to analyze the determinants of attitudes toward children. Even though the religious composition of population is different among Japan, Korea and Taiwan, the results of comparative analysis show some similarities in the effects of religion on fertility-related attitudes among the three societies. After the inclusion of interaction with age, some apparent

similarities turn into differences even within a country. The analyses also reveal difficulties in comparing the results of surveys conducted separately in different societies as well as difficulties in comparing the results of the same survey conducted in different years.

Data Sources: The Japanese General Social Surveys (JGSS-2000/2001/2002); the 2000 Korean National Fertility Survey (KNFS-2000); the 2001 Taiwan Social Change Survey (TSCS-2001)

Countries: Japan, Korea, Taiwan

Subjects/ Variables: Whole population; (Japan) “having personal religion” (usually Buddhism), “having household religion”, “others”; (Korea) “Buddhism,” “Protestantism,” “Catholicism” and “others”; (Taiwan) “Buddhism,” “Christianity,” “Taoism,” “folk religion” and “others”

Discipline: Social Sciences

Kojima, H. (2014). The Effects of Religion on Fertility-Related Attitudes and Behavior in Japan, South Korea and Singapore. *Waseda Studies in Social Sciences*, 15, 1-26.

Abstract: Even though the religious composition of population is different among Japan, Korea and Singapore, the results of comparative analysis show some similarities in the effects of religion on fertility-related attitudes and behavior among the three societies. Generally speaking, religion turns out to be pronatalist as expected. However, the effects of the same religion are not always the same in the three societies. Japan is often the exception because of low percentage of followers and low diversity of religion. The effects of the same religion on men and women are not always the same. Even among Christians, the effects of Catholicism and Protestantism are sometimes different in Korea and Singapore. The results for Singapore suggest that the discrepancy between fertility attitudes and behavior is different between Abrahamic religion (monotheism and others including non-monotheist religion and non-religion).

Data Sources: 2009 Survey on Comparative Study of Family Policies in East Asia (South Korea, Singapore and Japan, the Section for Measures against Declining Birthrate, Director-General for Policies on Cohesive Society, Cabinet Office (Japanese Government)

Countries: Japan, South Korea, Singapore

Subjects/ Variables: 1,000 (male and female) respondents aged 20-49, in each country

Discipline: Social Sciences

Kok, Jan; Van Bavel, Jan

Kok, J., & Van Bavel, J. (2006). Stemming the tide. Denomination and religiousness in the Dutch fertility transition, 1845-1945. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 83-106). Dordrecht: Springer.

Summary: Analysis of life-course data of married couples from Rotterdam and Utrecht (1845-1945). On the basis of religious doctrines regarding procreation, religious norms on the roles of men and women and the institutional means to enforce compliance to those rules, the authors try to test the hypothesis that only where direct supervision of the church members was possible could Catholicism and Orthodox Protestantism have slowed down the advent of birth control. By using various indicators of religiousness at the individual level they have been able to show that reduction of family size was achieved first among Liberal Protestants. The authors also found that mechanisms and conditions of effective social control were crucial intermediaries in the linkage between religion and fertility.

Data Sources: Birth, marriage and death certificates, and population registers

Countries: Netherlands

Subjects/Variables: Married couples from Rotterdam and the province of Utrecht (1845-1945)

Discipline: Socioeconomic history

Kollehlon, Konia T.

Kollehlon, K. T. (1994). Religious affiliation and fertility in Liberia. *Journal of Biosocial Science*, 26(4), 493-507.

Abstract: This study examines fertility differentials by religious affiliation in Liberia, within the context of two competing hypotheses: the characteristic and particularised theology. Using a subsample of currently married women from the 1986 Liberian Demographic and Health Survey, the study examines the fertility of five religious groups: Catholic, Protestant, Moslem, traditional, and other women. Overall, the findings are more consistent with the characteristic hypothesis, because the small fertility differentials by religious affiliation are largely accounted for by differences in the socioeconomic and demographic characteristics of these women.

Data Sources: Sample of 5239 women, aged 15-49 years, from the 1986 Liberian Demographic and Health Survey

Countries: Liberia

Subjects/Variables: Liberian women, aged 15-49 years; Protestant, Catholic, Muslim, Traditional, other

Discipline: Social Sciences

Kouaouci, A.

Kouaouci, A. (1995). Islam, famille et fécondité : potentialités, de la sociologie de la religion dans l'analyse de la transition démographique. In H. Gérard & V. Piché (Eds.), *Sociologie des Populations* (pp. 217-231). Montreal: PUM/ AUPELF-UREF.

Summary: The change in fertility in Algeria was made possible by a decline in age at marriage and a decline in the fertility of marriages. The study finds:

- that the desire for a child has the most important variable;
- that the second main variable is related to "technical/fatalistic" orientation;
- that the third variable is the region. This is a variable that probably reflects the degree of implementation of the family planning program;
- that the education of the woman, considered initially by us as the starting point of the process of change, has its main effect mitigated because of the significant interaction with the child's desire and the "technical/fatalistic" orientation. Ultimately, if the effects of female education were summed up, it would be at the forefront of the explanation of contraceptive practice;
- that religious practice has the weakest effect on contraceptive practice. However, this effect remains significant.

The main lesson is certainly that the characteristics of women, especially their opinions and attitudes, are the crucial factors for a decline in fertility. The fertility transition observed in the Maghreb region shows that Islam, as well as Arab culture, does not oppose the spread of family planning. In the case of Algeria, it is even the opposite that would be observed: female practitioners have adopted

contraception in larger proportions. Only they are also more educated, on average, more urban, and so on.

Data Sources: Algeria ENAF, 1986

Countries: Algeria

Subjects/Variables: Algerians; Muslims

Discipline: Social Science

Krishnaji, N.; James. K.S.

Krishnaji, N., & K.S., J. (2005). Religion and Fertility: A Comment. *Economic and Political Weekly*, 40(5), 455-458.

Abstract: For understanding emerging patterns in fertility behaviour, according to the religious beliefs of a population, it is grossly unscientific to look only at current levels at a time when fertility is falling in all regions and among all communities, at varying rates and in response to different social factors.

Data Sources: NFHS-I (1993) and NFHS-II (1998-99)

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Economics

Krishnan, Vijaya

Krishnan, V. (1993). Religious Homogamy and Voluntary Childlessness in Canada. *Sociological Perspectives*, 36(1), 83-93.

Abstract: Given the greater propensity of married women to choose a childless lifestyle in recent decades, it is important to understand what contributes to or deters this decision. This paper focuses on religious homogamy as a possible predictor. Data from the Canadian Fertility Survey (CFS) are used to examine the relationship between religious homogamy and voluntary childlessness in the context of several sociodemographic and economic controls. The results indicate that non-Catholic wives in homogamous marriages who attend church services frequently are less motivated to control fertility, regardless of their sociodemographic background. It may be argued that, unless more attention is devoted in the literature to various dimensions of religion, little consensus on the effect of religious factors on childlessness can be expected.

Data Sources: Canadian Fertility Survey (CFS), April-June 1984, based on World Fertility Survey (WFS) questionnaire

Countries: Canada

Subjects/Variables: 5,315 women in the reproductive ages of 18 to 49 years

Discipline: Social Services

Kulkani, P.M.

Kulkarni, P. M. (1996). *Differentials in the Population Growth of Hindus and Muslims in India, 1981-1991*. New Delhi: Population Foundation of India.

Kulkarni, P.M.; Alagarajan, Manoj

Kulkarni, P. M., & Alagarajan, M. (2005). Population Growth, Fertility, and Religion in India. *Economic and Political Weekly*, 40(5), 403-410.

Abstract: This paper first addresses the issue of religious differentials in population growth in India and then examines differentials in fertility. Analysis of data from the second National Family Health Survey shows that differences in fertility, especially between Hindus and Muslims, are not explained by differences in socio-economic characteristics, as argued by many observers. This is true of differentials in contraceptive practice as well. However, the differences appear to be a passing phase in the process of fertility transition. Since all religious communities in India have experienced substantial fertility declines and contraceptive practice has been well accepted, it is expected that fertility levels among communities would converge over time.

Data Sources: Censuses 1991, 2001

Countries: India

Subjects/ Variables: Indians; Hindu, Muslim

Discipline: Demography

Kulkarni, P.M.; Alagarajan, Manoj; Sivakami, M.

Kulkarni, P. M., Alagarajan, M., & Sivakami, M. (1998). Religious differentials in fertility in India: An assessment of the characteristics hypothesis. Discussion paper. *XXIth Annual Conference of the Indian Association for the Study of Population*.

Kupinsky, Shlomo

Kupinsky, S. (1992). Jewish Fertility Patterns: Norms, Differentials, and Policy Implications. In C. Goldscheider (Ed.), *Population and Social Change in Israel* (pp. 149-175). Boulder, CA: Westview.

Summary: Examines Israeli fertility by four socio-demographic differentials of education, area of origin, religiosity, and work pattern. Religiosity is the largest fertility differential. While increased education correlates with declining fertility for the secular and traditional, there is no such inverse relationship for the religious.

Data Sources: Field study of Jewish fertility in Jewish communities with a population of 5000 or more, interviewed August 1987 - November 1988

Countries: Israel

Subjects/ Variables: 71% of sample of 2,452 Jewish women; religiosity (secular, traditional, religious (Dati), and Haredi (Ultra-Orthodox))

Discipline: Demography

Lalou, Richard

Lalou, R. (1993). Quand l'école des femmes était une école des mères. Influence de l'instruction sur la fécondité des Québécoises (1850-1940). *Cahiers québécois de démographie*, 22(2), 229-262.

Abstract: Theoretical studies on the demographic transition and empirical analyses generally conclude that schooling has the power to direct mentalities towards modernization and progress: it is because of the education obtained at school that young girls began to irreversibly break away from society's traditional values and started questioning their ancestral roles of wife and mother. However, because of its strongly religious nature, there is no doubt that the schooling received by Quebec women contributed only indirectly to the emancipation of their thoughts. If schooling, and the knowledge that came with it, provided the fundamental tools for freedom, it must also be noted that the school's pro-birth stand moulded the collective conscience to respect tradition. The statistics indicate that there is no doubt that the school's emancipatory characteristics had more influence on the reproductive habits of Quebec's women. But in a society so attached to religion, the conservative character of educational teaching probably prevented the school from fully contributing to progress. Therefore, it is possible that schooling did not have, in Quebec, all of the impact which theories on declining birthrate credit it with.

Data Sources: Review of existing studies

Countries: Canada (Quebec)

Discipline: Demography

Landau, Ruth

Landau, R. (2003). Religiosity, Nationalism and human reproduction: The case of Israel. *International Journal of Sociology and Social Policy*, 23(12), 64-80.

Abstract: At least four major social collectivities or sectors can be identified in the multicultural society of the State of Israel: the Jewish secular, the Jewish nationalist religious, the Jewish ultra-Orthodox and the Arab Muslim sectors. The purpose of this article is to examine the psycho-social and ethical aspects behind the variations in fertility among different sectors of the Israeli population. Its first part describes the basic values and the importance attached to human reproduction in the laws of Judaism and Islam. The second part of the article examines how values and beliefs of different social sectors affect the behavior and attitudes of individuals involved in the field of human reproduction in Israel. It then focuses on reproductive and familial rights as reflecting Israelis' values and preferences. Finally, based on cultural and ethical theories, the place of religion, religiosity and nationalism are examined.

Data Sources: Theoretical discussion

Countries: Israel

Landau, Ruth; Blyth, Eric

Landau, R., & Blyth, E. (2009). Introduction. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 11-34). London: Jessica Kingsley Publishers.

Summary: Different faith communities have different theories about what constitutes the authoritative official teaching of their community at a given time in history. Are there indeed major differences among various faith or religious communities in beliefs and practices related to the issues of fertility, infertility and assisted conception? And if there are, what are these differences and how do they influence everyday practice in the context of reproduction? Regardless of their religion, people's religiosity may affect their fertility patterns. Religiosity may be expressed in various forms and levels of religious participation, such as attendance at religious services within a congregation, family observance, individual devotion, as well as by the salience of religion for life decisions (Waite and Lehrer 2003).

Data Sources: Overview of effects of different religions on fertility

Discipline: Health

Lazerwitz, Bernard

Lazerwitz, B. (1980). Religiosity and Fertility: How Strong a Connection? *Contemporary Jewry*, 5(1), 56-63.

Abstract: Those who assert that the positive relation between fertility and religiosity found for Catholics also exists for Jews are right. However, it is likely that socio-economic factors have more influence upon fertility than do identity factors for the majority of the Jewish group that is less involved with their religion. It is likely that socioeconomic factors have more of an impact on Protestant fertility while religious ones are more influential upon Catholic fertility. These conclusions about the associations between religiosity and fertility indicate that it is necessary to look for other Factors which can account for the major portion of the variance in fertility. Clearly, future research has to avoid the confusion that has resulted from assuming that the mere association of religiosity with fertility also can account for a lot of its variance.

Data Sources: The National Jewish Population Survey (NJPS), 1971, sub-sample of 4,111 currently married couples

Countries: United States

Subjects/Variables: US Jews; religiosity

Discipline: Sociology

Leasure, William J.

Leasure, W. J. (1982). La baisse de la fécondité aux Etats-Unis de 1800 à 1860. *Population*, 3, 607-622.

Abstract: Statistics from the census are used to test the hypothesis that the principal reason for the decline in fertility was the growing independence of individuals in respect of religious and political authority. The probabilities of joining one of the five religious groups which were relatively less dogmatic than others (Congregationalists, Presbyterians, Quakers, Unitarians and Universalists) were

taken as a measure of this growing independence. It was found that this variable yielded the highest value of the T statistic, and the greatest beta coefficient as well as the largest coefficients of partial and simple correlation ($r^2 = 0.68$) with fertility decline. The illiteracy ratio is the only other variable which is statistically significant. Other variables used in the study were: the proportion of the working population employed in agriculture, the sex ratio and a variable which measures the availability of land.

Data Sources: Censuses 1800-1860

Countries: United States

Subjects/Variables: Residents of 24 states in United States with declining fertility; Congregationalists, Presbyterians, Quakers, Unitarians, Universalists

Discipline: Economics

Lee, Geok Ling; Chan, Celia Hoi Yan; Choi Hui, Elizabeth Wai-Hing; Chan, Cecilia Lai Wan

Lee, G. L., Chan, C. H. Y., Choi Hui, E. W.-H., & Chan, C. L. W. (2009). Chinese Traditional Belief Systems, Livelihood and Fertility. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 137-157). London: Jessica Kingsley Publishers.

Summary: Geok Ling Lee, Celia Hoi Yan Chan, Elizabeth Wai-Hing Choi Hui and Cecilia Lai Wan Chan, in Chapter 5 on Chinese traditional religious beliefs, portray the importance of these beliefs on the behaviours of Chinese people. Although the beliefs have ancient roots, the rationale for them has been forgotten or lost over time. Chinese traditional beliefs can be divided into institutionalised beliefs (religion) and non-religious beliefs (folk belief systems and cultural practices). Confucianism, Daoism and Buddhism are the institutionalised traditional Chinese beliefs that form the basis of daily living for Chinese people. Although Buddhism, which underwent a transformation when entering China, appealed more to women because of its creed of universal compassion, in both Confucianism and Daoism the emphasis is on men. In the Chinese folk beliefs, likewise, the male is predominant. In a patrilineal and patriarchal Chinese society, only giving birth to a son endows a woman with status in her extended family. The strong cultural preference for sons, coupled with the state's 'one child policy', has resulted in an unprecedented imbalanced gender ratio in China. In the past this took an enormous toll in terms of female babies being aborted, abandoned or killed. It is unclear whether the current shortage of females will improve their lives or perpetuate existing discrimination, such as exposure to the risk of kidnapping or being sold into marriage, neither of which practices has been unusual in the past.

Data Sources: Theoretical discussion

Lee, Mei-Lin; Sun, Te-Hsiung

Lee, M.-L., & Sun, T.-H. (1995). The Family and Demography in Contemporary Taiwan. *Journal of Comparative Family Studies*, 26(1), 101-115.

Abstract: Over 90 percent of Taiwan's rural Hokkien residents are either self-described animists (i.e. practitioners of the folk religion), Buddhists, or Taoists; 5 percent of Taiwan's total population are

either Protestant or Catholic, and 12 percent agnostic. Changes in childbearing and birth control behavior introduced the steady fertility decline in Taiwan; the total fertility decreased dramatically from 6.5 to 1.8. Christians (Protestants and Catholics) exhibit lower percentages of son preference than Animists and slightly greater percentages than Agnostics during 1955-1990.

Data Sources: KAP surveys, Provincial Institute of Family Planning (a series of seven island-wide surveys in 1965, 1967, 1970, 1973, 1980, 1985 and 1990)

Countries: Taiwan

Subjects/ Variables: Households of married women aged 20-39 (Taiwanese only, excluding Mainlanders and aborigines); Protestant, Catholic, Animist (Taoist, Buddhist, Confucian), no religion

Discipline: Demography

Leete, Richard

Leete, R. (1996). *Malaysia's Demographic Transition, Rapid Development, Culture, and Politics*. Kuala Lumpur: Oxford University Press.

Leete, R. (Ed.) (1999). *Dynamics of values in fertility change*. Oxford: Oxford University Press.

See entries for:

McQuillan, Kevin. Religious Values and Fertility Decline: Catholics and Lutherans in Alsace, 1750-1870. (pp. 293-309).

Goldscheider, Calvin. Religious values, dependencies, and fertility: Evidence and implications from Israel. (pp. 310-330).

Lehrer, Evelyn L.

Lehrer, E. L. (1996). Religion as a Determinant of Marital Fertility. *Journal of Population Economics*, 9(2), 173-196.

Abstract: This paper develops hypotheses about the effects of husbands' and wives' religious affiliations on fertility. The hypotheses are based on two central ideas. First, religions differ in their fertility norms and corresponding tradeoffs between the quality and quantity of children; differences in religious beliefs between husband and wife may thus lead to conflict regarding fertility decisions and possible resolution through bargaining. Second, a low level of religious compatibility between the spouses may raise the expected probability of marital dissolution and thereby decrease the optimal amount of investments in spouse-specific human capital. Analyses of data from the 1987-1988 National Survey of Families and Households conducted in the United States suggest that both of these effects play important roles in explaining the observed linkages between the religious composition of unions and fertility behavior.

Data Sources: 1987-1988 National Survey of Families and Households

Countries: United States

Subjects/ Variables: Sample of 2600 men and women representative of the United States population aged 19 and over; Protestants (ecumenical and exclusivist), Catholics, Mormons, no religious affiliation; husbands and wives with different affiliations

Discipline: Economics

Lehrer, E. L. (1996). The Role of the Husband's Religious Affiliation in the Economic and Demographic Behavior of Families. *Journal for the Scientific Study of Religion*, 35(2), 145-155.

Abstract: Several recent studies suggest that in analyzing the effects of religion on the economic and demographic behavior of families, attention should be paid not only to the wife's affiliation but also to the husband's. The present paper synthesizes this research: it reviews the mechanisms through which differences between the spouses' affiliations influence marital stability, female employment, and fertility, as well as the empirical findings on these relationships. It also provides additional evidence on the linkage between the religious composition of unions and fertility behavior, based on data from the 1987-88 National Survey of Families and Households.

Data Sources: 1987-88 National Survey of Families and Households

Countries: United States

Subjects/ Variables: 9,643 male and female respondents of all marital statuses, aged 19 and over

Discipline: Demography

Lehrer, E. L. (2004). Religion as a Determinant of Economic and Demographic Behavior in the United States. *Population and Development Review*, 30(4), 707-726.

Abstract: This note reviews and synthesizes research on the effects of religion on various economic and demographic behaviors of individuals and families in the United States, including the choice of marital partner, union formation and dissolution, fertility, female time allocation, education, wages, and wealth. Using a theoretical framework based on Gary Becker's contributions to the economics of the family, it demonstrates that religious affiliation affects economic and demographic behavior because of its impact on the costs and benefits of many interrelated decisions that people make over the life cycle. In addition, for behaviors that pertain to married-couple households, religious affiliation matters because it is a complementary trait within the context of marriage. Religiosity, another dimension of religion, also affects economic and demographic outcomes, partly because it accentuates differences by religious affiliation, partly because religious involvement has generally beneficial effects on health and well-being.

Data Sources: Review article

Countries: United States

Discipline: Economics

Lehrer, E. L. (2008). The role of religion in economic and demographic behavior in the United States: A review of the recent literature. *IZA Discussion Paper*, 3541.

Abstract: This paper presents a critical review and synthesis of recent research on the role of religion in economic and demographic behavior in the United States. Relationships reviewed include the effects of religion on investments in human capital, labor supply and wealth accumulation; union formation and dissolution; and fertility. The paper also comments on the growing literature on the implications of religious dissimilarity between the spouses; on two different, possibly countervailing ways in which religiosity may affect demographic and economic behavior; and on the importance of estimating models that allow for possible non-linearities in the effects of religiosity

Data Sources: Review of recent literature

Countries: United States

Discipline: Economics

Lehrer, E. L. (2009). *Religion, Economics and Demography: The Effects of Religion on Education, Work, and the Family*. London: Routledge.

Summary: Compilation of articles. Chapter 4 reproduces Lehrer, "Religion as a Determinant" (1996).

Discipline: Economics

Lehrer, E. L. (2011). Religion, Human Capital Investments, and the Family. In R. M. McCleary (Ed.), *The Oxford Handbook of the Economics of Religion* (pp. 29-55). Oxford: Oxford University Press.

Summary: This article explores the role of religion in human capital investments and the family in the United States, based on analyses of microlevel data. The economic perspective views an individual's religious affiliation as affecting economic and demographic behavior because the norms and teachings of various faiths influence the perceived benefits and costs of numerous decisions that people make over the life cycle, including choices regarding the pursuit of investments in secular human capital, cohabitation, marriage, divorce, family size, and employment. These decisions are closely interrelated, so when religious teachings directly influence any one of them, all others are indirectly affected. Consistent with existing structures of perceived benefits and costs, several religious groups in the United States exhibit patterns of economic and demographic behavior that differ significantly from those of mainline Protestants. A higher level of religious participation can affect economic and demographic behavior by accentuating the effects of affiliation. The article also examines patterns of non-marital sex and divorce among conservative Protestants and discusses the role of religion in the second demographic transition in the United States.

Data Sources: Review article

Countries: United States

Lesthaeghe, Ron J.

Lesthaeghe, R. J. (1977). *The Decline of Belgian Fertility, 1800-1970*. Princeton: Princeton University.

Summary: Explanation of the fall in fertility in Belgium between 1800 and 1970, chronologically the second in Europe to undergo a fertility transition. The book aims at assessing the social and economic conditions in which the fall in fertility has occurred. Belgium's fertility transition is the result of two elements: 1. Early economic and social transformations were associated with and partly responsible for an early breakdown of the ethical and religious barriers; 2. A relatively low degree of breakdown was already sufficient to initiate the mechanism that would reduce fertility. Once this process began to move, secularization throughout the country increased rapidly, while at the same time achieving a lower value for marital fertility. The demographic transition occurred much earlier in Wallonia than in Flanders. In this latter region, the new and rational ideas about marriages continued to be in breach of the deeply rooted Catholic beliefs. This later deployment of secularization and another industrial development explain two-thirds to three-quarters of regional differences. The other factors like illiteracy, infant mortality and nuptiality had only minor effects.

Data Sources: Belgian Censuses; Hutterites for the period 1921-1930

Countries: Belgium

Subjects/Variables: Belgians, by region

Discipline: Demography

Lesthaeghe, R. J. (1983). A Century of Demographic and Cultural Change in Western Europe: An Exploration of Underlying Dimensions. *Population and Development Review*, 9(3), 411-435.

Abstract: A fertility decline is in essence part of a broader emancipation process. More specifically, the demographic regulatory mechanisms, upheld by the accompanying communal or family authority and exchange patterns, give way to the principle of individual freedom of choice, thereby allowing an extension of the domain of economic rationality to the phenomenon of reproduction. The purpose of this exercise is to explore the extent to which current changes in fertility and nuptiality in the region can be viewed as manifestations of a cultural dimension that had already emerged at the time of demographic transition in Europe. Much of the empirical evidence presented here pertains to this issue. The second aim of the article is to place the findings in a broad theoretical framework. Although we shall stress an important sociological component and its historical development, one should not consider the evidence as incompatible with other subtheories that follow, for instance, the microeconomic approach.

Data Sources: Theoretical overview

Countries: Western Europe

Subjects/Variables: Western Europeans, 1870s-1970s

Discipline: Demography

Lesthaeghe, R. J. (1989). Production and reproduction in sub-Saharan Africa: An overview of organizing principles. In R. J. Lesthaeghe (Ed.), *Reproduction and Social Organization in Sub-Saharan Africa*. Berkeley: University of California Press.

Lesthaeghe, R. J. (1991). Moral control, secularization and reproduction in Belgium (1600-1900) *Historiens et populations: liber amicorum Étienne Hélin* (pp. 260-279). Louvain-la-Neuve: Academia.

Summary: In Catholic countries, few marriages were contracted in the closed periods of Lent and Advent (roughly March and December). Institutional actors such as state, church, or later, political parties, have played a very significant role in France's demographic history from the 16th century onward. Secularization is not purely endogenous in the model that links income or industrialisation to marital fertility control. There are two histories to write when analyzing the demographic response, namely the history of material conditions and that of ideology.

Data Sources: Marriages in Lent and Advent (MLA) index

Countries: France

Subjects/Variables: French

Discipline: Demography

Lesthaeghe, R. J. (1992). Beyond economic reductionism: The transformation of the reproductive regimes in France and Belgium in the 18th and 19th centuries. In C. Goldscheider (Ed.), *Fertility transitions, family structure, and population policy* (pp. 1-44). Boulder: Westview Press.

Summary: An overview of the various ways in which - since the eighteenth century - nuptiality and marital fertility has been influenced by material living conditions, strategies of property transmission, types of rural economies, on the one hand, and by the penetration of the "nouvelle civilité chrétienne" and subsequent secularization, on the other hand.

Data Sources: Historical parish marriage records

Countries: France and Belgium

Subjects/Variables: French and Belgians

Discipline: Demography

Lesthaeghe, Ron J.; Surkyn, Johan.

Lesthaeghe, R. J., & Surkyn, J. (1988). Cultural Dynamics and Economic Theories of Fertility Change. *Population and Development Review*, 14(1), 1-45.

Abstract: First, we connect the Maslowian theory of the articulation of "higher order needs" to the classic economic utility theory and consider additional sociological theories concerning cultural mobility. These lead to the notions of individuation, embourgeoisement, and civil religion, which form the cornerstone of our interpretation of changes in Western family formation. The second part of the article concerns the operationalization of these concepts and proposes a model of ideational change that is partially contingent on structural economic change and partially autonomous. The model of ideational change is dominated by two features: first, it is cohort- and education-driven; and second, a period-cohort interaction is recognized that may capture the dialectics of idealization and subsequent disenchantment with institutional regulation. Links can then be established between the theories advanced by Richard Easterlin (the importance of early taste formation), Norman Ryder (the cohort format of change), Peter Blau (the dialectics of idealization and disenchantment), and John Simons (the role of civil religion). In the third part of the article we briefly explore a set of associations between the ideational indicators and indicators of family formation. Data from the 1981 European Values Studies (EVS) will be used to this end. The final product is a reappraisal of subjects that have occupied center stage in economic theories of family formation, namely the postwar baby boom and the subsequent baby bust.

Data Sources: 1981 European Values Studies

Countries: Europe

Subjects/Variables: Europeans

Discipline: Demography

Lesthaeghe, Ron J.; Wilson, Chris

Lesthaeghe, R. J., & Wilson, C. (1986). Modes of production, secularization, and the pace of the fertility decline in Western Europe, 1870-1930. In A. J. Coale & S. C. Watkins (Eds.), *The Decline of Fertility in Europe* (pp. 261-292). Princeton: Princeton University Press.

Levine, David; Savoie, Julie

Levine, D., & Savoie, J. (2005). A riddle wrapped in a mystery inside an enigma: Bi-modal fertility dynamics and family life in French-Canadian Quebec. *Histoire sociale / Social History*, 38(76), 307-337.

Abstract: Historians have struggled with an ingrained perception of what constituted the "traditional" Quebec family at the beginning of the twentieth century. Early studies on the demographic history

of Quebec portrayed women as generators of large families, a practice prescribed by the political elite as well as the Catholic Church. The new social history, and most especially the recent generation of feminist-inspired historians, has revisited and criticized the myth of the large family. Aggregated demographic statistics would indicate that francophone families continued to produce significantly more children than their English-speaking counterparts well into the twentieth century, despite a longstanding experience of industrialization, urbanization and contraception — the so-called hallmarks of modernization. Yet statistics also make clear that, even before the onset of declining fertility in the late nineteenth century, the majority of Quebec families did not do so, and there was in fact wide variation in family size. The real distinctiveness of Quebec's fertility decline was its unique and persistent minority of very large families that disappeared virtually overnight in the mid-twentieth century when the children of these families chose not to continue the pattern.

Data Sources: Review of literature, theoretical critique

Countries: Canada (Quebec)

Discipline: Economics

Lewis-Fanning, Ernest

Lewis-Fanning, E. (1949). *Report on an Inquiry Into Family Limitation and Its Influence on Human Fertility During the Past Fifty Years*. London

Liczbińska, Grażyna

Liczbińska, G. (2013). Fertility Patterns and Reproductive Behaviours in the Lutheran and Catholic Populations from Historical Poland. *Advances in Anthropology*, 3(3), 149-156.

Abstract: Many variables of biological, ecological and cultural nature affect the biological dynamics of human populations. A religious denomination was an element of the cultural system which had an impact on the attitude towards birth control and sexuality. The aim of this paper is to show how religion shaped the fertility figures in the Catholic and Lutheran populations of historical Poland. Two methods were used to characterize fertility. One uses reconstructed individual histories of families to assess fertility figures on the basis of the length of protogenetic and intergenetic intervals. In the second method fertility measures were estimated from mortality and natural increase data. Using life-table parameters estimated for both stationary and stable population models the following fertility figures were calculated: crude birth rate, net reproductive rate R_0 , mean family size, mean birth interval, total fertility rate, and mean age-specific fertility rate. It has been found that the analyzed Catholic and Protestant populations from the territory of historical Poland were characterized by a rather high reproductive potential.

Data Sources: historical Polish parish Births, Deaths, Marriages Registers (19th-20th centuries)

Countries: Poland

Subjects/Variables: Lutherans; Catholics

Discipline: History

Ling, T.O.

Ling, T. O. (1969). Buddhist Factors in Population Growth and Control: A Survey Based on Thailand and Ceylon. *Population Studies*, 23(1), 53-60.

Abstract: The following conclusions are suggested. (1) In countries with a predominantly Theravada Buddhist population there is latent discouragement of entrepreneurial activity and the development of an industrial economy, with the result that fertility rates remain higher than might otherwise be the case. (2) There is in Buddhist theory a certain potential opposition to the practice of contraception; this is due not to any explicit doctrine regarding the metaphysical aspect of conception but to the general objection to violence to a living being, even a potential being. (3) Communal factors, such as the fear of Catholic power, where they are present can evoke this latent theoretical objection to fertility control and produce a manifest opposition, on both doctrinal and empirical grounds, to family planning. On the other hand, in situations where there is no serious communal factor and Buddhist parents wish to avoid having more children as in Thailand, this can be justified from a proper Buddhist concern to do the best for the children already born and not to prejudice their upbringing; in such situations the latent Buddhist disapproval of contraception will be overcome; the good of the family will be the major determining consideration. (4) In Buddhist countries the acceptance or non-acceptance of population control policies will therefore depend to a large degree on the communal situation, i.e. the relation of Buddhist to non-Buddhist groups within the population.

Data Sources: Discussion of Buddhist doctrine and practice

Countries: Thailand, Sri Lanka (Ceylon)

Discipline: Demography

Livi Bacci, M.

Livi Bacci, M. (1986). Social-group forerunners of fertility control in Europe. In A. J. Coale & S. C. Watkins (Eds.), *The decline of fertility in Europe: The revised proceedings of a conference on the Princeton European Fertility Project* (pp. 182-200). Princeton: Princeton University Press.

Logue, Barbara J.

Logue, B. J. (1985). The Case for Birth Control before 1850: Nantucket Reexamined. *Journal of Interdisciplinary History*, 15(3), 371-391.

Abstract: Contra Byers (1981), although fertility declined considerably in Nantucket from 1660 to 1850, the pattern of fertility by age, as shown in the curve of age-specific rates for six successive marriage cohorts, always maintained the convexity characteristic of natural fertility. Aggregate fertility data, in summary, indicate no widespread resort to deliberate family limitation up to 1850 by Nantucket couples, although this does not rule out the possibility that a few individual couples may have been controlling. This article focuses on sampling biases in Byers' work arising from the confounding of two very different concepts-complete families with families with complete data. This confusion of concepts resulted in rules for sample selection which were not only unnecessarily restrictive but, moreover, served to produce a biased group of families. The end result was that the families used in the analysis were not representative of the target population of all Nantucket

couples. The sampling biases were such that fertility levels on the island were underestimated and the pattern misspecified. Furthermore, an increasingly biased sample over time created the erroneous impression of the increasing acceptance of deliberate family limitation.

Data Sources: Nantucket vital records

Countries: United States (Massachusetts)

Subjects/Variables: Residents of Nantucket (1660-1840)

Long, Larry H.

Long, L. H. (1970). Fertility Patterns Among Religious Groups in Canada. *Demography*, 7(2), 135-149.

Abstract: The U shape that has been traced out by the crude birth rate in the United States and Canada is well known. Falling birth rates reached a low point in the mid-1930's; the rate rose to a peak in 1947 and remained high through the 1950's. In terms of cohorts, completed family size was smallest for women born around 1910, whose childbearing was concentrated in the 1930's. With data from the 1961 census of Canada, trends in cohort marital fertility by religion are examined. The U pattern appears for both Protestants and Jews. For Catholics, a reversal in the downward trend of family size had not appeared by 1961, although the U pattern can be discerned for some subgroups such as Catholics living in big cities and persons of Irish ancestry. In the United States, however, changes in family size for all three religious groups and both whites and nonwhites follow the U pattern. Religious differentials in family size in Canada have been decreasing, but they remain much larger than either religious or color differentials in the United States, which show no decrease. The distinctive features of Catholic fertility in Canada are most pronounced among the regionally-concentrated French Canadians, suggesting an interplay of religious, regional, and ethnic influences.

Data Sources: Crude birth rates by single years; 1961 Canadian census data on children born to ever-married women in various age groups

Countries: Canada

Subjects/Variables: Canadians, 1922-1962; ever-married women, 1961

Discipline: Demography

Lorimer, Frank

Lorimer, F. (1954). Relation of Religion to Fertility *Culture and Human Fertility: A Study of the Relation of Cultural Conditions to Fertility in Non-industrial and Transitional Societies* (pp. 183-198). Zürich: UNESCO.

Summary: Summary of the influence of religion on fertility. It discusses religion in primitive societies, religious communities in composite societies, Islam, Buddhism, and Christianity.

Data Sources: Summary section

Discipline: Demography

Lowenstein, Steven M.

Lowenstein, S. M. (1981). Voluntary and Involuntary Limitation of Fertility in Nineteenth Century Bavarian Jewry. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 94-111). Leiden: Brill.

Summary: There is a substantial decline in fertility, from 4.2 children for marriages in 1813-1830 to 2.9 for couples married between 1871-1924. Yet there were huge variations. Causes include late marriage, restriction of childbearing after age 30 or 35.

Data Sources: Jewish birth, marriage, and death registers in Ansbach, Berolzheim, Cronheim, Pappenheim

Countries: Germany

Subjects/Variables: 265 married couple Bavarian Jew, 1813-1924

Discipline: Demography

Lowry, Nelson

Lowry, N. (1952). Education and the Changing Size of Mormon Families. *Rural Sociology*, 17(4), 335-342.

Lutz, Wolfgang

Lutz, W. (1987). Culture, Religion, and Fertility: A Global View. *Genus*, 43(3-4), 15-35.

Abstract: This study tries to assess the effects of culture and religion on fertility after accounting for a country's socio-economic standing. Analysis of covariance models are estimated for 128 countries with time-series covering the period 1950-75. The dependent variable is the gross reproduction rate; independent variables are the infant mortality rate, an aggregate indicator of female educational standing, and CUP per person as well as categorical variables for religion and cultural region. It turns out that the European countries have generally lower fertility than could be expected from their socio-economic standing. In the Arabic countries culture and religion tend to have strong positive effects on fertility. Across cultures Catholicism has a fertility-increasing effect but it - like the effect of all religions except Islam - is diminishing over time. In contrast, the effect of culture (as measured by a regional variable) on the level of national fertility has been increasing at the expense of socio-economic effects.

Data Sources: National time-series data on various demographic and socio-economic indicators covering 128 countries in the world. For 69 countries the period 1950-1975 could be covered (in 5-year intervals), for 33 countries the period 1960-1975 (5-year intervals), and for 32 countries only the year 1975

Countries: 128 countries

Subjects/Variables: Whole populations

Discipline: Demography

Lynch, Katherine A.

Lynch, K. A. (2006). Theoretical and analytical approaches to religious beliefs, values, and identities during the modern fertility transition. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World*. Dordrecht: Springer.

Summary: Overview of the various theoretical and analytical approaches to religious beliefs, values, and identities during the first fertility transition (late 19thC, early 20thC). Analysis of influence of birth control. The paper suggests that dichotomous approaches to traditional and modern forms of birth control have been overstated. Study of the role of religious identities must consider the wider community, society, political sphere.

Data Sources: Review of literature

Countries: North America; Europe

Discipline: History

Mahadevan, K.

Mahadevan, K. (1989). Sociology and Population Studies. In R. Jayasree (Ed.), *Religion, Social Change and Fertility Behaviour: A Study of Kerala* (pp. 1-28). New Delhi: Concept Publishing.

Summary: Overview of contribution of Sociology to Population Studies, including its theoretical basis, methodological applications, adoption of relevant concepts for the study of population phenomena, knowledge for the successful promotion of population control programmes and the improvement of the quality of life of the population in general. The Introduction provides a discussion of the general theories on population postulated by sociologists and economists. It then sets out the theories on fertility: Kingsley Davis and Judith Blake (intermediate variables); Ronald Freedman, Ruth Simmons et al (conceptual variables) and Bongaarts and Potter (proximate determinants: age at first marriage, use of contraception, breastfeeding, post-partum amenorrhea, birth interval, induced abortion); Becker, Easterlin, Leibenstein, Robinson & Horlacher, Arold, Nag, Mahadevan (value of children); Caldwell (wealth-flow theory); Adnan, McNicoll (structural change by social stratification); Ryder (social norms for family size).

Data Sources: Overview

Countries: India

Discipline: Sociology

Malenfant, Éric Caron; Bélanger, Alain

Malenfant, É. C., & Bélanger, A. (2003/2004). The fertility of visible minority women in Canada. *Report on the demographic situation in Canada, Statistics Canada, Cat. No. 91-209-XIE*.

Abstract: The visible minority population is growing rapidly in Canada and accounts for an increasing proportion of the birth rate, but few studies have looked at the differential fertility of visible minority groups. This article is an effort to partially address that gap by answering the following question: How do the various visible minority groups in Canada's population differ from one another with respect to fertility? Using the own-children method and data from the 1996 and 2001 censuses, the authors present the total fertility rates of the various minority groups, explore the possible impact of the religion factor, and analyse the fertility of visible minority groups from the

combined perspective of religious denomination, and other fertility-related socio-economic factors. The study shows that fertility is higher for visible minority women as a group than for the rest of the population, that fertility varies appreciably from one visible minority group to another, and that removing through statistical standardization the effects of the groups' socio-economic characteristics, including religious denomination, does not eliminate fertility differentials.

Data Sources: Canadian census 1996, 2001.

Countries: Canada

Subjects/ Variables: Canadian minorities, by religious denomination and socio-economic factors

Discipline: Demography

Manabe, Kazufumi; Jagodzinski, Wolfgang

Manabe, K., & Jagodzinski, W. (2002). Family and Religion in Germany and Japan: Theoretical discussions and empirical findings. *Annual Bulletin of NHK Broadcasting Culture Research Institute*, 45, 239-260.

Abstract: This paper is a report of our comparative and collaborative research in Germany and Japan, which analyzes the relationships between family values and religion, combining both theoretical discussions and empirical findings. The first part deals with the results of the following theoretical discussions: (1) a comparison of Germany and Japan, based on a comprehensive review of previous research in the sociology of German religion, and religious trends in Japan; (2) investigation of the analytical framework of studies on the influence of religion on morals; (3) investigation of the analytical framework of studies concerning the influence of religion in family life. The next part describes the following four lines of inquiry.

1.Examination of the findings on the relationships between family values and religion using data from the 1998 ISSP Religion Survey.

2.Examination of the findings from another large scale multi-national survey such as the World Values Survey.

3.Examination of the translation from the Master Questionnaire into the Japanese Questionnaire.

4.Examination of the reliability and validity of the general items on religiosity which were used in the 1998 ISSP Religious Module, by comparing them with Japanese Nation Specific Items on religiosity.

The examination above suggests: the theoretical hypotheses - nonreligious people tend to have the least orientation toward traditional family values, and the more frequently people participate in religious activities, the more traditionally oriented they become - are more applicable to Germany (particularly West Germany), and less applicable to Japan.

Data Sources: 1998 ISSP Religion Survey; World Values Survey; Japanese Questionnaire

Countries: Germany, Japan

Subjects/ Variables: Germans (Catholics, Protestants), Japanese (Buddhism, Shinto, Confucianism)

Discipline: Sociology, Economics

Marc, G.

Marc, G. (1994). La maîtrise de la fécondité : quel peut être l'apport du magistère catholique? In M. E. Cosío Zavala (Ed.), *Religions et démographies: vers la conférence du Caire* (pp. 37-79). Paris: Le Centre d'études du Saulchoir-Cerf.

Summary: Discussion of Vatican policy on contraception.

Marcum, John P.

Marcum, J. P. (1981). Explaining Fertility Differences Among U.S. Protestants. *Social Forces*, 60(2), 532-543.

Abstract: The hypothesis that Protestant fertility patterns result from differences in social characteristics among denominations is set against the hypothesis that doctrinal differences lead members of conservative denominations to have both higher wanted and unwanted fertility. Data for white couples from the 1965 National Fertility Survey support the doctrine hypothesis for wanted fertility among conservative Protestants low in formal participation. It is suggested that couples who follow conservative doctrine and have larger families participate less frequently because of conflicting demands associated with larger families. Further analysis with a measure of participation less sensitive to differences in family size produces results consistent with this argument.

Data Sources: 1965 National Fertility Survey

Countries: United States; Liberal (Episcopal, Methodist, Presbyterian, Congregational, and Evangelical United Brethren [who merged with the Methodists in 1968]), conservative (Baptist, Southern Baptist, American Lutheran, Missouri Synod Lutheran, and smaller "fundamentalist sects", including Christian Missionary Alliance, Church of Christ, Church of the Nazarene, Church of God, Assembly of God, Jehovah's Witnesses, Seventh Day Adventist, Salvation Army, and other Baptist)

Subjects/Variables: Sample of 5,617 currently married women, from which were drawn white, Protestant women who wanted at least two children, who had borne all the children they wanted, and who had consistent reproductive histories

Discipline: Demography

Marcum, J. P. (1986). Explaining Protestant Fertility: Belief, Commitment, and Homogamy. *The Sociological Quarterly*, 27(4), 547-558.

Abstract: Alternative explanations for higher conservative than liberal fertility among white Protestants in the United States emphasize concurrent compositional differences in either (1) social characteristics or (2) doctrine. Previous tests support the doctrine hypothesis but use denominational proxies for beliefs. Using a personal measure of liberalism-conservatism, I test these hypotheses with data from the 1963 Glock-Stark Northern California Church Member Study. I find little support for either the characteristics or doctrine explanations, even when the analysis is restricted to subsets of couples highly committed to their faith and denominationally homogamous. Further investigation suggests that the regional nature of the Northern California data, and not the measurement of liberalism-conservatism, accounts for the difference in results between this and prior research.

Data Sources: The 1963 Northern California Church Member Study (Glock Stark 1979)

Countries: United States (Northern California)

Subjects/Variables: Currently married, white, Protestant women age 15-49 who were married to another Protestant; those aged 15-34 to study recent fertility (N = 268), and those aged 35-49 to study cumulative fertility (N = 428)

Discipline: Demography

Marcum, J. P. (1988). Religious Affiliation, Participation and Fertility: A Cautionary Note. *Journal for the Scientific Study of Religion*, 27(4), 621-629.

Abstract: When studies of religion's effect on fertility seek to discriminate between nominal and committed followers, they often turn to measures of participation in church activities. Such an approach is conceptually defensible but empirically problematic with the typical cross-sectional data set, because the temporal ordering is wrong: such studies usually ascertain religious participation at the time of the interview, after the birth of children. I explore the problem empirically with data from the 1963 Glock-Stark Northern California Church Member Study. Finally, I discuss alternative indicators of religiosity for cross-sectional analysis, and the need for appropriate panel data.

Data Sources: 1963 Glock-Stark Northern California Church Member Study (responses from 2,871 church members living in a four-county area centered on San Francisco)

Countries: United States (California)

Subjects/Variables: 108 cases of white, Protestant women aged 18-35, currently married and in a denominationally-homogamous union, who indicated that their church membership is "extremely important" to them

Marcum, John P.; Radosh, Mary

Marcum, J. P., & Radosh, M. (1981). Religious Affiliation, Labor Force Participation and Fertility. *Sociological Analysis*, 42(4), 353-362.

Abstract: Different teachings on family and procreation make balancing the demands of church and career more difficult for Catholic than Protestant women. Examination of 1965 National Fertility Survey data reveals fertility differences by religious affiliation primarily for women who worked in the past but are not now employed: for Catholics, their fertility is high and similar to that of women who have never worked; for Protestants, their fertility is low and similar to that of currently employed women.

Further analysis of unwanted fertility suggests this pattern occurs because lower contraceptive efficacy lead more Catholic women to leave the labor force.

Data Sources: 1965 National Fertility Survey (Ryder and Westoff 1971)

Countries: United States

Subjects/Variables: White Catholic and Protestant women who wanted at least two children, had had all the children they wanted, and had consistent birth histories (i.e., no wanted birth after an unwanted birth), a subsample of the 1965 NFS (5,617 married women who, at the time of interview, were under 55 years of age, living with their husbands, residing in the United States, and able to participate in an English-language interview)

Discipline: Sociology

Marddent, Amporn

Marddant, A. (2013). Religious piety and Muslim women in Thailand. In S. Schröter (Ed.), *Gender and Islam in Southeast Asia: Women's Rights Movements, Religious Resurgence and Local Traditions*. Leiden: Brill.

Marom, T.A.

Marom, T. A. (2015). *Religiosity or Money? The Combined Impact of Child Allowances and Religiosity on Israeli Jewish Population Fertility 1987–2008*: The Hebrew University of Jerusalem.

Mazrui, A.A.

Mazrui, A. A. (1994). Islamic Doctrine and the Politics of Induced Fertility Change: An African Perspective. In J. L. Finkle & A. A. McIntosh (Eds.), *The New Politics of Reproduction* (pp. 121-134). New York: Oxford University Press.

Summary: Islam in Africa as a whole has been more relevant for the culture of lineage and procreation than for the culture of combat, more important in buttressing high fertility and defining lineage than as a jihad, or holy war, to eliminate rivals. This article concentrates primarily on Islam in sub-Saharan Africa (or black Africa). In its encouragement of large families, the faith has reinforced indigenous African values.

Data Sources: Discusses previous studies

Countries: Sub-Saharan Africa

Subjects/Variables: Sub-Saharan Africans; Islam

Discipline: Demography

Mazur, D. Peter

Mazur, D. P. (1967). Fertility among Ethnic Groups in the USSR. *Demography*, 4(1), 172-195.

Abstract: Thirty-six ethnic groups in the USSR are analyzed as to fertility differentials. The analysis is based on data from the 1959 nationwide census. To explain the fertility differentials found, ethnographic and sociological features of these groups are traced as a possible contributing factor. One of the poignant observations of the study is the fact that almost all ethnic groups with fertility above the median are those belonging to Moslem and Buddhist traditions. They are primarily located in the Central Asian republics, the Caucasus, and some parts of southern Siberia. Low fertility levels are by and large associated with the Eastern Orthodox Slavs and the Protestant Balts. Ratios of the number of children aged 0-9 to the number of women in the 20-49 age group are related to independent variables in the following order of importance: traditional religion, percentage of married women in the 20-49 age group, degree of literacy, male-female literacy differential, and sex ratio. The multiple correlation of 0.911 was obtained between the child-woman ratio and the first four of the most important independent variables. Sex ratio appeared significant only after the influence of the percentage of married women was eliminated from the analysis of multiple and

partial correlations. The data suggest that the urban-rural differential is a non-linear function of the urban-rural migration. A more complete explanation of the divergence between urban and rural child-woman fertility ratios should be made the subject of separate studies.

Data Sources: 1959 nationwide census

Countries: USSR

Subjects/Variables: Muslim, Buddhist, Orthodox, Protestant

Discipline: Demography

McGregor, Patrick; McKee, Patricia

McGregor, P., & McKee, P. (2016). Religion and Fertility in Contemporary Northern Ireland. *European Journal of Population/Revue Européenne de Démographie*, 32(4), 599–622.

Abstract: Northern Ireland has been and continues to be deeply divided on the basis of religion. This paper examines and compares contemporary fertility in the two communities given the sharp declines that have occurred in recent decades. The data are drawn from the Northern Ireland Longitudinal Study and cover 108,000 women aged 16–44 in the period 1997–2007. A logit analysis of births in the period is undertaken based on individual demographic data and also the characteristics of the locality in which the woman is resident. The effect of religion is measured by its individual marginal effect averaged over the total sample, over time and by the age of the woman. The estimated average marginal effect is 4% of the probability of a woman having a birth over the entire period. The effect peaks when the woman is between 29 and 30 years and is stable over time. When the fertility behaviour of each religious group is compared separately with those women that came from the same background but had lost their religion, it is found to differ substantially. Thus, community background is rejected as a possible explanation of the difference in fertility between declared Catholics and Protestants. Although the fertility rates of former Catholics and Protestants appear to be converging, the size of these groups is relatively small. There is no evidence to suggest that the small but distinct difference in the fertility rates of the two religious communities is likely to change in the immediate future.

Data Sources: Northern Ireland Longitudinal Study (from birth registrations and censuses)

Countries: Northern Ireland

Subjects/Variables: Sample from 108,000 women aged 16–44 in the period 1997–2007; Catholics and Protestants, former Catholics and Protestants

Discipline: Demography

McKinnon, Sarah; Potter, Robert G.; Garrard-Burnett, Virginia

McKinnon, S., Potter, R. G., & Garrard-Burnett, V. (2008). Adolescent fertility and religion in Rio de Janeiro, Brazil in the year 2000: The role of Protestantism. *Population Studies: A Journal of Demography*, 62(3), 289–303.

Abstract: Social transformations in Brazil in recent years have included a substantial increase in adolescent fertility, a dramatic rise in membership of Protestant religious denominations, and an accompanying decline in the number of Catholics. We used the 2000 Brazil Census to examine differentials in fertility and family formation among adolescents living in Rio de Janeiro by the

following religious denominations: Catholic; Baptist; other mainline Protestant; Assembly of God Church; Universal Church of the Kingdom of God; other Pentecostal Protestant; and no religion. Results from logistic regression models show that the majority of the Protestants are at a lower risk of adolescent fertility than Catholics, and that among adolescents who have had a child, most Protestants are more likely than Catholics to be in a committed union. Our findings offer some support for the hypothesis that Protestant churches are more effective than the Catholic Church in discouraging premarital sexual relations and childbearing among adolescents.

Data Sources: 2000 Brazil Census

Countries: Brazil

Subjects/Variables: Adolescents aged 15-17 living in Rio de Janeiro; Catholic; Baptist; other mainline Protestant; Assembly of God Church; Universal Church of the Kingdom of God; other Pentecostal Protestant; and no religion

Discipline: Sociology, Religion

McQuillan, Kevin

McQuillan, K. (1999). *Culture, religion, and demographic behaviour: Catholics and Lutherans in Alsace, 1750-1870*. Montreal: McGill-Queen's University Press.

Summary: In the period from 1750 to 1870, the Catholic and Lutheran populations of Alsace were governed by two different demographic regimes. The Catholic pattern was marked by restricted marriage, high marital fertility, and high levels of infant and child mortality. This pattern changed remarkably little over the 120 years under study. The middle decades of the nineteenth century saw further tightening of the marriage system, brought on in part by increasing population density in the rural areas. Illegitimacy and bridal pregnancy also increased significantly. On the whole, however, the Catholic demographic regime was surprisingly stable in the face of considerable economic and political change. In the Lutheran community, a different pattern prevailed. Marriage occurred earlier than among Catholics and a smaller part of the population remained permanently celibate. Marital fertility was consistently lower as were rates of infant and child mortality. The years from 1750 to 1870 also saw much greater demographic change in the population. There was some restriction of marriage in the mid-years of the nineteenth century, and for many of the same reasons as in the Catholic community. More important is the clear evidence of change in rates of marital fertility and child mortality. Fertility control began to take hold amongst the cohorts married in the early nineteenth century, and among these same couples, premarital conceptions and births became noticeably more common as well. And, while infant mortality rates remained stubbornly high (though still below the level in the Catholic community), progress was made against mortality in early childhood.

Data Sources: Parish and civil registers

Countries: France (Alsace)

Subjects/Variables: Catholic and Lutheran populations of Alsace, 1750-1870

Discipline: Sociology

McQuillan, K. (1999). Religious Values and Fertility Decline: Catholics and Lutherans in Alsace, 1750-1870. In R. Leete (Ed.), *Dynamics of Values in Fertility Change* (pp. 293-309). Oxford: Oxford University Press.

Summary: Empirical evidence demonstrates difference in fertility between Catholics and Lutherans in Alsace in the period from 1750-1870. Two factors were important. There were important ideological differences between Lutherans and Catholics on issues that had direct and indirect implications for marriage and childbearing. However, these ideological differences need not translate into observable differences in behaviour. The second important factor relates to the political settlement that grew out of the wars of religion, which created two distinct and often antagonistic religious communities. Religious leaders worked hard to create a stronger sense of identity among their followers and to extend their control over their everyday behaviour, resulting in more-or-less continuous inter-religious conflict. The heightened sense of religion, as an important source of personal and social identity, allowed variations in religious teaching to assume an important role in shaping demographic behaviour.

Data Sources: Family reconstitution analysis of 5 villages in Alsace, France

Countries: France

Subjects/Variables: French; Catholic and Protestant (majority Lutheran)

Discipline: Demography

McQuillan, K. (2004). When does religion influence fertility? *Population and Development Review*, 30(1), 25-56.

Abstract: Religious affiliation as a determinant of demographic behavior is receiving renewed attention in demography. Interest in the role of cultural factors in affecting fertility and a specific concern with the role of Islam in many developing countries have helped re-invigorate research on the role of religion. This article reviews theoretical and empirical work on that relationship, with special attention to a number of cases in which religion has been identified as an important determinant of fertility patterns. The article concludes that religion plays an influential role when three conditions are satisfied: first, the religion articulates behavioral norms with a bearing on fertility behavior; second, the religion holds the means to communicate these values and promote compliance; and, third, religion forms a central component of the social identity of its followers.

Data Sources: Review essay; no new empirical research

Discipline: Sociology

McQuillan, K. (2006). The evolution of religious differences in fertility: Lutherans and Catholics in Alsace, 1750-1860. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 133-146). Dordrecht: Springer.

Summary: A study of differences in fertility patterns between Catholics and Lutherans from late 18th to early 19th century. In the mid-eighteenth century, the tempo of fertility among Lutheran couples was slower. For couples married in the nineteenth century, this slower pace of childbearing was accompanied by an earlier end to childbearing. In contrast to the situation in the Lutheran communities, there is no evidence of declining religious practice among Catholics. The author stresses the role of diversities in the nature of the marriage bond and the roles of husbands and wives between Protestants and Catholics in explaining fertility differences. A second factor was the greater Protestant support for literacy and schooling. Crucial in explaining religion's influence on demographic behavior was the role of religious institutions and the place of religious practice in the lives of individuals.

Data Sources: Parish registers of five villages in Alsace

Countries: France

Subjects/Variables: Lutherans; Catholics in Alsace (1750-1860)

Discipline: Sociology

Mehryar, Amir H.

Mehryar, A. H. (2005). Shi'ite Teachings, Pragmatism and Fertility Change in Iran. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 118-156). London: Hurst.

Summary: The family planning programme (FP) of the Islamic Republic of Iran has generally been acclaimed as one of the most effective and successful programmes launched by any developing country. According to the latest large scale knowledge, attitude and practice (KAP) survey (1997), over 76% of married women aged 15-49 are using contraceptive. The total fertility rate (TFR) of Iranian women dropped from over 6 children in 1986 to under 3 in 1996. Examines Shi'ite views on fertility.

Data Sources: Theoretical discussion

Countries: Iran

Subjects/ Variables: Iranians

Discipline: Demography

Meisenberg, Gerhard

Meisenberg, G. (2012). Demography and Modernization as the Major Determinants of Religious Belief. *Mankind Quarterly*, 52(3-4), 388-414.

Abstract: Using a sample of up to 62 countries, this study finds that differential fertility influences trend lines in the prevalence of theistic religious belief at the country level. High religiosity of females relative to males is an additional, though less consistent, predictor. These effects are demonstrated on the background of two other causal influences: Recovery from communist rule predicts a rising trend, and indicators of economic, social and cognitive development predict a declining trend. Several alternative hypotheses about the determinants of religious trends receive no support.

Data Sources: The World Values Survey (WVS) Official Aggregate v.20090901, 2009, www.worldvaluessurvey.org

Countries: Worldwide

Subjects/ Variables: 355,298 respondents in 96 countries and territories, 1981-2008

Discipline: Biochemistry

Merrill, Stan W.; Peterson, Evan T.

Merrill, S. W., & Peterson, E. T. (1972). Some aspects of family size: Stress and utility. In P. R. Kunz (Ed.), *Selected Papers in Genealogical Research* (pp. 27-37). Provo, UT: Brigham Young University.

Summary: Two factors which appear to be related to family size are considered in this paper: stress, that may derive from physical, economic or socio-interactional sources; and utility, or the motivations that may increase or limit a particular family size depending on how useful it is or is not

to have children. There was a distinct relationship between temple marriage and family size among wives. Those married in the temple had larger families than those not married in the temple. There was no significant trend for husbands.

Data Sources: Genealogical Library of the Church of Jesus Christ of the Latter Day Saints microfilm

Countries: United States

Subjects/Variables: 1220 husbands and their families over four generations, mostly Mormon

Discipline: Demography

Mineau, G.P.; Bean L.L.; Skolnick, M.

Mineau, G. P., L.L., B., & Skolnick, M. (1979). Mormon Demographic History II: The Family Life Cycle and Natural Fertility. *Population Studies*, 33(3).

Abstract: In this paper we have examined the family life-cycle of a group of approximately 17,000 women born between 1800 and 1869. These women were selected from a larger file based upon a set of genealogical records maintained by the LDS Church. By analysing a series of indices, we have demonstrated that our population is certainly a natural-fertility population. These data cannot therefore be regarded as representative of the general family life-cycle of the American family in the nineteenth century. They refer to the life-cycle of a unique religious and frontier population, in particular a population associated with cross-continental migration, the settlement of an American western frontier area, and the strong influence of a pro-natalist religious group, the LDS Church.

Data Sources: A set of three-generation family group sheets, collected and maintained by the LDS (Church of Jesus Christ of Latter-day Saints or Mormon) Church

Countries: United States

Subjects/Variables: Sub-population of 17,124 Mormon women born between 1800 and 1869, and married only once, only wife of husband

Discipline: Sociology

Mineau, Geraldine P.; Anderton, Douglas L.; Bean, Lee L.; Willigan, J. Dennis

Mineau, G. P., Anderton, D. L., Bean, L. L., & Willigan, J. D. (1984). Evolution différentielle de la fécondité et groupes sociaux religieux: l'exemple de l'Utah au XIXe siècle. *Annales de démographie historique*, 1, 219-236.

Abstract: This paper presents a differential fertility analysis which is of interest on two counts: firstly, it provides concrete findings on the factors which modify behaviour patterns; and secondly, it is based on a method of analysis by groups which enables several variables involved in this modification to be taken into account simultaneously. Religion and residence are two factors which undeniably have a strong influence on fertility. Their relative importance varies from one period to another.

Data Sources: Subsample of 24,953 family records

Countries: United States

Subjects/Variables: Mormons

Discipline: Demography

Mishra, Vinod

Mishra, V. (2004). *Muslim/Non-Muslim Differentials in Fertility and Family Planning in India.*

Honolulu*Summary:* Reasons for lower contraceptive use and higher fertility among Muslims than among non-Muslims in India are highly debated. This paper examines differentials in fertility and contraceptive use by religion using data from India's 1992–93 and 1998–99 National Family Health Surveys. The analysis shows that socioeconomic factors do not explain lower use of family planning and higher fertility among Muslims. A reason may be heavy reliance of India's family planning program on sterilization and Muslims' preference for temporary methods over sterilization. Another reason may be heavy reliance of the program on public-sector sources of supply of family planning and Muslims' preference for private-sector services due to greater privacy needs. A third reason may be greater opposition to family planning among Muslims, which is indicated in surveys as their main reason for not currently using and not intending to use family planning in the future. The findings suggest that greater availability of modern temporary methods and expansion of private-sector family planning services may increase contraceptive use and lower fertility among Muslims in India. Education and motivation programs aimed at reducing opposition to family planning may also help achieve these objectives.

Data Sources: India's 1992–93 and 1998–99 National Family Health Surveys

Countries: India

Subjects/Variables: Ever-married women aged 15–49

Discipline: Sociology

Mistry, Malika B.

Mistry, M. B. (1994). *Hindu-Muslim fertility differentials in India. Institute of Muslim Minority Affairs. Journal, 15(1-2), 171-182.*

Abstract: During the last several decades, the proportion of Muslims in the Indian population has been steadily increasing. The population growth rate has also been consistently higher for Muslims than for Hindus. But an examination of the data reveals that present Hindu-Muslim fertility and population growth rate differentials are not large and are likely to narrow down in future. Marriage patterns do not adequately account for the higher fertility among Muslims. Family planning practice among Muslims is important in explaining their higher fertility. Muslims prefer spacing methods to sterilization. Socio-economic backwardness of Muslims and low status of Muslim women are the other variables that account for their higher fertility. In India, Parsis with low death and birth rates are already in the final stage of demographic transition. Christians are also entering this stage. Fertility of urban Hindus has fallen significantly. Eventually Muslims too would reach the final stage of demographic transition with low levels of fertility, mortality and population growth so as to adapt themselves to a modern industrial society. Family planning programmes alone cannot bring about a decline in fertility. Socio-economic conditions especially of women among Muslims as well as in other communities have to be improved and with greater urgency in rural areas and backward states. Changes in social institutions such as marriage and the status of women have to be brought about in a sustained and cumulative manner. Then only will all the communities of this pluralistic society

complete the demographic transition, attain population stabilisation and adapt themselves to technological changes.

Data Sources: Censuses, 1881-1981

Countries: India

Subjects/Variables: Indians; Muslim, Hindu

Discipline: Demography

Mistry, M. B. (1999). Role of religion in fertility and family planning among Muslims in India. *Indian Journal of Secularism*, 3(2), 1-33.

Abstract: According to the 1991 census, more than four-fifths of the population were Hindus (82 per cent), 12 per cent were Muslims, a little above 2 percent were Christians, 2 per cent were Sikhs, about 1 per cent were Buddhists, and about half per cent were Jains. The rest consisted of Jews, Parsis and others. Muslims as the largest minority religious group in India are undergoing demographic transition, but factors and the mechanisms through which such changes are occurring are not well understood. The present study examines fertility and family planning behaviour among Muslims, in Malegaon city in Nashik district. The factors that are considered for examination are variables relating to modernization, female status and religiosity and social indicators like age at marriage, education and occupation and economic variables like income status of the household. Religiosity of women had a positive relationship with education. Certain variables - purdah, female education, female labour-force participation, marriage, discrimination against girl child, female property rights, son preference, decision making, freedom of movement and exposure to media - have been used as indicators of status of women and modernization. It is found that fertility was lower among women with high religiosity than among women with medium religiosity. It is found that with increasing level of modernisation and status of woman, the fertility reduces.

Data Sources: Questionnaires of Muslims in Malegaon City

Countries: India

Subjects/Variables: 961 ever-married women aged 15-49 from 800 Muslim households in Malegaon city, India, October 1994 - March 1995; religiosity (practices: prayer, fasting, charity, participation in religious congregation); 60 community leaders in Malegaon on perceptions on population, family planning programme and related issues

Discipline: Economics

Mistry, M. B. (2005). Muslims in India: A demographic and socio-economic profile. *Journal of Muslim Minority Affairs*, 25(3), 399-422.

Abstract: This paper presents a demographic and socio-economic profile of the Muslims in India, who form the largest minority in the country. At 120 million strong, Muslims constitute 12% of the population of India. Tracing the origin and ethnicity of Muslims in India, the findings suggest that most Indian Muslims are ethnically Indian since they are the descendents of the early converts to Islam. Many Indians who belonged to the lower castes embraced Islam for its egalitarianism which was practised by the local Sufi saints. The paper provides a demographic history of Indian Muslims, including the growth and distribution of the Muslim population across Indian states over the past century. Comparative fertility and mortality rates are presented for various religious communities to explain the differential growth of the Muslim population. The relative backwardness of the Muslim community, and particularly of Muslim women, is noted as a factor in the comparatively high fertility rates observed among the Muslim population. The paper also reviews the contribution of Muslims to the politics, arts and culture of India, and then goes on to examine the problem of communalism and communal violence that has characterized the Indian political scene. The paper

concludes with arguments in favour of ensuring justice and human rights for Muslims, emphasizing the importance of non-governmental organizations (NGOs) and the positive role they could play in enhancing the condition of the Muslim community in India.

Data Sources: Census of India 1881-1991; National Family Health Survey (Maternal and Child Health) and Family Planning (NFHS), India, 1992-93, Bombay; International Institute for Population Sciences, 1995; National Sample Survey Organization (NSSO), 1987-1988; India: Human Development Report 1994, National Council of Applied Economic Research (NCAER), Delhi

Countries: India

Subjects/Variables: Muslim, Hindu, Christian, Sikh, other Indians

Discipline: Demography

Moore, Eric G.

Moore, E. G. (1990). Fertility decline in three Ontario cities, 1861-1881. *Canadian Studies in Population*, 17(1), 25-47.

Abstract: The analysis of individual records from the 1861 and 1881 manuscript censuses from 3 Ontario (Canada) cities--Toronto, London, and Kingston--provided documentation of the importance of sociodemographic factors in the decline in marital fertility in this time period. A total of 11,504 records for women 15-49 years of age were available for review. The dependent variable was the number of children 0-4 years old for each married woman; independent variables were mother's religion, mother's birthplace, maternal age, social class, and region. In 1861, fertility differentials were most closely associated with age, maternal birthplace, and locality. Women 25-34 years of age who were born in Ireland had significantly higher fertility than their counterparts born in Canada or elsewhere and than older Irish-born women. In addition, marital fertility was highest in Kingston and lowest in Toronto. By 1881, however, the effects of city were no longer significant and the strongest differentials were related to religion. The largest declines in marital fertility between 1861 and 1881 occurred among Methodists; Anglicans showed reductions in the middle range, while Catholics and Presbyterians experiences the smallest reductions. A somewhat weaker, but still significant, inverse correlation was found between social class and marital fertility, with women from the lowest social group exhibiting the highest fertility. A comparison of fertility changes between 1861 and 1881 further revealed evidence of both birth spacing and birth stopping. The average fertility reduction in the 20-39 year age group was 20%, while that in the 40 years and over group was 40%. Although birthplace was no longer a significant correlate of marital fertility in 1881, Canadian-born women of Irish descent had higher fertility than others. Finally, there was a significant closing of the fertility differential between Toronto and the other 2 cities in the study period. This reduction in spatial differentiation reflected the increasing correspondence of fertility behavior to religion and general diffusion through the urban hierarchy.

Data Sources: 1861 and 1881 manuscript censuses from Toronto, London, and Kingston (Ontario, Canada)

Countries: Canada (Ontario)

Subjects/Variables: 11,504 records for women 15-49 years of age

Discipline: Geography

Morgan, S. Philip; Stash, Sharon; Smith, Herbert L.; Oppenheim Mason, Karen

Morgan, S. P., Stash, S., Smith, H. L., & Oppenheim Mason, K. (2002). Muslim and Non-Muslim Differences in Female Autonomy and Fertility: Evidence from Four Asian Countries. *Population and Development Review*, 28(3), 515-537.

Abstract: On the basis of research on paired Muslim and non-Muslim communities selected in India, Malaysia, Thailand, and the Philippines, the authors test the hypothesis that greater observed Muslim pronatalism can be explained by less power or lower autonomy among Muslim women. Indeed, wives in the Muslim communities, compared to the non-Muslim ones: 1) had more children, 2) were more likely to desire additional children, and 3) if they desired no more children, were less likely to be using contraception. However, the authors do not find that Muslim communities consistently score lower on dimensions of women's power/autonomy. Thus, aggregate-level comparisons provide little evidence of a relationship between lower autonomy and higher fertility. Individual-level multivariate analysis of married women in these paired settings similarly suggests that women's autonomy differentials do not account for the higher fertility, demand for more children, and less use of contraception among Muslim wives. These results suggest that explanations for Muslim/non-Muslim fertility differences lie elsewhere.

Data Sources: Subset of data from a five-country study of the relationship between fertility and the status of women in communities in South and Southeast Asia (SWAF). <http://swaf.pop.upenn.edu/>
Countries: India, Malaysia, Thailand, and the Philippines

Subjects/ Variables: Muslims and non-Muslims in India (Uttar Pradesh and Tamil Nadu), Malaysia, Thailand, Philippines

Discipline: Demography

Mosher, William D.; Goldscheider, Calvin

Mosher, W. D., & Goldscheider, C. (1984). Contraceptive Patterns of Religious and Racial Groups in the United States, 1955-76: Convergence and Distinctiveness. *Studies in Family Planning*, 15(3), 101-111.

Abstract: A number of studies have reported data on contraceptive use among white Protestant and white Catholic couples in the United States, but this paper is the first to study a large sample of couples with other or no religious affiliation, as well as black couples by religion, using multivariate controls. Using a nationally representative sample of 14,000 married women aged 15-44, we find convergence among white Protestant, Catholic, and Jewish couples in contraceptive patterns between 1955 and the mid-1970s, but large differences remained at the latter date, even after multivariate controls. Among black couples, differences by religious affiliation are smaller, but differences between white and black couples within religion categories are substantial. We conclude that religious differences are not artifacts of an incomplete demographic transition, and that religious affiliation is an indispensable datum for understanding contraceptive choice in the United States.

Data Sources: 1973 and 1976 National Survey of Family Growth (NSFG) studies

Countries: United States

Subjects/ Variables: 14,048 married women aged 15-44, ever married, or never married and had children living with them; Protestant, Catholic, Jewish, other, none

Discipline: Demography

Mosher, William D.; Hendershot, Gerry E.

Mosher, W. D., & Hendershot, G. E. (1984). Religion and Fertility: A Replication. *Demography*, 21(2), 185-191.

Abstract: Jones and Westoff (1979) reported a study of fertility trends among white women in intact first marriages. They found that the fertility of white Catholic and non-Catholic wives was converging. The differential had all but disappeared, as had the differential by frequency of communion among Catholic wives. We replicated their study using data from the 1976 National Survey of Family Growth. We found that the fertility of the two religious groups was indeed converging, but the Catholic-non-Catholic differential was larger than that found by Jones and Westoff-how much larger depends on what measure is used. Moreover, we found that the differential by frequency of communion among Catholic wives was not converging. Possible explanations of the apparent differences in the findings are discussed.

Data Sources: 1973 and 1976 National Survey of Family Growth

Countries: United States

Subjects/Variables: US women 15-44 years

Discipline: Demography

Mosher, W. D., & Hendershot, G. E. (1984). Religious Affiliation and the Fertility of Married Couples. *Journal of Marriage and Family*, 46(3), 671-677.

Abstract: Using the 1973 and 1976 National Surveys of Family Growth - nationally representative samples totalling 14, 000 married women - we present a wide range of national estimates of the fertility of married couples in religious groups in the United States. These are the most recent, the most inclusive, or the only national estimates of these parameters. It was found that (a) the white-Protestant/white-Catholic difference in family size persisted even after controlling for age, education, and residence; (b) the fertility of Catholic couples is negatively related to the wife's education, a reversal of a positive association in the 1950s and 1960s; (c) the fertility of Jewish couples was lower than that of Protestant and Catholic couples, both before and after multivariate adjustment; (d) the fertility of black Catholic couples was much lower than that of black Protestant couples; but the difference disappeared after controlling for age, education, and residence; (e) the fertility of white and black wives with no religious affiliation was much lower than for Protestants both before and after multivariate adjustment. We conclude that religious affiliation continues to be an indispensable datum for understanding fertility differences in the United States.

Data Sources: 1973 and 1976 National Surveys of Family Growth

Countries: United States

Subjects/Variables: Married women; Black Protestant; Hispanic Catholic; White Catholic; Black Catholic; White Protestant; Jewish; other religions; Black, no religion; White, no religion

Discipline: Health

Mosher, William D.; Johnson, David P.; Horn, Marjorie C.

Mosher, W. D., Johnson, D. P., & Horn, M. C. (1986). Religion and Fertility in the United States: The Importance of Marriage Patterns and Hispanic Origin. *Demography*, 23(3), 367-379.

Abstract: Previous studies have found that marital fertility was declining among both white Catholic and non-Catholic wives, that it was declining faster among Catholic wives, and that convergence was occurring. This paper has 5 main objectives: 1) to test the assertion that convergence in the marital fertility of Catholics and non-Catholics has occurred and that the end of the religious differential has been reached; 2) to test the finding that the differential contracts when Hispanics are excluded, 3) to see if the same conclusions about the differential emerge when total rather than marital fertility is analyzed, 4) to see whether frequency of religious participation is still associated with fertility; and 5) to consider some additional data and the available literature to speculate on whether the current patterns will last. Results show that the convergence in white marital fertility had occurred by 1977-1981, but only if Hispanics were excluded. For non-Hispanics, Catholic and non-Catholic marital fertility rates were approximately equal in 1977-1981, but Catholics were less likely to be currently married. It was therefore expected that Catholic total fertility would be slightly lower than that of non-Catholics, and that is what was found. In addition, the total fertility rate for Hispanics in 1977-1981 was higher than for other white women. Religious participation and fertility were positively related among non-Catholics, but it made no difference for Catholic women. If the pattern of delayed marriage continues, it seems equally unlikely that Catholic total fertility will be substantially higher than Non-Catholic fertility in the near term.

Data Sources: Cycle III of the National Survey of Family Growth (NSFG), National Center for Health Statistics, 1982

Countries: United States

Subjects/ Variables: 4,577 white women (August 1982 - February 1983); Protestant, Catholic, Jewish; religious participation (communion, attendance)

Discipline: Demography

Mosher, William D.; Williams, Linda B.; Johnson, David P.

Mosher, W. D., Williams, L. B., & Johnson, D. P. (1992). Religion and Fertility in the United States: New Patterns. *Demography*, 29(2), 199-214.

Abstract: In the United States, the baby boom-era pattern of high Catholic and low Protestant fertility has ended. Among non-Hispanic whites in the 1980s, Catholic total fertility rates (TFRs) were about one-quarter of a child lower than Protestant rates (1.64 vs. 1.91). Most of the Protestant-Catholic difference is related to later and less frequent marriage among Catholics. Future research on the demography of religious groups should focus on explaining the delayed marriage pattern of Catholics, the high fertility of Mormons and frequently attending Protestants, and the very low fertility of those with no religious affiliation.

Data Sources: 1982 and 1988 National Surveys of Family Growth (conducted by the National Center for Health Statistics) interviews

Countries: United States

Subjects/ Variables: 7,969 women (1982); 8,450 women (1988); white, black, Hispanic; Jewish, Catholic, Protestant, Mormon, no religious affiliation; religious participation

Discipline: Demography

Moulasha, K.; Rao, G. Rama

Moulasha, K., & Rao, G. R. (1999). Religion-Specific Differentials in Fertility and Family Planning. *Economic and Political Weekly*, 34(42-43), 3047-3051.

Abstract: The relationship between religion and fertility behaviour has prompted much interest, especially in the context of the rising population in developing countries. In India data reveal that the fertility rate among Muslim women is significantly higher than for Hindu women which may in the first instance be attributed to such practices as postpartum abstinence and the length of amenorrhea after child birth. Clearly, however, there are more complex socio-economic reasons for the differential behaviour of the two communities that needs to be better understood.

Data Sources: National Family Health Survey (NFHS)

Countries: India

Subjects/Variables: 79,640 currently married (69,570 Hindu and 10,070 Muslim) women aged 13-49 years

Discipline: Demography

Muller, Claude

Muller, C. (1986). *Dieu est catholique et alsacien*. Strasbourg: Société d'Histoire de l'Eglise d'Alsace.

Musallam, Basim

Musallam, B. (1983). *Sex and society in Islam: Birth control before the nineteenth*. Cambridge, MA: Cambridge, MA: Cambridge University Press.

Mutuku, Andrew Kyalo

Mutuku, A. K. (2013). *Fertility Transition and Its Determinants in Kenya: 2003-2008/9*. Calverton, MD.
Summary: Kenya began to experience rapid fertility decline in the late 1980s. However, this decline in fertility stalled in the late 1990s. This study examined factors influencing transition to third and fourth births in Kenya for the period between 2003 and 2008/9, in order to provide a better understanding of the current fertility transition in Kenya with respect to birth spacing. Data was obtained from the Kenya Demographic and Health Surveys (KDHS) of 2003 and 2008/9. Logistic regression model was the main method of data analysis. The dependent variable was whether or not a woman had made a transition from second to third birth and from third to fourth birth in the five years preceding each survey. The main independent variables were: education level, place of residence (urban-rural), region of the country, wealth index, marital status, religion, ever-use of contraception, child mortality, and mother's age at the start of the birth interval.

The results showed that for the five-year period before KDHS 2008/9 the odds of transition to a third birth were lower for women with some education compared with women with no education. Odds were lower for women in Central, Eastern, and North Eastern provinces compared with women in Western province, but higher for women of the Protestant religion compared with Catholic women. The odds of transition to a third birth were lower for women from middle, richer, and richest households compared with women from poorest households, and lower for women who had ever used a modern method of contraception compared with women who had never used contraception.

For the five year-period before KDHS 2008/9, the odds of transition from third to a fourth birth were significantly influenced by education level, wealth index, age at the start of the interval, ever-use of contraception, and desire for an additional child. The results for the five year-period before KDHS 2003 showed that transition to fourth birth was significantly associated with region, wealth index, age at the start of the interval, ever-use of contraception, and desire for another child.

This paper has two main policy implications. First, there is a need to improve family planning services across the country, which would address the issues of unwanted fertility and unmet need for family planning and hence lead to a decline in fertility. Second, there is also a need to improve the socioeconomic conditions in the country. Higher levels of wealth and education are strongly associated with lower fertility.

Data Sources: Kenya Demographic and Health Surveys (KDHS) of 2003 and 2008/9

Countries: Kenya

Subjects/Variables: 8,195 (2003) and 8,444 (2008/9) women aged 15-49; various socio-economic and proximate factors, including Catholics, Protestants/other Christians, Muslims, and other religions

Discipline: Demography

Nagi, Mostafa H.

Nagi, M. H. (1983). Trends in Moslem fertility and the application of the demographic transition model. *Biodemography and Social Biology*, 30(3), 245-262.

Abstract: Presented are data on fertility levels in thirty Moslem countries between 1960 and 1980. Fertility measures include: crude birth rate, total fertility rate and age-specific birth rate, and the per cent change in them between 1960 and 1980. The analysis focuses on: (1) the current status of Moslem fertility, (2) the emerging fertility differentials among Moslem countries, and (3) the degree to which recent fertility declines in some Moslem countries is associated with modernization variables and family planning efforts. Results indicate that: (a) Moslem fertility remains universally high and is generally higher than non-Moslem countries in the same region; (b) few Moslem countries have succeeded in reducing their levels of fertility to justify a search for the predictors of Moslem fertility levels; (c) in spite of a sufficient range of variations in the economic and social correlates of fertility, the corresponding fertility variables in these countries do not suggest that the reproductive behavior of Moslem women has reacted to such variations; and (d) efforts directed toward stronger family planning programs are clearly related to fertility decline.

Data Sources: Demographic and socioeconomic data and reports published by the World Bank, Population Council, World Fertility Survey, and Population Information Program

Countries: 30 countries in which Islam is the religion of more than 60% of total population

Subjects/Variables: Muslims

Discipline: Sociology

Nagi, M. H. (1984). Trends and Differentials in Moslem fertility. *Journal of Biosocial Science*, 16(2), 189-204.

Abstract: This paper examines data on fertility levels in 33 Moslem countries between 1960 and 1980. Fertility measures include crude birth rate, total fertility rate and age-specific birth rate, and the percentage change in them between 1960 and 1980.

The analysis focuses on: (1) the current status of Moslem fertility in comparison to non-Moslem countries in the same region; (2) the emerging fertility differentials among Moslem countries; (3) how much of the recent fertility declines in some Moslem countries is associated with modernization variables and with family planning efforts.

The results indicate that: (1) Moslem fertility remains universally high and is generally higher than in non-Moslem countries in the same region; (2) very few Moslem countries have succeeded in bringing down their level of fertility to justify a search for the predictors of Moslem fertility levels; (3) in spite of a sufficient range of variations in the economic and social correlates of fertility, the corresponding fertility variables in these countries do not suggest that the reproductive behaviour of Moslem women has reacted to such variations; (4) efforts directed towards stronger family planning programmes are clearly related to fertility decline.

Data Sources: United Nations, the World Bank, the Population Reference Bureau, the Population Council, the World Fertility Survey, 1960-1980

Countries: 33 countries in which Islam is the religion of more than 60% of the total population

Subjects/Variables: Muslims

Discipline: Sociology

Nagi, Mostafa H.; Stockwell, Edward G.

Nagi, M. H., & Stockwell, E. G. (1982). Muslim fertility: recent trends and future outlook. *Journal of South Asian and Middle Eastern studies*, 6(2), 48-70.

Abstract: This article examines the current fertility situation in 33 Muslim countries and discusses the likelihood and possible determinants of a sustained fertility decline. 3 basic sets of data from diverse sources were utilized: measures of fertility, indicators of general socioeconomic conditions, and measures of the strength of family planning programs. Crude birthrates in the 33 countries revealed that Muslim fertility was and continues to be very high. In 1960 all 33 countries except Lebanon and Turkey had crude birthrates of 45 or more/1000 and 10 had birth rates of 50 or more. Between 1960-75, most countries experienced fertility declines; however, in 1978-79 crude birthrates of the 33 countries were generally still far higher than those of non-Muslim countries in the same regions. A fairly wide range of variation is now found in the crude birthrates of Islamic countries. In 1978-79, crude birthrates ranged from 31-51, and 15 countries had rates lower than 45/1000. Examination of total fertility rates reinforces the conclusion that Muslim fertility is very high but variable in different countries. A table showing the rank position of 29 Muslim countries according to their scores on a composite index of socioeconomic development revealed that there was no clear association between overall index scores and crude birthrate declines. Countries that have experienced relatively large declines in fertility since the early 1960s were scattered up and down the continuum, and some of the highest ranked countries have experienced little change in their high fertility levels in the past 20 years. A generally similar conclusion is supported by examination of 7 specific socioeconomic measures of literacy, school enrollment, life expectancy, infant mortality rate,

nonagricultural employment, per capita gross national product, and urbanization. Application of Mauldin and Berelson's family planning program efforts scale demonstrates the importance of family planning efforts in the Islamic world. Countries with no family planning program experienced total fertility rate declines averaging 3% for 1968-70, those with weak programs averaged 6% declines, but those with moderate programs averaged 18% declines. The Muslim countries do not strongly support the modernization hypothesis of fertility decline, but indicate the importance of government sponsored family planning programs.

Data Sources: United Nations, the World Bank, the Population Reference Bureau, the Population Council, the World Fertility Survey, 1960-1980

Countries: 30 countries in which Islam is the religion of more than 60% of the population

Subjects/Variables: Whole population

Discipline: Sociology

Nair, Sukumari N.

Nair, S. N. (1996). Determinants of Birth Intervals in Kerala: An Application of Cox's Hazard Model. *Genus*, 52(3-4), 47-65.

Abstract: Patterns of birth intervals can be considered as indirect measures of fertility dynamics over time and hence the determinants of birth intervals as the factors associated with fertility change. The present study is an attempt to delineate the differences in the patterns and determinants of birth intervals which appear highly relevant in a transitional population such as Kerala. In this country two comparable surveys, with a period difference of 20 years, were conducted. The study tries to estimate the effects of socio-economic, demographic and proximate variables using Cox's proportional hazard model. For the former data-set, socio-economic variables have significant effect on birth intervals, while for the latter data proximate variables are the significant determinants of birth intervals. A significant differential existed between Hindus and Muslims in Kerala for the first and the second birth intervals, but not for the third birth interval.

Data Sources: subsample of 1971-1972 survey conducted of a Kerala village by the Population Research Centre; comparable study in 1990

Countries: Nepal

Subjects/Variables: Currently married women below 35 years of age

Discipline: Demography

Nasir, Rosina

Nasir, R. (2012). In Search of Reasons for the Comparatively Higher Fertility among Muslim Women in Delhi, India: Postulating a Cultural Hypothesis. *Journal of Muslim Minority Affairs*, 32(4), 557-575.

Abstract: Three hypotheses dominate the literature on fertility and religion, viz., "particular theological hypothesis" which argues that religious doctrines and ideologies influence contraceptive use and fertility behaviour of different religious groups; "characteristics hypothesis" which argues that differentials in fertility and contraceptive use between majority and minority religious groups are due to socio-economic and demographic factors; and "minority hypothesis" which asserts that

minority-group status exerts an independent influence on fertility behaviour. These hypotheses are the subject of discussion in this paper as to how pervasive general explanation can be a limiting factor to contextual studies or local studies and what are the gaps or missing elements in these theories? In this paper, I would like to attempt to show how generalization can be applicable to any religious group in a pluralistic society and propose a “cultural hypothesis” which postulates that religious group differentials in reproductive behaviour may be due to differences in norms, values, and attitudes towards fertility among different religious groups. An empirical part of this paper attempts to explore the role of culture in the reproductive behaviour of Muslim women in Delhi, India.

Data Sources: Fieldwork collected between 2005 and 2006 from the Jama Masjid, Turkman Gate (extension of outer periphery of Jama Masjid area), Bara Hindu Rao, and Seelampur Muslim Populations, Delhi

Countries: India

Subjects/ Variables: Ever-married women aged over 30; Hindu, Muslim, Christian, Sikh, Jain, Buddhist/Neo-Buddhist, and others

Discipline: Anthropology

Neidell, Shara G.; Niraula, Bhanu B.; Morgan, S. Philip; Stash, Sharon

Neidell, S. G., Niraula, B. B., Morgan, S. P., & Stash, S. (1998). Moslem and non-Moslem fertility differences in the eastern Terai of Nepal. *Contributions to Nepalese Studies in Family Planning*, 25, 109-128.

Abstract: It has been argued that Islam engenders a more intense form of patriarchy than other groups, which in turn limits fertility levels and limits contraceptive use by (1) providing strong motivations for childbearing, and (2) constraining both women's exposure to and ability to implement innovative fertility behaviours. But there is no evidence of this in the three groups of Nepal villages studied. Opposition to government antinatalist policies is part of minority group identity for Muslims in Nepal.

Data Sources: Interviews carried out in 1997

Countries: Nepal (Eastern Terai)

Subjects/ Variables: 992 Nepalese wives; Muslims, Hindus

Discipline: Demography

Neuman, Shoshana

Neuman, S. (2007). Is fertility indeed related to religiosity? A note on: 'Marital fertility and religion in Spain, 1985 and 1999,' *Population Studies* 60(2): 205-221 by Alicia Adsera. *Population Studies*, 60(2), 219-230.

Abstract: Critique of article by Alicia Adsera. (1) The measure of religiosity is too broad and subjective for the change to be significant. Based on the International Social Survey Program: Religion II (ISSP), fertility was not related to religiosity. (2) Adsera mixes research on the interrelationship between fertility and religiosity within a single religion with research into differences in fertility between religions in the same country. The latter may be influenced by other

socio-economic and demographic factors, such as minority-religion status, different ages and education. In addition, the "other" group was heterogeneous, and the mixed-religion marriage included both practising/non-practising Catholics as well as Catholics and non-Catholics. Instead, a sample should have been taken which was limited to Catholics.

Data Sources: Critique of Adsera (2006)

Countries: Spain

Discipline: Economics

Neuman, Shoshana; Ziderman, Adrian

Neuman, S., & Ziderman, A. (1986). How does fertility relate to religiosity: survey evidence from Israel. *Sociology and Social Research*, 70(2), 178-180.

Abstract: This paper presents new evidence that Jews in Israel who are more religious also have higher fertility and lower rates of contraceptive use. The data used were drawn from an unpublished representative sample survey of male and female salaried workers in Israel in June 1968. Each of the respondents answered a questionnaire composed of some 150 questions relating to different areas of everyday life, particularly those pertaining to the performance of religious observances. From these data, 2 measures of religiosity were adopted: 1 stemming from the self-categorization by respondents of their religiosity; and the other measuring the amount of time (hours per year) devoted by respondents to religious observances. A table presents the results of 4 multiple regressions, in which number of children was entered as the dependent variable to be explained and religiosity as an independent, explanatory variable. The number of children rose with female religiosity under both definitions. Thus, not only was fertility higher amongst very religious Jewish married women in Israel, but the extent of religiosity acted as a continuous variable affecting the level of fertility. To hold constant the effect of other factors, additional independent variables were included in the regressions. Number of children was negatively related to year of marriage, as expected. The negative sign on the education variable and the positive sign on the education squared variable indicated that the relation between number of children and education, rather than being linear, was U-shaped. For the age variable, the coefficient was significant and of the expected sign. Women originating from Europe-America had significantly fewer children than those born in Israel. A similar pattern emerged for the men. Positive coefficients were found on the religiosity variables, although the difference between nonreligious and traditional respondents was not statistically significant. Of those respondents not using contraception, the proportion that failed to do so for reasons that were basically religious in nature rose consistently with the level of religiosity in each case. Thus, whereas for nonreligious women not using contraceptives, only 2.3% did not do so for religious reasons; the proportion for traditional and religiously observant women rose to 11.7% and 59.0%, respectively. The parallel proportions for men that did not use contraceptive methods because of religious reasons were 2.2%, 8.1%, and 46.6%.

Neven, Muriel; Oris, Michel

Neven, M., & Oris, M. (2003). Contrôle religieux, contrôle social : la fécondité dans l'est de la Belgique dans la seconde moitié du XIXe siècle. *Annales de démographie historique*, 106(2), 5-32.

Abstract: This paper aims to contrast the fertility of a Catholic rural area (Pays de Herve) and of a working centre, secularised and with leftwing tendencies (Tilleur). It pays attention both to the pre-transitional period and to the beginning of the transition. The opposition between these two societies, located in Eastern Belgium, is analysed from three points of view. First, we describe their economical and social history. Second, we observe marriages during the closed periods, illegitimate births and pre-marital conceptions, all those measures being considered as indicators of social control and religiousness. Third, using the methods of event history analysis, we compare the fertility patterns of those areas, and observe changes occurring between the pre-transitional period and the beginning of the fertility decline. Results indicate important contrasts: the persistence of traditional social controls characterized the Pays de Herve, while the urban centre rather broke the links with them. Yet, the beginning of the transition did not appear as a revolution. Among those very different populations, fertility strategies centred on the number of desired children and on their sex composition, existed before the transition. Those cultural rationalities increased when birth control appeared: in this way, the fertility decline is in keeping with the family culture, and does not appear, at first, as a radical change.

Data Sources: Census data; electoral data

Countries: Netherlands

Subjects/ Variables: Catholic Pays de Herve and secular Tilleur (1850-1900)

Newman, Lareen A.

Newman, L. A. (2008). Demographic fertility research: A question of disciplinary beliefs and methods. In B. Spalek & A. Imtoul (Eds.), *Religion, spirituality and the social sciences: Challenging marginalisation* (pp. 93-106). Bristol: The Policy Press.

Summary: Lack of attention to religious influences on contemporary Australian fertility resulted partly from researchers adhering to an unquestioning belief in the hegemony of secularisation, along with a continued preference for aggregate-level quantitative analysis at the expense of qualitative methods, which effectively contributed towards a 'closed shop' on research topics. The empirical project highlighted how, through mixed method research, qualitative methods can provide room for new themes to emerge or old themes to be rediscovered, while quantitative data can test emerging hypotheses. The chapter also showed benefits in disaggregating data rather than aggregating to traditional groupings that may hide important trends and differences. In particular, the chapter has shown how qualitative research methods which talk to 'the actors' allow the voices of those in faith communities to be heard and explored, rather than the research being limited by traditional theory, disciplinary interest or popular debate. The former quite clearly leads to a broader and deeper understanding of influences on social behaviour, and in relation to fertility encouraged (re)exploration of social and family influences on fertility which have been overshadowed by the contemporary research focus on economics (work and finances).

Data Sources: Australian censuses; semi-structured interviews with 38 mothers and 24 fathers who had between one and seven children, including at least one child aged between one to six years, 2003-04

Countries: Australia

Subjects/ Variables: 38 mothers and 24 fathers

Discipline: Geography

Newman, Lareen A.; Hugo, Graeme J.

Newman, L. A., & Hugo, G. J. (2006). Women's fertility, religion and education in a low-fertility population: Evidence from South Australia. *Journal of Population Research*, 23(1), 41-66.

Abstract: The old issue of religion and fertility is examined in relation to women's level of education. In-depth interviews exploring influences on parity for Adelaide parents in 2003–04 suggest that more frequent attendance at religious services in childhood, and affiliation with particular religious denominations, are related to both higher preferred and higher achieved parity, even for women with university education. For some university-educated women, their religious upbringing appears to play a part in negating the traditional relationship between higher education and lower fertility. Quantitative data on religion, fertility and educational level from the 1996 Census for women aged 40–44 in South Australia show that women with No Religion had lower fertility than those With a religion, while university-educated women in New Protestant-New Christian groups had higher fertility than university-educated women in other denominations. The findings provide an understanding of some social conditions that support higher fertility in a low-fertility population. Future fertility research in developed countries should include consideration of the influence of religious affiliation and religiosity at disaggregated levels of inquiry.

Data Sources: The Adelaide Fertility and Family Size Study (AFFSS), 2003–04 (interviews with 38 mothers and 24 fathers from 39 families in four socio-economic areas in metropolitan Adelaide)

Countries: Australia

Subjects/Variables: Australian parents

Discipline: Health

Nigem, E.T.; Nagi, Mostafa H.

Nigem, E. T., & Nagi, M. H. (1988). Fertility patterns and differentials in Israel. *Biology and society: the journal of the Eugenics Society*, 5(3), 119-126

Abstract: Using fertility rates derived from the Statistical Abstracts of Israel, fertility differentials by religion, ethnicity, continent of birth, and education are examined. The fertility rates of non-Jews, although slowly declining, are significantly and substantially higher than those of Jews. There are differentials in fertility rates between Western and Eastern Jews and between Moslems, Druze, and Christians. Some details of the study findings follow. 1) Western Jews (Europe-America) have consistently shown the lowest total fertility rate, and Eastern Jews (Asia-Africa) the highest. 2) The pattern of the decline in the total fertility rate of Christians from 4.85 in 1955 to 2.12 in 1985 is similar to that of the Jewish population, which declined from 3.64 in 1955 to 2.79 in 1982. Since 1982 there has occurred a reversal in the Jewish population growth, and by 1985 the total fertility rate had reached 2.85. 3) The total fertility rate for all non-Jews fell from 7.07 in 1955 to 4.37 in 1985. 4) In 1985, Israel's total fertility rate was 3.12 for Jews and 4.86 for Arabs; this represents a slow decline in the Arab total fertility rate since 1965. 5) Arab women produce more children both at younger and at later ages than their Jewish counterparts. Jews have an average of 2.6 children, while Moslems average 3.8, Christians 2.5, and Druze & others 3.7. Mothers whose continent of birth is Asia or Africa have, on the average, about 1 child more than Israel-born mothers, and immigrant Jews seem to be more fertile than Israel-born Jews. 6) A large proportion of the

differences in fertility between Jews and non-Jews and differences within these groups can be explained by their social and economic status. In 1985, about 53% of non-Jews aged 14 and over had received less than 9 years education in contrast to 25% of Jews. Only 8.4% of non-Jews had progressed beyond 12 years education in contrast to 24.4% for Jews.

Data Sources: Statistical Abstracts of Israel

Countries: Israel

Subjects/Variables: Jews, non-Jews in Israel

Discipline: Sociology

Nixon, J.W.

Nixon, J. W. (1961). Some Demographic Characteristics of Protestants and Catholics in Switzerland. *Revue de l'Institut International de Statistique / Review of the International Statistical Institute*, 29(3), 13-28.

Abstract: The birth-rate for Catholic mothers is higher than that for Protestant, and the difference increases with age-group. It is higher for all occupations of fathers and especially high among the Catholic agricultural population. Illegitimacy is the same for the two groups. The general conclusion seems to be that religion does not exercise a serious influence on demographic characteristics except for the birth-rate, and that these characteristics except for the birth rate, and that these characteristics, especially the death-rate are largely influenced by the circumstance that Catholics are predominant in the high Alpine valleys, where living conditions are often poor, while Protestants are predominant in the fertile plains and in the large towns where living conditions are superior.

Data Sources: Censuses, Swiss Federal Statistical Office, 1860-1950

Countries: Switzerland

Subjects/Variables: Swiss Protestants and Catholics

Discipline: Demography

Notestein, Frank W.

Notestein, F. W. (1945). Population: The Long View. In T. W. Schultz (Ed.), *Food for the World* (pp. 36-57). Chicago: University of Chicago Press.

Summary: Overview of population trends, considering, first, the course of past developments and something of the processes of past change; next, examining in greater detail three types of population change; and, finally, presenting some hypothetical population trends for the future, on the basis of which we can discuss the actual prospects for population change. The chapter finds that religious doctrine can encourage high fertility and, conversely, the power of values and customs can limit the influence of economic development on fertility.

Data Sources: Overview of population trends

Countries: Worldwide

Discipline: Demography

Notestein, Frank W.; Kiser, Clyde V.

Notestein, F. W., & Kiser, C. V. (1935). Factors Affecting Variations in Human Fertility. *Social Forces*, 14(1), 32-41.

O'Grada, Cormac

O'Grada, C. (1991). New evidence on the fertility transition in Ireland 1880-1911. *Demography*, 28(4), 535-548.

Abstract: Recent analyses of Ireland's marital fertility transition based on the Princeton Ig and the Stanford CPA measures are reassessed. Revised county estimates of Ig are subjected to regression analysis, and added insight into CPA is offered by comparing Ireland with Scotland and applying the measure to three specially constructed local data sets.

Data Sources: Irish county estimates for 1881 and 1911

Countries: Ireland

Subjects/Variables: Children aged up to four years recorded in the census; Catholic and non-Catholic

O'Grada, Cormac; Walsh, Brendan

O'Grada, C., & Walsh, B. (1995). Fertility and Population in Ireland, North and South. *Population Studies*, 49(2), 259-279.

Abstract: This paper reviews and interprets recent demographic trends and prospects in the two Irelands, North and South. We discuss both the influence of religion on demographic behaviour, and the impact of demographic trends on the distribution by religion. In the Republic of Ireland, we show that the long-standing gap in marital fertility between Catholics and others had virtually disappeared by the 1980s. In Northern Ireland the gap is still there in the 1990s, though considerably reduced. However, estimates of its size hinge on how the significant proportion of non-respondents to the census question on religion are allocated. We identify some peculiarities of the non-respondent population which imply that it was more 'Catholic' in 1991 than first reports suggested. The Catholic share of Northern Ireland's population may accordingly be larger - 42 to 43 per cent - than previously thought. In both communities, the future of the Catholic share depends less on fertility than on migration patterns.

Data Sources: Censuses for both Northern Ireland and the Republic of Ireland, to 1991

Countries: Ireland, Northern Ireland

Subjects/Variables: Whole population

Discipline: Economics

Obermeyer, Carla Makhlouf

Obermeyer, C. M. (1992). Islam, Women and Politics: The Demography of the Arab Countries. *Population and Development Review*, 18(1), 33-60.

Obermeyer, C. M. (1994). Religious Doctrine, State Ideology, and Reproductive Options in Islam. In G. Sen & R. Snow (Eds.), *Power and decision: the social control of reproduction* (pp. 59-75). Cambridge, MA: Harvard University Press.

Summary: This chapter assesses the compatibility of Islam with ideas of reproductive choice through an examination of Islam's doctrinal principles and their interpretations, and reviews available indicators of reproductive health in countries of the Middle East as a measure of reproductive choice. It argues that while the doctrine has a degree of flexibility on issues of reproduction, the political context is a key factor for understanding the way in which religious doctrine is interpreted. The role of the state in shaping women's options through interpretations of religious doctrine is illustrated through a discussion of the dramatic reversals in Iran's population policy.

Data Sources: Theoretical-historical discussion

Countries: Muslim-majority countries

Subjects/Variables: Muslims

Discipline: Medical Anthropology

Obermeyer, C. M. (1994). Reproductive Choice in Islam: Gender and State in Iran and Tunisia. *Studies in Family Planning Perspectives*, 25(1), 41-51.

Abstract: This report examines the extent to which reproductive choice is compatible with Islamic principles. It presents the argument that the impact of Islam on reproductive choice is largely a function of the political context in which gender issues are defined. Indicators of reproductive health in countries of the Middle East are reviewed and the way these relate to constraints on reproductive choice is assessed. The examples of Tunisia and Iran are used to illustrate the way in which Islam is invoked to legitimate conflicting positions concerning women and their reproductive options.

Data Sources: UN figures

Countries: Muslim-majority countries

Subjects/Variables: Muslims

Discipline: Medical Anthropology

Okun, Barbara S.

Okun, B. S. (1996). Sex preferences, family planning, and fertility: An Israeli subpopulation in transition. *Journal of Marriage and the Family*, 58, 469-475.

Abstract: Jewish immigrants who came to Israel from Muslim countries of North Africa and the Middle East were transplanted to a radically different, modern society. Their high fertility levels were put critically at odds with changed socioeconomic and mortality conditions. In their countries of origin, high fertility had been consistent with many socioeconomic, cultural, and religious goals, including the survival of male offspring. In Israel, an immediate conflict developed between the desire for male children and high fertility and economic conditions that necessitated a drastic decrease in family size. Previous research has shown that the conflict resulted in a rapid reduction in fertility levels across marriage cohorts of Jewish women of Asian and African origin. We show here that, at the same time, the conflict also led to rapid abandonment of fertility behavior related to the preference for sons. Thus, convergence of the fertility levels of Asian and African immigrants to the lower fertility levels of other Jewish women in Israel - a factor important in the assimilation process

of African and Asian women - was accompanied by convergence in behavior related to sex preferences - a further indicator of absorption into modern Israeli society. Religiosity is a potentially important determinant of contraceptive use and sex preference for children. For example, approximately 50% of women surveyed felt that Judaism forbids the use of family planning.

Data Sources: Fertility survey conducted in 1974 and 1975

Countries: Israel

Subjects/ Variables: Married, urban Jewish women aged 18-54; religiosity (follows Sabbath, kosher, mikveh)

Discipline: Demography

Okun, B. S. (1997). Innovation and Adaptation in Fertility Transition: Jewish Immigrants to Israel from Muslim North Africa and the Middle East. *Population Studies*, 51(3), 317-335.

Abstract: This study examines fertility transition among a population of Jewish immigrants to Israel from Muslim countries of North Africa and the Middle East. The study addresses the impact of socioeconomic factors and culture on the spread of fertility control and birth spacing. Data were obtained from a fertility survey in 1974 and 1975 among a random sample of married urban Jewish women aged 18-54 years. Cohort analysis indicates that Asian-African women in early cohorts during 1940-70 had smaller proportions of ever users of contraception or abortion than European women. Asian-African ever use increased from 70% to 78% between the 1948-51 cohort and the 1964-67 cohort. Fertility declined during 1948-85 among Asian-African women due to a large increase in fertility control at early parities. Asian-African women tended to rely on withdrawal for spacing at low parities. After 1958 European marriage cohorts increased their reliance on pills. Asian-African women steadily increased use of withdrawal until the 1960s; it stabilized thereafter. European women abandoned withdrawal for pill use. Logistic models indicate that Asian and African women aged under 35 years were less likely to have used the pill than Israeli-born women. Pill use was associated with women's educational status and higher socioeconomic status. Women who served in the Israeli military were more likely to have used the pill. Pill use among high-status European and Israeli-born women was associated with socioeconomic and religiosity factors. Pill use among low-status and marginalized Asian-Africans was associated with military service and non-numeracy factors. Culture and military service had an effect only on pill use and not spacing behavior. Findings suggest a decline in importance of ideational factors in explaining behaviors that are already accepted and practiced. Socioeconomic status was important in explaining use of fertility control in all models.

Data Sources: Fertility surveys in 1974 and 1975

Countries: Israel

Subjects/ Variables: Married urban Jewish women aged 18-54 years; Asian-African, European

Discipline: Demography

Okun, B. S. (2000). Religiosity and Contraceptive Method Choice: The Jewish Population of Israel. *European Journal of Population / Revue Européenne de Démographie*, 16, 109-132.

Abstract: The primary purpose of this paper is to explore the relationship between religiosity and contraceptive method choice, among users of contraception. We analyze a representative sample of 1,751 married urban Israeli Jewish women interviewed in 1987-1988. Our findings indicate that the contraceptive choices of religious women are determined largely by considerations unrelated to religious doctrine. A combination of factors, including the suitability of specific methods to fertility control needs, peer influences, and other cultural effects, appear to modify the acceptance and application of a particular religious theology.

Data Sources: The 1987–88 Study of Fertility and Family Formation”, Hebrew University School of Public Health (Peritz and Baras 1992)

Countries: Israel

Subjects/ Variables: 1,751 Jewish, urban currently-married women aged 22–39

Discipline: Demography

Okun, B. S. (2013). Fertility and marriage behavior in Israel: Diversity, change, and stability. *Demographic Research*, 28(17), 457–504.

Abstract: Background: Based on aggregate statistics, the population of Israel, as compared to all or most other developed societies, has very high levels of fertility and marriage (e.g. TFR of 2.96 in 2009 and only 9.7% never married among women aged 40–44 in 2009). However, studying aggregate demographic measures is problematic, because Israel is an extremely heterogeneous society, with family formation patterns differing greatly across numerically important social groups. Until now, little has been documented about the basic fertility and marriage behavior of different population groups. Objective: We describe the fertility and marriage behavior of populations in Israel, broken down by nationality, religion, religiosity and nativity-status. Although our main focus is on a detailed presentation of fertility patterns, we also look at marriage behavior, as it is closely related to fertility in Israel. Methods: We analyze recently available annual data from the Israel Social Surveys for 2002–2009, which, for the first time in several decades, provides detailed information on family and household demographic behavior and direct information on level of religiosity. We focus primarily on comparisons across cohorts born from the late 1940s to the late 1960s and between periods in the early and late 2000s. Results: We provide a detailed portrait of striking diversity in fertility and marriage behavior across population groups, along with important patterns of change and stability across cohorts and over time. We document findings and differential patterns, some unexpected, regarding comparisons across groups and across cohorts. Conclusions: The descriptive findings form the basis for a clearer understanding of fertility and marriage patterns in different population subgroups in Israel. In addition, the reported results suggest many questions for future research, which are outlined in the paper.

Data Sources: Israel Social Surveys, Israel Central Bureau of Statistics, 2002–2009 (7500 individuals annually)

Countries: Israel

Subjects/ Variables: Jews and Arabs; Arabs: Muslims (primarily Sunni) (84%), Christian Arabs (8%); Druze (8%); Jews: (1) ultra-Orthodox (7.6%); (2) religious (10.6%); (3) traditional (39.8); and (4) secular/not religious (41.8%); religiosity

Discipline: Demography

Okun, B. S. (2016). An investigation of the unexpectedly high fertility of secular, native-born Jews in Israel. *Population Studies*, 70(2), 239–257.

Abstract: Secular, native-born Jews in Israel enjoy the socio-economic status of many affluent populations living in other democratic countries, but have above-replacement period and cohort fertility. This study revealed a constellation of interrelated factors which together characterize the socio-economic, cultural, and political environment of this fertility behaviour and set it apart from that of other advanced societies. The factors are: a combination of state and family support for childbearing; a dual emphasis on the social importance of women's employment and fertility; policies that support working mothers within a conservative welfare regime; a family system in which parents provide significant financial and caregiving aid to their adult children; relatively egalitarian gender-role attitudes and household behaviour; the continuing importance of familist ideology and of

marriage as a social institution; the role of Jewish nationalism and collective behaviour in a religious society characterized by ethno-national conflict; and a discourse which defines women as the biological reproducers of the nation.

Data Sources: Israeli Social Survey (ISS), Israel Central Bureau of Statistics (ICBS)

Countries: Israel

Subjects/Variables: Sample of 7500 men and women aged 20 and over

Discipline: Demography

Okun, B. S. (2017). Religiosity and Fertility: Jews in Israel. *European Journal of Population / Revue Européenne de Démographie*, 33(4), 475–507.

Abstract: We analyze the relationship between religiosity and fertility among Jews in Israel—a modern democracy in which there is no separation of religion and state. Micro-level data from the 2009 Israel Social Survey are used to perform multivariate analyses of the odds of having at least three children. The findings from separate analyses of women and men are consistent with a theoretical framework, outlined by McQuillan and C. Goldscheider, which suggests how religiosity affects fertility. In particular, measures of the importance of religious community explain in part the higher levels of fertility among some religiosity groups; attitudes toward religion as a social and political institution as well as norms regarding family building over the life course also partly account for the influence of religiosity on fertility. While women's employment activity is significantly related to their fertility, as many economic theories predict, controlling for paid work in regression models does not affect the estimated relationship between religiosity and women's fertility. We conclude that, in the current context, fertility variation across religiosity groups can be understood largely in terms of the cultural, political, and institutional power of religion, and the impact of religion through community, and via norms and ideals.

Data Sources: Israel Social Surveys (ISS), Israel Central Bureau of Statistics (ICBS)

Countries: Israel

Subjects/Variables: Jewish women (N=1309) and men (N=1238) aged 25–49; religiosity

Discipline: Sociology

Omran, Abdul R.

Omran, A. R. (1973). Islam and Fertility Control. In A. R. Omran (Ed.), *Population Problems and Prospects* (pp. 165-180). Chapel Hill: University of North Carolina.

Summary: High Muslim fertility is a function more of sociological and epidemiological determinants than of theological doctrine. Pronatalism in Islam is real but is neither absolute nor representative of the comprehensive attitude of Islam toward family formation and planning. Methods of birth control are sanctioned by fundamental sources in Islamic law, and in recent years many Muslim countries have adopted family planning policies in agreement with these sanctions. In the choice between contraception and abortion, Islam unequivocally favours contraception. Islam does, however, tolerate abortion if continuation of a pregnancy endangers the health of the mother; further, a few theologians would also tolerate abortion for other reasons provided it is done before ensoulment.

Data Sources: Demographic Yearbook, 1967; World Data Sheet, 1971

Countries: Muslim-majority countries

Subjects/Variables: Muslims

Discipline: Demography

Omran, A. R. (1992). *Family planning in the legacy of Islam*. London: Routledge.

Park, A.T.

Park, A. T. (1962 -1963). An analysis of human fertility in Northern Ireland. *Dublin: Journal of the Statistical and Social Inquiry Society of Ireland*, 21(1), 1-13.

Abstract: There has never been a special inquiry into the population of Northern Ireland such as that of the Royal Commission on Population (1946) in Great Britain. In fact, apart from three questions on fertility in the 1911 census which covered the whole of Ireland and for which the only published fertility tables relevant to Northern Ireland were in respect of Belfast County Borough, the 1961 census schedule was the first one to contain fertility questions. The fertility report from this census will probably be published some time in 1964 For the purpose of this paper, it has been necessary to calculate a measure of fertility which would give an indication of the trend of fertility over the years in different areas within the Province.

Data Sources: 1961 Northern Ireland Census

Countries: Northern Ireland

Subjects/Variables: Married women aged 15-44; Catholic, non-Catholic

Discipline: Demography

Parkerson, Donald H.; Parkerson, Jo Ann

Parkerson, D. H., & Parkerson, J. A. (1988). "Fewer Children of Greater Spiritual Quality": Religion and the Decline of Fertility in Nineteenth-Century America. *Social Science History*, 12(1), 49-70.

Abstract: Married pietistic women had significantly fewer children than other church-going women (about one child less on the average for those who had completed their fertility) by spacing them throughout their childbearing years. Pietistic women married no later than others, and until the birth of their fourth child, they were as likely as liturgicals to have another child at each birth parity level. This suggests that pietists retained their commitment to children throughout their childbearing years but used effective birth-spacing strategies to limit their families to three or four children. We have argued that, for women, the pietistic belief in spiritual free will led to a kind of secular individualism as well as a growth of self-esteem, both of which offered them an alternative to their primary role as childbearer and childrearer. These feelings encouraged married women to become involved in church activities, moral reform groups, and clubs associated with pietism. This movement away from the domestic environment presented women with the opportunity to limit their fertility. The pietistic belief in perfectionism was also important in this regard. Central to this belief was personal conversion and admittance to the church in order to reach a state of divine grace. Tied directly to this idea was the notion that the pietistic mother could (and must) nurture her child to a state of grace as well. This personal conversion and the intensive Christian nurture of the child persuaded married, pietistic women to have fewer children of "greater spiritual quality."

Data Sources: The St. Charles, Illinois, City Directory of 1885

Countries: Unites States

Subjects/Variables: "Liturgical", "pietistic", non-church-attending St. Charles women; regularity of church attendance

Discipline: History

Pasupuleti, Samba Siva Rao; Pathak, Prasanta; Jatrana, Santosh

Pasupuleti, S. S. R., Pathak, P., & Jatrana, S. (2017). Hindu-Muslim Fertility Differential in India: A cohort approach. *Journal of Biosocial Science*, 49(2), 147-172.

Abstract: Hindus and Muslims together account for 94% of the population of India. The fertility differential between these two religious groups is a sensitive and hotly debated issue in political and academic circles. However, the debate is mostly based on a period approach to fertility change, and there have been some problems with the reliability of period fertility data. This study investigated cohort fertility patterns among Hindus and Muslims and the causes of the relatively higher level of fertility among Muslims. Data from the three National Family Health Surveys conducted in India since the early 1990s were analysed using a six-parameter special form of the Gompertz model and multiple linear regression models. The results show a gap of more than 1.3 children per woman between those Muslim and Hindu women who ended/will end their reproductive period in the calendar years 1993 to 2025. The socioeconomic and demographic characteristics of Muslims explain 31.2% of the gap in fertility between Muslims and Hindus, while the desire for more children among Muslims explains an additional 18.2% of the gap in fertility.

Data Sources: National Family Health Surveys (NFHSs)

Countries: India

Subjects/Variables: (NFHS-1, 1992–1993) 89,777 ever-married women aged 13–49 years; (NFHS-2 and NFHS-3, 1998–1999 and 2005–2006) 90,303 ever-married women aged 15–49 years and 124,385 women aged 15–49 years, respectively

Discipline: Applied Statistics

Pearce, Lisa D.

Pearce, L. D. (2002). The Influence of Early Life Course Religious Exposure on Young Adults' Dispositions Toward Childbearing. *Journal for the Scientific Study of Religion*, 41(2), 325-340.

Abstract: Previous research about religion and childbearing focuses on childbearing behavior, yet is motivated by the idea that behavioral outcomes result from the influence of religion on individuals' childbearing dispositions. This article describes how early life religious exposure may influence young adults' childbearing attitudes and preferences as they transition to adulthood. Analyses of intergenerational panel data suggest that, compared with others, young adults with Catholic mothers, or mothers who frequently attend religious services, are more likely to object to voluntary childlessness, to feel the average American family should have more children, and to desire many children for themselves. The effect of having a Catholic mother appears to operate through the mother's own dispositions and behaviors. The effect of their mothers' religious service attendance operates through the young adults' own religious participation and the importance they place on religion. The consistent effects of early life religious exposure on subsequent child-bearing

dispositions outweigh the effects of socioeconomic factors and point to religion as an influential institution in the formation of child-bearing preferences.

Data Sources: The Intergenerational Panel Study of Mothers and Children, an 18-year panel study of children born in the Detroit metropolitan area (Wayne, Oakland, and Macomb Counties)

Countries: United States (Michigan)

Subjects/Variables: First, second, and fourth-parity white children and their mothers. Mothers were interviewed twice in 1962 and once in 1963, 1966, and 1977. In 1980, the mothers were interviewed again and the children born in 1962 were interviewed for the first time

Discipline: Demography

Pearce, L. D. (2002). Integrating Survey and Ethnographic Methods for Systematic Anomalous Case Analysis. *Sociological Methodology*, 32(1), 103–132.

Abstract: This paper describes how the salience of research findings can be enhanced by combining survey and ethnographic methods to draw insights from anomalous cases. Using examples from a research project examining the influence of religion on childbearing preferences in Nepal, the author illustrates how survey data can facilitate the selection of ethnographic informants and how semistructured interviews with these deviant cases leads to improved theory, measures, and methods. A systematic sample of 28 informants, whose family size preferences were much larger than a multivariate regression model predicted, were selected from the survey respondent pool for observation and in-depth interviews. The intent was to explore relationships between religion and fertility preferences that may not have been captured in the initial multivariate survey data analyses. Following intensive fieldwork, the author revised theories about religion's influence, coded new measures from the existing survey data, and added these to survey models to improve statistical fit. This paper discusses the author's research methods, data analyses, and resulting insights for subsequent research, including suggestions for other applications of systematic analyses of anomalous cases using survey and ethnographic methods in tandem.

Data Sources: In-depth interviews with 28 "deviant cases" from the 1996 Chitwan Valley Family Study

Countries: Nepal

Subjects/Variables: Nepalese; importance of religion; high-caste Hindu, low-caste Hindu, Hill Tibeto-Burmese, Newar, Terai Tibeto-Burmese

Discipline: Demography

Pearce, L. D. (2002). The Influence of Early Life Course Religious Exposure on Young Adults' Dispositions toward Childbearing. *Journal for the Scientific Study of Religion*, 41(2), 325–340.

Abstract: Previous research about religion and childbearing focuses on childbearing behavior, yet is motivated by the idea that behavioral outcomes result from the influence of religion on individuals' childbearing dispositions. This article describes how early life religious exposure may influence young adults' childbearing attitudes and preferences as they transition to adulthood. Analyses of intergenerational panel data suggest that, compared with others, young adults with Catholic mothers, or mothers who frequently attend religious services, are more likely to object to voluntary childlessness, to feel the average American family should have more children, and to desire many children for themselves. The effect of having a Catholic mother appears to operate through the mother's own dispositions and behaviors. The effect of their mothers' religious service attendance operates through the young adults' own religious participation and the importance they place on religion. The consistent effects of early life religious exposure on subsequent child-bearing dispositions outweigh the effects of socioeconomic factors and point to religion as an influential institution in the formation of child-bearing preferences.

Data Sources: The Intergenerational Panel Study of Mothers and Children (18-year panel study in Detroit)

Countries: United States (Michigan)

Subjects/ Variables: Mothers interviewed in 1962 (x2), 1963, 1966, 1977, 1980, 1982 (with children)

Discipline: Demography

Pearce, L. D. (2010). Religion and the Timing of First Births in the United States. In C. G. Ellison & R. A. Hummer (Eds.), *Religion, Families, and Health: Population-Based Research in the United States* (pp. 19-39). New Brunswick: Rutgers.

Summary: The chapters assesses the influence of the religious affiliation in which one is raised, as well as the frequency of religious attendance, on the risk of timing of both premarital and marital childbearing for a sample of young men and women in the United States. The relationship between religious involvement and fertility behavior received considerable attention in social demography in the 1950s and 1960s, largely due to a focus on Catholic-Protestant differences in fertility at the time. Pearce shows empirically that both the religious denomination in which one is raised as well as the frequency of religious attendance during adolescence and young adulthood is related to the timing of premaritally and maritally conceived first births, even net of a range of other social and demographic factors. Those raised as Catholic, Evangelical Protestant, or in no religious group are more likely to have a premaritally conceived child. The relationship between religious service attendance and first birth timing, both premarital and marital, is consistent and persistent. Controlling for religious affiliation and other standard demographic and socioeconomic variables, the more often an unmarried person attends religious services, the less likely he/she is to have a child, and the more often a married person attends services, the more quickly he/she will have a first child.

Data Sources: The first 19 waves of the National Longitudinal Survey of Youth (NLSY79)

Countries: United States

Subjects/ Variables: American youth born between 1957-64; Catholic, mainline Protestant, Evangelical Protestant, African

American Protestant, other Protestant, other religion, and no religion; religiosity (attendance)

Discipline: Demography

Pearce, Lisa D.; Brauner-Otto, Sarah R.; Ji, Yingchun

Pearce, L. D., Brauner-Otto, S. R., & Ji, Y. (2015). Explaining religious differentials in family-size preference: Evidence from Nepal in 1996. *Population Studies: A Journal of Demography*, 69(1), 23-37.

Abstract: This paper presents an examination of how religio-ethnic identity, individual religiosity, and family members' religiosity are related to preferred family size in Nepal. Analyses of survey data from the Chitwan Valley Family Study show that socio-economic characteristics and individual experiences can suppress, as well as largely account for, religio-ethnic differences in fertility preferences. These religio-ethnic differentials are associated with variance in particularized religious theologies or general value orientations (like son preference) across groups. In addition, individual and family religiosity are both positively associated with preferred family size, seemingly because of their association with religious beliefs that are likely to shape fertility strategies. These findings suggest improvements in how we conceptualize and empirically measure supra-individual religious influence in a variety of settings and for a range of demographically interesting outcomes.

Data Sources: Chitwan Valley Family Study (CVFS), interviews of a sample of 171 neighbourhoods systematically selected from the Chitwan Valley (5,272 respondents); interviews with subsample aged 15-24 (1,518 individuals)

Countries: Nepal

Subjects/ Variables: Young adults (aged 15–24) resident in Chitwan Valley of Nepal; selected from total population of Hindu (76%), Buddhist (15%), Muslim (0.74%), Christian (0.51%), no religious affiliation (4.5%); selecting four groupings of High-caste Hindu, low-caste Hindu, Garung/Lama/Tamang, Tharu; assessing Religiosity (frequency of praying), theologies, values.

Discipline: Demography

Peri-Rotem, Nitzan

Peri-Rotem, N. (2016). Religion and Fertility in Western Europe: Trends Across Cohorts in Britain, France and the Netherlands. *European Journal of Population/Revue Européenne de Démographie*, 32(2), 231–265.

Abstract: The role of religion in explaining fertility differences is often overlooked in demographic studies, particularly in Western Europe, where there has been a substantial decline in institutional forms of religious adherence. The current study explores the changing relationships between religion and childbearing in Britain, France and the Netherlands. Using data from the Generations and Gender Programme and the British Household Panel Survey, religious differences in completed fertility and the transition to first birth are explored across cohorts of women. In addition, a longitudinal analysis is employed to examine the influence of religion on subsequent childbearing. Although the secularization paradigm assumes that the influence of religion on individual behavior will diminish over time, it is found that religious affiliation and practice continue to be important determinants of fertility and family formation patterns. However, there is some variation in the relationship between religion and fertility across countries; while in France and the Netherlands fertility gaps by religiosity are either consistent or increasing, in Britain, this gap appears to have narrowed over time. These findings suggest that fertility differences by religion also depend on the particular social context of religious institutions in each country.

Data Sources: The British Household Panel Survey (BHPS) (University of Essex, Institute for Social and Economic Research 2010) and the Generations and Gender Programme (GGP) surveys for France and the Netherlands (United Nations 2005)

Countries: Britain, France and the Netherlands

Subjects/ Variables: Birth cohorts per decade (1930s-1970s); Britain: no religion; Protestant, Catholic, other; France: No religion, Catholic, other; Netherlands: no religion, Catholic, Dutch Reformed, conservative Protestant, other

Discipline: Sociology

Peritz, E.; Baras M.

Peritz, E., & M., B. (1992). *Studies in the fertility of Israel*. Jerusalem: The Institute of Contemporary Jewry.

Peters, H.

Peters, H. (1958). Die Geburtenhäufigkeit nach der Religionszugehörigkeit. *Wirtschaft und Statistik*, 10, 24-25.

Data Sources: 1950 Census

Countries: West Germany

Subjects/Variables: The results of the 1950 census showed a much higher average number of children for Roman Catholic women than for Protestant women. By marriage cohorts, there is a significant decrease in the difference per denomination. The difference was weak in urban areas and most pronounced in communities with less than 2000 inhabitants

Discipline: Demography

Philipov, Dimitar; Berghammer, Caroline

Philipov, D., & Berghammer, C. (2007). Religion and fertility ideals, intentions and behaviour: a comparative study of European countries. *Vienna Yearbook of Population Research*, 5, 271-305.

Abstract: European demographers rarely study religion as a determinant of contemporary demographic behaviour. One reason could be the secularisation observed in European countries, implying that the effect of religiosity has been diminishing. This paper aims to show that religion can have an important impact on ideals, intentions and behaviour related to fertility. First we discuss recent trends in religiosity. We base our ensuing hypotheses on three deliberations why religion may have a bearing on fertility: importance of religious teaching, effect of social capital and function of religion to decrease uncertainty. Using FFS data we examine the influence of several measures of religiosity on the ideal number of children and intentions to have a second and third child, as well as on the expected and actual number of children. We find that all measures of religiosity are in general related to a higher ideal number of children, higher odds to intend another child and higher expected and actual number of children. Participation in religious services turns out to be slightly more salient than affiliation and self-assessed religiosity. We also discover that the effect of religion on ideals is more pronounced than its effect on intentions. Ideals stay further away from behaviour than intentions do and hence the influence of religion is intermediated by other social systems.

Data Sources: Fertility and Family Surveys (FFS), 1990s; Gender and Generations Surveys (GGS)

Countries: Europe

Subjects/Variables: Catholics, Protestants, Orthodox and non-religious; religiosity

Discipline: Demography

Pick, James B.; Tellis, Glenda L.; Butler, Edgar W.

Pick, J. B., Tellis, G. L., & Butler, E. W. (1989). Fertility determinants in the oil region of Mexico. *Social Biology*, 36(1-2), 45-66.

Abstract: This study analyzes fertility determinants in the oil region of Mexico, consisting of the states of Veracruz, Tabasco, and Campeche. Data are from the 1980 Mexican census and the unit of analysis is the municipio. The regression models, in which the dependent variables of children ever born and child-woman ratio are examined, reveal religious variables to be most significant, with greater fertility for non-Catholics and persons with no religion than for Catholics. Also of great importance are economic variables. Literacy and urbanization, both "classical" Mexican fertility variables, reduce fertility. There are major differences among three urban/rural and three indigenous language subsamples. Results are discussed vis-a-vis demographic theories and prior research.

Data Sources: 1980 Mexican Census of Population (Secretaria de Programacion y Presupuesto, 1982-85)

Countries: Mexico

Subjects/Variables: Mexicans; "non-Catholic" (Protestant or Evangelical, Jewish, and Other religion), no religion

Discipline: Sociology

Pitcher, Brian L.; Peterson, Evan T.; Kunz, Phillip R.

Pitcher, B. L., Peterson, E. T., & Kunz, P. R. (1974). Residency differentials in Mormon fertility. *Population Studies: A Journal of Demography*, 28(1), 143-151.

Abstract: Although one of the most consistent findings of recent fertility studies is the convergence of the religious differentials in fertility, few data have been analysed to discover Mormon fertility trends and differentials. This paper, based on data obtained on 1,001 Mormon couples, is concerned with describing the effects that the dispersion of Mormon families from the Mormon centre in Utah to surrounding areas with various social conditions is having on the fertility of the re-located Mormon families. Data presented clearly show that such families do, on the average, have a lower fertility than do their Mormon contemporaries residing in the homogeneous Mormon society in Utah. They probably compromise their religious obligations to have children with the contradicting demands of their new environment. Their loyalty to these religious beliefs, however, is confirmed by data which show that they tend to have larger families in their new environments than do their non-Mormon neighbours.

Data Sources: Family genealogical histories

Countries: United States

Subjects/Variables: 1,001 couples born between the years 1800 and 1940, from Utah, the Intermountain States (Idaho, Wyoming, Colorado, Arizona, and Nevada), and the West Coast States (California, Oregon, and Washington)

Discipline: Demography

Plakans, Andejs; Halpern, Joel M.

Plakans, A., & Halpern, J. M. (1981). An Historical Perspective on Eighteenth Century Jewish Family Households in Eastern Europe: A Preliminary Case Study. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 18-32). Leiden: Brill.

Summary: Analysis of Russian Empire censuses for Baltic provinces of Livland, Estland, and Kurland in the 18th century by family size, occupations, conjugal family units, proportion of single women versus Latvian peasant rate, age at marriage and first childbirth

Data Sources: Russian Empire censuses ("head tax" or "soul tax")

Countries: Latvia

Subjects/Variables: Jewish Latvians

Discipline: Demography

Pobee, John S.

Pobee, J. S. (1977). *Religion, morality, and population dynamics : proceedings of the Seminar on Moral and Religious Issues in Population Dynamics and Development, University of Ghana, Legon, 31 March-4 April, 1974. Legon, Ghana: Population Dynamics Programme, University of Ghana.*

Potvin, Raymond H.; Westoff, Charles F.; Ryder, Norman B.

Potvin, R. H., Westoff, C. F., & Ryder, N. B. (1968). Factors Affecting Catholic Wives' Conformity to Their Church Magisterium's Position on Birth Control. *Journal of Marriage and Family*, 30(2), 263-272.

Abstract: The data reported here derive from the National Fertility Study, a probability sample of 5,600 United States wives, surveyed in late 1965. The proportion of Catholic wives using methods of contraception other than rhythm increased since 1955 and became a majority by 1965. This type of nonconforming is related strongly and inversely to such measures of religiousness as frequency of receiving communion and, less directly, to measures of socioeconomic status and ethnic background. There is an especially pervasive tendency for contraceptive nonconformity to be related to age at marriage, independently of other measured variables. A comparison of data by birth cohort and age for comparable studies in 1955, 1960, and 1965 reveals a systematic reduction, and at progressively earlier ages, in the proportion of Catholic women conforming to their Church Magisterium's position on birth control. The trend prevails for all socioeconomic subdivisions and degrees of religiousness. Between 1955 and 1960 those with less education showed the greater increase in the use of methods other than rhythm; between 1960 and 1965, those with more education showed the greater increase. This reversal may be associated with the advent of oral contraception and the publicity about the theological debates within the Catholic Church.

Data Sources: National Fertility Study 1965

Countries: United States

Subjects/Variables: 5600 US wives; Catholic

Discipline: Demography

Prais, S. J.; Schmool, Marlana

Prais, S. J., & Schmool, M. (1973). The Fertility of Jewish Families in Britain. *The Jewish Journal of Sociology*, 15(2), 189-203.

Abstract: A survey of Jewish male births, based on records of 20 Mohalim, was carried out in London in 1970-1971. Jewish fertility is 20% lower than that of the general population. Birth spacing is very similar to the general population up to the second child, but there are relatively fewer Jewish families with more than two children. Average number of children per family is 2.69 for Ultra-Orthodox, 1.74 for Central Orthodox, and 1.80 for Reform/Liberal.

Data Sources: Surveys to 20 Mohalim (circumcisers)

Countries: United Kingdom (England)

Subjects/Variables: 694 births (Oct 1970 - Oct 1971) to London Jewish mothers

Discipline: Demography

Praz, Anne-Françoise

Praz, A.-F. (2003). Politique conservatrice et retard catholique dans la baisse de la fécondité: l'exemple du canton de Fribourg en Suisse (1860-1930). *Annales de démographie historique*, 106(2), 33-55.

Abstract: The late fertility decline of Catholic populations (1860-1930) is usually explained by the religious norms concerning contraception and by the degree of secularization. However religion also guided the political practices and institutions that, in turn, influenced the population's procreative choices. This comparative analysis examines the impact of the political-religious factor on the fertility decline in two Protestant villages (from the canton of Vaud) and two Catholic villages (from the canton of Fribourg), which experienced the same economic change.

The political attitude to public debate on birth control provides a first example. The "tolerance" of the authorities in the canton of Vaud (Protestant/ progressive) permitted a wide public discussion on the subject; this contrasted with the strategy of "silence" implemented by the government of the canton of Fribourg (Catholic/ conservative). It is however difficult to quantify the impact of these policies on the procreative decisions of the families.

Thanks to the event history analysis it is possible to evaluate the impact of the differing school policies on the costs of education. In the canton of Vaud the opportunity and monetary costs of schooling their children was high for the parents for both boys and girls. In the canton of Fribourg, the school system permitted many exceptions in school attendance, especially for girls; by gender discrimination, parents were able to seriously reduce the overall costs of bringing up children. The result was that birth control was less imperative and this cost disparity increased the lag in the pace of fertility decline. One can conclude that gender analysis provides an effective and further mechanism in explaining the late fertility decline of the catholic populations.

Data Sources: Reconstructed families from parish registers and marital records (available in Switzerland since 1876), supplemented by different sources (population registers, bourgeois registers, point censuses)

Countries: Switzerland

Subjects/Variables: Births in villages in Broc and Delley-Portalban, Freiberg, and Chavornay and Chevroux, Vaud

Discipline: Economics

Praz, A.-F. (2006). State institutions as mediators between religion and fertility: A comparison of two Swiss regions, 1860-1930. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 147-176). Dordrecht: Springer.

Summary: Study of how religious norms and values affected compulsory schooling, gender differences in education, and parental investment in education, in turn influencing fertility decisions in the Swiss cantons of Vaud (Protestant) and Fribourg (Catholic). The author analyzes religious norms and values pertaining to fertility, and interactions with political elites and their strategies, effecting state institutions and policies. In particular, differences in school policy, inspired by religious values and norms, had an impact on the cost of children at the individual level and through this on fertility levels. The growing costs of children in Protestant families constituted an important incentive to practice birth control. Catholic parents avoided considerable education costs, above all by discriminating against their daughters.

Data Sources: Parochial and civil registers (1860-1930)

Countries: Switzerland

Subjects/ Variables: Swiss cantons of Vaud (Protestant) and Fribourg (Catholic), two pairs of villages

Discipline: History

Premi, Mahendra

Premi, M. (2004). Religion in India: A Demographic Perspective. *Economic and Political Weekly*, 39(39), 4297-4302.

Abstract: This paper estimates religion-related population data for Assam in 1981 and for Jammu and Kashmir in 1991. It then examines the aggregate population composition and growth rates on the basis of religion. It also analyses the child sex ratios for different religious communities and, wherever necessary, the state-level data.

Data Sources: Censuses 1961-2001

Countries: India

Subjects/ Variables: Indians; Hindus, Muslims, Christians, Sikhs, Buddhists, Jains, other

Discipline: Demography

Prioux, France; Régnier-Loilier, Arnaud

Prioux, F., & Régnier-Loilier, A. (2008). Does religious practice influence family behaviours? *Population and Societies*, 447, 1-4.

Abstract: In France, Catholics traditionally have larger families than non-Catholics. Now that religious practice is much less widespread, does this difference still exist? Other religions, Islam in particular, are gaining ground due to immigration. Do practising members of these other faiths also have more children than the average? After an overview of religious practice in France today, Arnaud Régnier-Loilier and France Prioux explain the relationships between religiosity, marriage and the family.

Data Sources: Étude des relations familiales et intergénérationnelles survey (the French version of the European Generation and Gender Survey) conducted in 2005 by INED and INSEE

Countries: France

Subjects/Variables: Catholics, Muslims, Protestants, other, no affiliation; religiosity: attendance
Discipline: Demography

Rajan, S. Irudaya

Rajan, S. I. (2005). District Level Fertility Estimates for Hindus and Muslims. *Economic and Political Weekly*, 40(5), 437-446.

Abstract: This paper provides estimates of crude birth rates and total fertility rates for Hindus and Muslims for 594 districts of India, and assesses the state and district level differentials across the country. It reconfirms that there is a regional variation in fertility in India, with higher fertility in the north than in the southern and western parts, irrespective of religious affiliation. However, unless we understand the regional as well as the undocumented cross-national migration of Muslims, the picture of higher population growth rates among Muslims, reported in the 2001 Census, is likely to persist in the future, in spite of the moderate decline in their fertility.

Data Sources: 2001 Census

Countries: India

Subjects/Variables: Indians; Hindus and Muslims

Discipline: Demography

Rajput, Kishor Singh

Rajput, K. S. (2011). *Fertility and Health Behaviour Among Hindu and Muslim Women in Assam*. New Delhi: Concept Publishing.

Summary: The objectives of the study are: (1) to find out the existing level of fertility and fertility behaviour among Hindus and Muslims; (2) to find out the effect of important socio-economic variables of fertility and fertility behaviour among Hindus and Muslims; (3) to find out the maternal health care experience of these communities of Assam, viz., the maternal health problems, treatment behaviour and avenues of treatment seeking, in case of health problems; (4) to find out the effect of important socio-economic variables on the basic reproductive health behaviour of Hindus and Muslims. Particular emphasis has been placed on areas such as contraceptive use, son preference, breastfeeding practices, fertility, antenatal care, institutional delivery, etc, among the Hindu and Muslim women, and the influence of religion on them. The results show that the Hindu and Muslim women exhibit variation in fertility behaviour, viz., in areas like the use of contraception and desire for additional children. But fertility differences are due to differences in the composition of the socio-economic characteristics of the women and the family, not religion.

Data Sources: Questionnaires in Sonitpur district, Assam, April-July 2006

Countries: India (Assam)

Subjects/Variables: 503 Assam women (245 Hindu, 258 Muslim), aged 13-49

Discipline: Social Sciences

Rao, N. Baskara; Kulkarni, P.M.; Rayappa, P. Hanumantha

Rao, N. B., Kulkarni, P. M., & Rayappa, P. H. (1986). *Rao, N Baskara, P M Kulkarni and P Hanumantha Rayappa*. New Delhi: South Asian Publishers.

Summary: During 1960-1969 and 1975-1979, the total fertility rate in Dharwad, Dakshina Kannada, and Mandya districts combined declined from 6.8 to 4.1. One-third of the decline is due to the decline in the proportion of the population who married, the remaining two-thirds due to decline in marital fertility. Age at marriage increased with increased women's education, but desire for children decreased. Caste and religion have the effect of lowering fertility for dominant castes and raising fertility for Muslims. But socio-economic factors played a miniscule role in the decline of fertility. The official family planning programme was the key factor.

Data Sources: Karnataka Fertility Survey: interviews in Karnataka, India, funded by World Bank project 'Case Studies of the Determinants of Fertility Decline in Sri Lanka and South India' (K.C. Zachariah)

Countries: India

Subjects/Variables: 2995 households, interviewed 1979-1980; Hindus, Muslims, Christians, other

Discipline: Demography

Rashad, Hoda; Eltigani, Eltigani E.

Rashad, H. E., Eltigani E. (2005). Explaining Fertility Decline in Egypt. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 174-198). London: Hurst.

Summary: The chapter aims to better understand the interplay of forces that influenced fertility trends, and identify the main contextual factors that supported or impeded the transitional path in Egypt. Contextual factors include: population policy; cultural dynamics; socio-economic conditions. The government's initial reluctance to openly support family planning efforts has been explained by two interrelated factors: adoption of the economic development model and reluctance to arouse religious antagonism. The estimated TFR in the 1960s of 7.0 live births decreased to 3.4 in 1996/1998. The decline is related to increased use of family planning methods, and an outcome of the contemporary socio-economic environment.

Data Sources: 1980 Egyptian Fertility Survey; 1995 EDHS

Countries: Egypt

Subjects/Variables: Egyptian, Muslims

Discipline: Reproductive Health

Reddy, P.H.

Reddy, P. H. (2003). Religion, Population Growth, Fertility and Family Planning Practice in India. *Economic and Political Weekly*, 38(33), 3500-3509.

Abstract: The differential growth rates of Hindu and Muslim populations in India, as well as differences in acceptance of family planning practices, have always formed the subject of controversial debate. Based primarily on five national level surveys conducted between 1970 and 1998, this paper makes an attempt to analyse the differential growth rates of the Hindus and Muslims in India, their fertility levels and family planning practices observed by them.

Data Sources: Survey of knowledge, attitudes and family planning practice in India by the Operations Research Group (ORG), Baroda (1970-1971); all-India survey of family planning practices by ORG (1980-1981); all-India survey of family planning practices by ORG (1988-1989); first National Family Health Survey (NFHS-1), ministry of health and family welfare (MOHFW), 1992-1993; the NFHS-2, 1998

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Rele, J.R.; Kanitkar, Tara

Rele, J. R., & Kanitkar, T. (1976). Fertility Differentials by Religion in Greater Bombay: Role of Explanatory Variables. In L. T. Ruzicka (Ed.), *The Economic and Social Supports for High Fertility* (pp. 371-384). Canberra: Department of Demography, Australian National University.

Summary: Differentials in marital fertility by religion of the wife were analysed, in respect of a sample of 7,872 currently married women in Greater Bombay, carried out in 1966. The Zoroastrians had the lowest and the Muslims and 'others' the highest fertility. Hindus and Christians had similar average fertilities, inbetween the two extremes. The study finds a strong negative association between education of the wife and her fertility. Controlling for education, differentials between Hindus and Muslims narrowed but did not disappear. Convergence between Muslims and Hindus is expected.

Data Sources: Fertility study of Great Bombay, 1966

Countries: India

Subjects/Variables: 7,872 currently married women in Greater Bombay; Muslims, Hindus, Christians, Zoroastrians

Revelle, Roger; Glass, David Victor

Revelle, R., & Glass, D. V. (1972). *Population and social change*. London: E. Arnold.

Richards, Jim

Richards, J. (2009). A Roman Catholic Perspective on Fertility Issues: Objective Truths, Moral Absolutes and the Natural Law. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 35-56). London: Jessica Kingsley Publishers.

Summary: Richards discusses the Roman Catholic Church's categorical views of abortion, the use of contraception, third-party assisted conception, sex selection and the use of other fertility-related technologies. On a continuum of restrictive-permissive approach to issues in the area of fertility, the Roman Catholic Church in its doctrines and teaching is on the restrictive side.

Data Sources: Theoretical discussion

Riddell, Katrina

Riddell, K. (2009). *Islam and the Securitisation of Population Policies: Muslim States and Sustainability*. London: Routledge.

Summary: Islam is not inherently hostile toward family planning and population control. Rather, a variety of nuanced interpretations, ranging from orthodox to modernist, have manifested nationally and internationally with varied effect.

Data Sources: Official demographic and fertility reports of, eg., Ministries of Health and Population in Pakistan and Iran, the UN and UNFPA, Population Reference Bureau (PRB), the National Institute of Population Studies in Pakistan, and the Family Planning Association of the Islamic Republic of Iran. After 1989, Iranian discourse engaged Islam – its teachings, symbols and the identification of it as a security referent – to produce a discourse with wide reaching social appeal. In Iran Islam enabled the development of a discourse on population-sustainability-security that was, and remains, consistent with global norms and objectives. In Pakistan, from the 1970s, Islamic ideas become highly informative to government, agent and public responses to population, often resulting in overtures to conservatism which disguised actual commitment to population control. Elite understandings in Pakistani discourse from 1988 to the present are consistent with the global population-sustainable development-security paradigm. From the late 1980s Pakistani governments have attempted to redress religio-political orthodoxy through moderate Islamic discourses and modernisation policies. Cognisant of the influence of Islamic opinions and agents, governments have countered orthodox objectionism with Islamic language and symbols. Population, revived as a national socio-economic concern in the late 1980s, has been prioritised and discursively elevated to security status since 2000.

Countries: Iran, Pakistan

Discipline: Social and Cultural Studies

Rifa'i, Akhmad; Dwiyanto, Agus

Rifa'i, A., & Dwiyanto, A. (2005). Muslim Society and Population Policy in Indonesia. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 81-101). London: Hurst.

Summary: Discusses issues facing Indonesian population policy over the past 30 years.

Data Sources: Central Bureau of Statistics 1983, 1993

Countries: Indonesia

Subjects/Variables: Indonesian Muslims

Rijken, Arieke J.; Liefbroer, Aart C.

Rijken, A. J., & Liefbroer, A. C. (2009). The Influence of Partner Relationship Quality on Fertility. *European Journal of Population / Revue Européenne de Démographie*, 25, 27-44.

Abstract: This study examines whether partner relationship quality influences fertility, and if so, in which direction and which aspects of relationship quality are relevant. Competing hypotheses are

tested. One hypothesis assumes that higher relationship quality leads to higher rates of childbearing, as a high-quality relationship offers the most favourable environment to raise children. An opposite hypothesis expects that lower relationship quality leads to higher rates of childbearing, as couples might have children in order to improve their relationship. Hazard analyses are performed using three waves of the Panel Study on Social Integration in the Netherlands. Findings indicate that positive as well as negative interaction between partners has a negative effect on first- and higher-order birth rates. This suggests that couples are most likely to have children if they do not have too much negative interaction, but neither interact in a very positive way. Value consensus negatively influences higher-order birth rates.

Data Sources: PSIN (Liefbroer and Kalmijn 1997)

Countries: Netherlands

Subjects/ Variables: Six waves of data collection (1987–2006) among a sample of Dutch young adults, with 1,775 interviews in first wave; homogamy measured by age, education and religiosity

Discipline: Social Science, Demography

Rindfuss, Ronald R.

Rindfuss, R. R. (1980). Minority Status and Fertility Revisited - Again: A Comment on Johnson. *American Journal of Sociology*, 86(2), 372-375.

Abstract: The minority-status hypothesis argues that even after the minority group has acquired the socioeconomic status characteristics of the majority group, fertility differences will persist. The theoretical discussion over these two hypotheses, from the Goldscheider and Uhlenberg (1969) article on, has been cast in terms of change over time. The central question is: Do changes over time in the differences in socioeconomic status composition of the groups under consideration produce concomitant changes in fertility differences among these groups? But Johnson and other authors apply a cross-sectional approach. Johnson's article (as well as earlier follow-ups on the Goldscheider and Uhlenberg article) fails to take into account social, cultural, and historical context. Neither the characteristics hypothesis nor the minority-group-status hypothesis are specific enough to be testable.

Ritterband, Paul

Ritterband, P. (1981). Introduction. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 1-17). Leiden: Brill.

Summary: Discussion of the contribution of historical demography in Jewish studies. Summary of changes in Jewish Fertility from the beginning of the European demographic transition, including available historical data. Continued differentiation after emancipation was a result of structural non-assimilation. The Jewish population grew enormously in the 18th-19th centuries, but Jews of Western Europe began to limit family size most severely and earlier than other groups in the 19thC. Jewishness not only implies certain doctrines and ritual practices and loyalty to religious polity, but implied occupation and place of residence (increasingly urban, which in turn affected age at marriage, age-specific fertility, propensity to marry, infant fertility. Reduced family size is as much culturally as socially determined

Data Sources: General discussion

Rizk, Hanna

Rizk, H. (1978). Fertility Trends and Differentials in Jordan. In J. Allman (Ed.), *Women's Status and Fertility in the Muslim World* (pp. 113-130). New York: Praeger.

Summary: The main purpose of the study was to investigate the fertility history of women in the sample, their attitudes toward the size of their families, the extent and effect of knowledge and use of contraceptives if any, on fertility levels, and socioeconomic status of husbands and wives. Respondents were classified also into the two major religions prevailing in the area: 93.1 percent of the respondents were Muslims, 6.8 percent were Christians, and 0.2 percent were others or unknown. Differentials in fertility were found in the study between of educational levels attainment, socioeconomic status, and religious groups.

Data Sources: Survey based on the International Union for the Scientific Study of Population (IUSSP) publication, *Variables and Questionnaire for Comparative Fertility Survey*.

Countries: Jordan

Subjects/Variables: Ever-married women from Jordan aged 15-49

Discipline: Demography

Robinson, Alan

Robinson, A. (1961). The geography of human fertility in Northern Ireland (1961). *Irish Geography*, 5, 320-331.

Abstract: It is intended in this paper to examine fertility throughout the Province from a geographical point of view by mapping the feature. In particular an attempt is made to demonstrate the relationships between high fertility and marginal or remote situations. The average fertility rate for Northern Ireland in 1961 was 443.6. Where Catholics form the majority of the population, the fertility is higher than 443. Thus the Falls (91% Catholic), Smithfield (90% Catholic), Newry (72% Catholic), and Ballycastle (57% Catholic) areas have fertilities of 547, 571, 529, and 492 respectively.

Data Sources: 1961 Northern Ireland Census

Countries: Northern Ireland

Subjects/Variables: Northern Ireland women aged between 15 and 49 years

Discipline: Geography

Robinson, Gilbert Kelly

Robinson, G. K. (1936). The Catholic birth rate: Further facts and implications. *American Journal of Sociology*, 41(6), 757-766.

Abstract: The decline in the Catholic birth-rate is due in part to the fact that children of immigrants have smaller families than immigrants, since in selected Chicago census tracts which are mostly Polish or mostly Italian the rate of reproduction in immigrant families is approximately twice as

great as in second-generation families. When the major portion of immigrant women pass beyond the child-bearing ages, one factor in the Catholic birth-rate decline will cease to operate. With the existing immigration law there is little replenishing of Italian and Polish immigrants of productive ages and a decidedly lower birth-rate is the result. The birth-rate in second-generation Catholic families in Chicago also declined sharply between 1920 and 1930. The rapid decline in the birth-rate among those of Polish and Italian descent is found to be applicable to both the native white and the foreign-born white, and this decline among the native white was more rapid from 1920 to 1930 than was that of the native white population of the United States as a whole. The present age distribution of those of Italian and Polish descent in the United States is favorable to population increase in these nationalities during the next fifteen years despite the decline in the birth-rates, since an unusually large proportion of those of Italian and Polish descent are just entering the ages of productivity.

Data Sources: Census 1930

Countries: United States

Subjects/Variables: Italian and Irish Catholics in Chicago

Discipline: Demography

Rowthorn, Robert

Rowthorn, R. (2011). Religion, fertility and genes: A dual inheritance model. *Proceedings of the Royal Society B*, 278(1717).

Abstract: Religious people nowadays have more children on average than their secular counterparts. This paper uses a simple model to explore the evolutionary implications of this difference. It assumes that fertility is determined entirely by culture, whereas subjective predisposition towards religion is influenced by genetic endowment. People who carry a certain 'religiosity' gene are more likely than average to become or remain religious. The paper considers the effect of religious defections and exogamy on the religious and genetic composition of society. Defections reduce the ultimate share of the population with religious allegiance and slow down the spread of the religiosity gene. However, provided the fertility differential persists, and people with a religious allegiance mate mainly with people like themselves, the religiosity gene will eventually predominate despite a high rate of defection. This is an example of 'cultural hitch-hiking', whereby a gene spreads because it is able to hitch a ride with a high-fitness cultural practice. The theoretical arguments are supported by numerical simulations.

Discipline: Economics

Ryder, Norman B.; Westoff, Charles F.

Ryder, N. B., & Westoff, C. F. (1971). *Reproduction in the United States, 1965*. Princeton: Princeton University Press.

Régnier-Loilier, Arnaud; Prioux, France

Régnier-Loilier, A., & Prioux, F. (2008). La pratique religieuse influence-t-elle les comportements familiaux? *Population et Sociétés*, 447.

Abstract: Catholic families traditionally have more children than others in France. Does the gap still exist today when religious practice has declined significantly? Other religions, especially Islam, are expanding because of immigration. Do those who practice them also have more children than average? After having made an inventory of religions today in France, Arnaud Régnier-Loilier and France Prioux explain the relationship between religious practice, marriage and family.

Data Sources: Erfi, the French version of the international survey Generations and Gender

Countries: France

Subjects/Variables: French women and men aged 18 to 79; Catholic, Muslim, other

Discipline: Demography

Sabagh, Georges; Lopez, David

Sabagh, G., & Lopez, D. (1980). Religiosity and Fertility: The Case of Chicanas. *Social Forces*, 59(2), 431-439.

Abstract: Data from a probability sample of 1,129 Chicanas (Mexican American women) married to Chicanos and interviewed in Los Angeles in 1973 were used to analyze the effects of religious norms on the fertility of Catholic women 35-44 years old in the sample. The findings indicate that if religiosity is a measure of adherence to the norms of the Roman Catholic Church, then these norms do have a net impact on the fertility of Chicanas reared in the United States but not in the fertility of those brought up in Mexico. The other independent variables in the multiple regression analysis include indices of socioeconomic status, a scale of sociocultural ethnicity, two measures of ghettoization, and age at marriage. The findings imply that the characteristics of the country of upbringing have to be taken into account in any analyses of the effects of religious norms on the reproductive behavior of Catholics.

Data Sources: 1973 interviews of a probability sample of 1,129 women in Los Angeles

Countries: United States

Subjects/Variables: Mexican-American women; Catholic; religiosity (attendance, subjective importance to woman and husband)

Discipline: Sociology

Saksena, D.N.

Saksena, D. N. (1973). *Differential Urban Fertility*. Lucknow, India: Demographic Research Centre, Department of Economics, University of Lucknow.

Salehi-Isfahani, Djavid; Abbasi-Shavazi, M. Jalal; Hosseini-Chavoshi, Meimanat

Salehi-Isfahani, D., Abbasi-Shavazi, M. J., & Hosseini-Chavoshi, M. (2010). Family Planning and Fertility Decline in Rural Iran: The impact of rural health clinics. *Health Economics*, 19(S1), 159-180.

Abstract: During the first few years of the Islamic Revolution of 1979, and aided by pro-natal government policies, Iranian fertility was on the rise. In a reversal of its population policy, in 1989, the government launched an ambitious and innovative family planning program aimed at rural families. By 2005, the program had covered more than 90% of the rural population and the average number of births per rural woman had declined to replacement level from about 8 births in the mid 1980s. In this paper, we evaluate the impact of a particular feature of the program – health houses – on rural fertility, taking advantage of the variation in the timing of their construction across the country. We use three different methods to obtain a range of estimates for the impact of health houses on village-level fertility: difference-in-differences (DID), matching DID, and length of exposure. We find estimates of impact ranging from 4 to 20% of the decline in fertility during 1986–1996.

Data Sources: Census; Ministry of Health and Medical Education (MOHME)

Countries: Iran

Subjects/ Variables: 14 176 villages, children aged 0–4 years to women aged 15–49 years

Discipline: Economics, Health

Sander, William

Sander, W. (1992). Catholicism and the Economics of Fertility. *Population Studies*, 46(3), 477-489.

Abstract: In this paper, we examine the effect of Catholicism on fertility in the United States. Several new findings are presented. Most importantly, it is shown that many studies on Catholicism and fertility are seriously flawed because of sample selection bias, which occurs because ex-Catholics prefer smaller families than non-Catholics. We also show that religious activity has no effect on fertility if it is treated as an endogenous variable. Further, it is shown that the fertility transition in the United States is partly related to the changing effect of Catholic norms. Thus, the direct effect of economic variables, such as women's earnings, on fertility might have been overstated by economists.

Data Sources: The National Opinion Research Center's 'General Social Survey, 1973-1989'

Countries: United States

Subjects/ Variables: 1,500 English-speaking persons, 18 years of age or older, who lived outside institutions in the United States

Discipline: Economics

Saw, S.H.

Saw, S. H. (1989). Muslim Fertility Transition: The Case of the Singapore Malays. *Asia-Pacific population journal*, 4(3), 31–40.

Scheitle, Christopher P.; Kane, Jennifer B.; Van Hook, Jennifer

Scheitle, C. P., & Kane, J. B. V. H., Jennifer. (2011). Demographic Imperatives and Religious Markets: Considering the Individual and Interactive Roles of Fertility and Switching in Group Growth. *Journal for the Scientific Study of Religion*, 50(3), 430-481.

Abstract: Two models seeking to explain the growth and decline of religious groups are prevalent in the literature. The religious market approach emphasizes the role of intergroup competition and in doing so focuses on religious switching. Another perspective emphasizes demographic mechanisms, particularly fertility. Research to date has not considered how switching and fertility interact as mechanisms of growth. Switching and fertility share a significant role in the growth trajectory of a religious group. Early success in gaining members through switching has an important long-term impact, which fertility alone cannot produce. The age of those switching into a group can also have significant consequences for the effects of fertility.

Data Sources: Theoretical discussion

Discipline: Sociology

Schellekens, Jona; Anson, Jon

Schellekens, J., & Anson, J. (2007). Introduction. In J. Anson & J. Schellekens (Eds.), *Israel's Destiny: Fertility and Mortality in a Divided Society* (pp. 1-14). New York: Routledge.

Summary: Overview of research on Fertility, mortality, and related issues in Israel and Palestine.

Countries: Israel

Schellekens, Jona; Eisenbach, Zvi

Schellekens, J., & Eisenbach, Z. (2002). The Predecline Rise in Israeli Moslem Fertility. *Economic Development and Cultural Change*, 50(3), 541-555.

Abstract: One of the largest predecline rises in fertility occurred among Israeli Moslems, from approximately 6.5 births among women born before 1900 to 8.5 births among women born in the 1920s and early 1930s. This rise culminated in a total fertility rate of well over nine births per woman during the 1960s. In the early 1970s, the total fertility rate started to decline, reaching a level of 4.7 by the late 1980s. Nuptiality seems to have been declining despite a decline in widowhood. Hence, the proximate

determinant that accounts for much of the rise in fertility is probably postpartum infecundability. The predecline rise in fertility was probably the result of special circumstances, namely, the close interaction of a developed Jewish economy with an underdeveloped Arab economy. When Arab income rose, partly as result of a growing Jewish demand for agricultural produce, breast milk substitutes would have come increasingly within reach of the mostly rural Arab population. Women's education also benefited from the growth in income, contributing to the decline in breast-feeding at a later stage and, eventually, to the fertility decline, which started in the 1970s.

Data Sources: Censuses (1931-1990s); detailed fertility survey carried out by the Department of Demography of the Hebrew University during 1974–75 (3000 Israeli Arabs, including 2300 Muslims)

Countries: Palestine/Israel

Subjects/Variables: Muslim Palestinians

Discipline: Demography

Schellekens, Jona; Poppel, Frans van

Schellekens, J., & Poppel, F. v. (2006). Religious differentials in marital fertility in The Hague (Netherlands), 1860-1909. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 59-82). Dordrecht: Springer.

Summary: Examination of whether religious differentials in fertility (between Jews, Catholics, Protestants) are the result of socioeconomic or religious-ideological factors, in respect of the populations of The Hague in the late nineteenth century. The study investigates how proximate determinants account for the religious differentials and whether the Jews were forerunners in the marital fertility transition in Europe. The results provide some evidence of relatively low levels of parity-dependent fertility control among Jews before the transition and among Catholics during the transition. Religious ideology probably accounts for the low level of fertility control among Catholics. The findings do not support the hypothesis that Jews were forerunners in the marital fertility transition.

Data Sources: Population registers

Countries: Netherlands

Subjects/Variables: Population of The Hague, second half of 19th century. Jews (mostly Ashkenazim); Catholics; Protestants (mostly Dutch Reformed, some Calvinists, liberal Protestant groups).

Variables: age of the woman; marital duration; a dummy variable indicating the first year of marriage; age difference between the woman and her husband; infant mortality; the number of births, or crude parity; and the number of surviving children, or net parity.

Discipline: Sociology/Anthropology

Schenker, Joseph G.; Rabenou, Vicki

Schenker, J. G., & Rabenou, V. (1993). Family planning: cultural and religious perspectives. *Human Reproduction*, 8(6), 969–976.

Abstract: The world population explosion has caused political leaders to look upon national and regional birth control projects as vital. Support for regulation of individual fertility has been evident in all cultures, and at all times, even in those societies in which social and religious rules have favoured the abundant production of children. As the secularization of Western society and scientific enquiry gained momentum during the modern period, knowledge of reproduction increased and was applied to control human population growth. The various methods of contraception and their development through the years from the ancient ideas to the modern era are presented. Each approach to fertility control has its advantages and disadvantages. No one method is perfect for everyone, for every clinical setting, and in every culture. Higher levels of fertility have

been associated with 'traditional', religious prohibitions on some forms of birth control, 'traditional' values about the importance of children and the priority of family, and 'traditional' family and gender roles reinforced by religion. The attitude of the main religious groups to contraceptive practice is discussed.

Data Sources: Overview of religious attitudes to birth control

Discipline: Obstetrics and Gynaecology

Schiff, Gary S.

Schiff, G. S. (1981). The Politics of Fertility Policy in Israel. In P. Ritterband (Ed.), *Modern Jewish Fertility* (pp. 255-278). Leiden: Brill.

Summary: Examines whether Israel has a policy concerning fertility, and what that policy is, whether pro- or antinatalist, and how it is implemented. The study finds a pro-natalist policy expressed since the 1960s, yet with family-planning support.

Data Sources: Policy examination

Countries: Israel

Subjects/Variables: Israeli Jews

Discipline: Demography

Schmelz, U.O.

Schmelz, U. O. (1985). Religiosity and fertility among the Jews of Jerusalem *Papers in Jewish Demography* (pp. 157-185). Jerusalem: The Institute of Contemporary Jewry, The Hebrew University of Jerusalem.

Summary: There has been a convergence between the Jews of Asia-Africa and those from Europe. So Israel's Jews, including those of European origin, did not participate in the fertility slump in developed countries since the 1970s. As origin-linked differentials of fertility subsided, the disparities by religiosity assumed increased prominence in the population. The rate of fertility among the very religious (ultra-Orthodox) is high (estimated 6.0), and so seems bound to increasingly influence overall levels of Jewish fertility in Israel.

Data Sources: All births 1970-1974 to Jewish women resident in Jerusalem of European or Israeli origin (n=17,150); most births 1975-1976 in Jerusalem to married Jewish women (n=16,100); all births in 1983-1984 to Jewish women resident in Jerusalem (n=17,650)

Countries: Israel

Subjects/Variables: Jewish women resident in Jerusalem; religiosity (practice of mikve, husband in yeshiva or rabbi, residential neighbourhood)

Discipline: Demography

Schnabel, Landon

Schnabel, L. (2017). Secularism and Fertility Worldwide. **, **(), **.**

Abstract: This study hypothesizes a link between societal secularism and fertility. Using country-level data from multiple sources (N=181) and multilevel data from 55 countries in the World Values Survey (N=78,639), I document a strong negative relationship between societal secularism and both country-level and individual-level fertility. Secularism, even in small amounts, is associated with population stagnation or even decline, whereas highly religious countries have higher fertility. This country-level pattern is driven by more than aggregate lower fertility of individual nonreligious people. In fact, secularism is more closely linked to religious than nonreligious people's fertility and appears to be a function of different cultural values related to gender and reproduction in more secular societies. Beyond its importance for the religious composition of the world population, the societal-level association between secularism and fertility is relevant

Data Sources: 2011 update of the 2008 Association of Religion Data Archives (ARDA) National Profiles (the United Nations, the World Christian Database, Freedom House, the Religion and State Project, the Polity IV Project, the Heritage Foundation, the Correlates of War Project, the CIRI Human Rights Data Project, and the CIA's World Factbook); sixth wave (2010-2014) of the World Values Survey (N=78,639)

Countries: 55 countries

Subjects/Variables: Worldwide

Discipline: Sociology

Schoonheim, Marloes

Schoonheim, M. (2006). *Mixing Ovaries and Rosaries: Catholic Religion and Reproduction in the Netherlands, 1870-1970*.: Het Spinhuis.

Summary: During the twentieth century in Europe as well as in the United States, Catholics were relatively slow to adopt family planning. How did Catholic reproductive behavior come about? This book aims to disclose the mechanism behind the influence of religion on Catholic fertility behavior in the Netherlands between 1870 and 1970. Schoonheim studies the relationship between faith and fertility at different levels of Dutch society. She explains the way religion, from the late nineteenth century onwards, came to constitute a nationwide social structure. Her research on six Catholic municipalities points out how socio-economic and cultural circumstances stimulated or discouraged the introduction of family planning. On an individual level, letters by Catholic women reveal the different ways believers were confronted with doctrines that affected reproduction. Only in the 1960s did the relationship between Catholic religion and reproduction change dramatically on each of these levels. In less than a decade, fertility rates in Catholic regions tumbled to become the lowest of the Netherlands.

Countries: Netherlands

Subjects/Variables: Dutch

Schoonheim, M. (2006). Het kleine roomse gezin. Geboortebeperking onder Nederlandse katholieken, 1950-1970. *Tijdschrift voor Sociale en Economische Geschiedenis/ The Low Countries Journal of Social and Economic History*, 3(2), 2-28.

Abstract: Compared to those of other denominations, fertility rates among Dutch Catholics remained high in the Netherlands during the twentieth century, only to fall rapidly after 1960. This article focuses on those Catholics who, in spite of Church regulations, practiced family planning between 1950 and 1970. The first paragraph evaluates research on Catholic fertility behaviour and the

explanations given for its deviance. The second paragraph discusses the socio-economic and religious characteristics of Catholics who practiced family planning, and the methods they chose. Ego documents, revealing how Catholics got away with family planning under the watchful eye of the Church, are analyzed in the third paragraph. These Catholics oppose the stigma of the large Catholic family and the historiographic value of research on their fertility behaviour is discussed in the conclusion.

Data Sources: Instituut voor Sociaal Onderzoek van het Nederlandse Volk, 766 women interviewed throughout the Netherlands, 1949-1950; 500 newly married couples interviewed in Limburg, 1960; "Sex in Nederland" national survey (2093 men, women and young people); family planning among 400 women from the province of Utrecht, 1960s

Countries: Netherlands

Subjects/ Variables: Dutch Catholics

Discipline: Demographic historiography

Schoonheim, Marloes; Hülsken, Marloes

Schoonheim, M., & Hülsken, M. (2011). Religion and fertility at the extremes: The Netherlands and Taiwan, 1950–1985. *The History of the Family*, 16(3), 267-277.

Abstract: This paper compares fertility behavior in the Netherlands and Taiwan during the second half of the twentieth century. It focuses on the influence of religion on fertility among Catholics in both countries by looking at compliance with Church teachings relating to fertility. The article discusses the development of fertility rates in the Netherlands and Taiwan, and to what extent these processes were affected by cultural, social and economic changes during the researched period. Subsequently, attitudes regarding birth control, extra-marital sex and interfaith marriage among Catholics in the Netherlands and Taiwan are analyzed and compared with those of other denominations. The opinions of Dutch Catholics on these matters are retrieved from surveys in 1965, 1966 and 1968; those in Taiwan in 1970 and 1979. Finally, the article shows how comparing fertility attitudes and behavior in Christian and Buddhist/folk religion countries serves to understand the way adherence to “scripture-based religions” affects demographic behavior.

Data Sources: (Netherlands) Three opinion polls in the Netherlands were organized in the 1960s by one of the biggest Dutch women's magazines, *Margriet*, in cooperation with scientific research bureaus (Hülsken, 2010, p. 42–45). The survey *Liefde en huwelijk in Nederland* (Love and Marriage in the Netherlands) was held in 1965, *God in Nederland* (God in the Netherlands) followed in 1966 (sample size unknown). *Seksualiteit in Nederland* (Sex in the Netherlands) was held among 2093 men, women and youngsters in 1968; (Taiwan) missionary Wolfgang Grichting's island-wide household survey among 1882 heads of households, 1970 and 1979

Countries: Netherlands, Taiwan

Subjects/ Variables: Taiwanese, Dutch; Catholic, Protestant, Buddhist

Discipline: Historical demography

Schoonheim, Marloes Marrigje

Schoonheim, M. M. (2005). *Mixing ovaries and rosaries: Catholic religion and reproduction in the Netherlands, 1870–1970*. Amsterdam: Aksant.

Seligman, Ben B.

Seligman, B. B. (1958). Some Aspects of Jewish Demography. In M. Skiare (Ed.), *The Jews* (pp. 63-69): The Free Press.

Sembajwe, Israel S.L.

Sembajwe, I. S. L. (1980). Fertility and child mortality levels among the Yoruba of Western Nigeria. *12, 2, 153-164*.

Abstract: This study examines the influence of religion on fertility among the Yoruba of Western Nigeria. There is a distinct differential in fertility by religion. Fertility is lower for Moslems than for Christians. The difference is attributed to the traditional characteristics of Moslems as opposed to the relatively modern characteristics of Christians. For example, Moslems have low education and low occupational status. Consequently, Moslems rather than Christians are more likely to observe longer periods of post-natal abstinence, and to experience higher pregnancy wastage and sterility rates.

Data Sources: The Nigerian segment of the Changing African Family Project

Countries: Nigeria

Subjects/Variables: Women 15+; Christian, Muslim

Discipline: Demography

Shariff, Abusaleh

Shariff, A. (1995). Socio-Economic and Demographic Differentials between Hindus and Muslims in India. *Economic and Political Weekly, 30(46), 2947-2953*.

Abstract: This paper reviews the socio-economic and demographic data according to religion available from various censuses, National Sample Survey and academic publications since the independence of India. Indicators such as, the structure and levels of employment, of living and of education according to religion are discussed. The fertility and mortality indicators, distribution and growth of population are also presented. The paper emphasises the need to strengthen the data bases which would allow a study of ethnic and religious differentials in socio-economic and educational achievements.

Data Sources: Census 1951-1981; National Samples Survey Organisation (NSSO) 43rd round survey, 1988

Countries: India

Subjects/Variables: Indians; Hindu, Muslims, Christians

Discipline: Demography

Sharma, A.K.

Sharma, A. K. (1994). Muslim Fertility in Urban Uttar Pradesh: A Qualitative Study. *Demography India*, 23(1-2), 41–49.

Abstract: Because of the fact that different categories of Muslims exhibit different reproductive tendencies, explanation of urban Muslim fertility would require a theory of rotating coordinates system. Broadly speaking, their fertility would depend on: (a) Religiosity and perceptions of Islamic position on fertility and family planning; (b) the degree of residential segregation between Muslims and others; (c) socio-economic conditions. The present study of Kanpur Muslims shows that fertility among urban Muslims is largely a socio-economic problem. We cannot deny that religion can sometime appear as a great barrier family planning adoption. Yet the effect of religion (interpretation) depends heavily on socio-economic structure.

Data Sources: Interviews in Kanpur, July-September 1993

Countries: India

Subjects/ Variables: Residents of Kanpur; Muslim

Discipline: Demography

Shaver, John H.

Shaver, J. H. (2017). Why and how do religious individuals, and some religious groups, achieve higher relative fertility? *Religion, Brain & Behavior*. doi:10.1080/2153599X.2016.1249920

Abstract: Across the contemporary world, religious individuals tend to exhibit higher relative fertility than their secular counterparts, while religions vary substantially in mean fertility levels. Across all biological taxa, organisms sacrifice quantity for quality of offspring. If all things were equal, then, religious individuals would be expected to produce lower-quality offspring and religions with high fertility levels would be expected to be lower-quality populations. Studies of modern populations demonstrate that humans sacrifice quantity for quality of offspring, yet children born to religious parents do not appear to suffer. I propose the Alloparenting Signaling Model, which asserts that religious cultures function as cooperative breeding niches that motivate alloparenting from large kin networks, as well as unrelated co-religionists, to enable high-quantity, high-quality reproductive strategies, and that shared parental care partially explains successful religions. Evaluating this model will require methods from human behavioral ecology as well as traditional ethnography.

Data Sources: Proposal

Shaw, Brent D.

Shaw, B. D. (1991). The cultural meaning of death: age and gender in the Roman family In D. I. Kertzer & R. P. Saller (Eds.), *The family in Italy from antiquity to the present* (pp. 66-90). New Haven: Yale University Press.

Summary: Some Roman social historians have detected an increasing value attached to marriage and children, which they attribute to Christianity. This study of patterns of funerary inscriptions may

appear to support this view, with a higher percentage of tombstone epigraphs for children aged under ten which were Christian, and move towards more female tombstones in some centres (but the opposite trend in other centres). But the trend was part of a complex of social developments of which Christianity was only one aspect, and which had roots in the pre-Christian empire.

Data Sources: Tens of thousands of funerary inscriptions from first century AD to end of sixth century

Countries: Roman Empire

Subjects/Variables: Romans

Discipline: History

Simons, John

Simons, J. (1982). Reproductive behaviour as religious practice. In C. Höhn & R. Mackensen (Eds.), *Determinants of fertility trends: theories re-examined* (pp. 131-145). Liège: Ordina Éditions.

Singh, K.P.

Singh, K. P. (1988). Religion and fertility: A study in differentials. *Population Geography*, 10(1-2), 18–27.

Singh, R.P.; Saxena, U.; Saxena, A.K.; Gupta, R.B.

Singh, R. P., Saxena, U., Saxena, A. K., & Gupta, R. B. (1997). Family Planning Practices among Muslims in Selected Districts of Uttar Pradesh. In A. Pandey & K. Gupta (Eds.), *Population and Development in Uttar Pradesh* (pp. 349–359). New Delhi: B.R. Publishing Corporation.

Summary: Muslims for 18% of the population of Uttar Pradesh and 12% in the nation of India. The present paper looks into two aspects: (1) whether the minority religious group gets affected by the presence of majority community in terms of their fertility behaviour, and (2) perception of Muslims on religion influencing their fertility behaviour. The sample population were mostly from the lower socio-economic strata. Only one quarter were users of family planning. None-adaptors cited religion, desire for son, and spouse objection. The main reason for low adoption of family planning methods was the lower level of socio-economic conditions in comparison with the general population.

Data Sources: Sample involving target 4,262 couples (of which 85.3% females and 64.5% males were interviewed) in five districts (Bahraich, Rampur, Jalaun, Lucknow, and Nainital).

Countries: India

Subjects/Variables: Indians; Hindu and Muslim

Discipline: Demography

Skirbekk, Vegard; Kaufmann, Eric; Goujon, Anne

Skirbekk, V., Kaufmann, E., & Goujon, A. (2010). Secularism, Fundamentalism, or Catholicism? The Religious Composition of the United States to 2043. *Journal for the Scientific Study of Religion*, 49(2), 293-310.

Abstract: We provide a cohort-component projection of the religious composition of the United States, considering differences in fertility, migration, intergenerational religious transmission, and switching among 11 ethnoreligious groups. If fertility and migration trends continue, Hispanic Catholics will experience rapid growth and expand from 10 to 18 percent of the American population between 2003 and 2043. Protestants are projected to decrease from 47 to 39 percent over the same period, while Catholicism emerges as the largest religion among the youngest age cohorts. Liberal Protestants decline relative to other groups due to low fertility and losses from religious switching. Immigration drives growth among Hindus and Muslims, while low fertility and a mature age structure causes Jewish decline. The low fertility of secular Americans and the religiosity of immigrants provide countervailing force to secularization, causing the nonreligious population share to peak before 2043.

Data Sources: The U.S. Census Bureau; General Social Survey (GSS), 1972-1993; World Christian Encyclopedia (WCE)

Countries: United States

Subjects/ Variables: Fundamentalist Protestants excluding Blacks (PFU), Moderate Protestants excluding Blacks (PMO), Liberal Protestants excluding Blacks (PLI), Black Protestants (PBL), non-Hispanic Catholics (CAT), Hispanic Catholics (CHI), (JEW), Hindus and Buddhists (HBU), Muslims (MUS), Other Religions (OTH), and No Religion (NOR)

Discipline: Sociology

Skirbekk, Vegard; Stonawski, Marcin; Fukuda, Setsuya; Spoorenberg, Thoma; Hackett, Conrad; Muttarak, Raya

Skirbekk, V., Stonawski, M., Fukuda, S., Spoorenberg, T., Hackett, C., & Muttarak, R. (2015). Is Buddhism the low fertility religion of Asia? *Demographic Research*, 32(1), 1-28.

Abstract: The influence of religion on demographic behaviors has been extensively studied mainly for Abrahamic religions. Although Buddhism is the world's fourth largest religion and is dominant in several Asian nations experiencing very low fertility, the impact of Buddhism on childbearing has received comparatively little research attention. Objective: This paper draws upon a variety of data sources in different countries in Asia in order to test our hypothesis that Buddhism is related to low fertility. Methods: Religious differentials in terms of period fertility in three nations (India, Cambodia and Nepal) and cohort fertility in three case studies (Mongolia, Thailand and Japan) are analyzed. The analyses are divided into two parts: descriptive and multivariate analyses. Results: Our results suggest that Buddhist affiliation tends to be negatively or not associated with childbearing outcomes, controlling for education, region of residence, age and marital status. Although the results vary between the highly diverse contextual and institutional settings investigated, we find evidence that Buddhist affiliation or devotion is not related to elevated fertility across these very different cultural settings. Conclusions: Across the highly diverse cultural and developmental contexts under

which the different strains of Buddhism dominate, the effect of Buddhism is consistently negatively or insignificantly related to fertility. These findings stand in contrast to studies of Abrahamic religions that tend to identify a positive link between religiosity and fertility.

Data Sources: Demographic and Health Surveys (DHS) for the years 2005 in Cambodia, 2006 in Nepal and 2005–06 in India; 2003 Reproductive Health Survey (RHS) (n=6,547) in Mongolia, the 2000 Population and Housing Census (n=101,107) (Minnesota Population Center 2013) in Cambodia, and the 2000–2008 Japanese General Social Survey (n=4,123)

Countries: India, Cambodia, Nepal, Mongolia, Thailand, Japan

Subjects/ Variables: Women aged 15–49 years by religious denomination in India, Cambodia, Nepal; women aged 25–49 years in Mongolia, Thailand and Japan

Discipline: Demography, Statistics, Economics

Skolnick, M.; Bean, L.; May, D.; Arbon, V.; De Nevers, K.; Cartwright, P.

Skolnick, M., Bean, L., May, D., Arbon, V., De Nevers, K., & Cartwright, P. (1978). Mormon Demographic History I. Nuptiality and Fertility of Once-Married Couples. *Population Studies*, 32(1), 5-19.

Abstract: This paper presents the initial results of the first effort to use the LDS records on a massive scale for the study of demography. Development of the data base for the medical genetics study involved the gathering and computerization of 170,000 family group sheets, an estimated 80 to 90 per cent of all families who lived along the Mormon pioneer trail or in Utah. The total marital fertility rates and the numbers of children ever born for various marriage cohorts approximate to the levels observed for a variety of populations with natural fertility. Nevertheless, the data also indicate that the demography of the Mormons was influenced by particular historical events, and unlike other high fertility, non-Catholic religious groups identified as maintaining natural fertility, some measure of control began to emerge during the last quarter of the nineteenth century.

Data Sources: Family group sheets from LDS files

Countries: United States

Subjects/ Variables: 20,000 once-married Mormon families over a 100-year period, 1820 to 1920

Discipline: Sociology

Smith, James E. and Kunz, Phillip R.

Smith, J. E. a. K., Phillip R. (1976). Polygyny and Fertility in Nineteenth-Century America. *Population Studies*, 30(3), 465-480.

Abstract: Polygyny was practiced by Mormon communities in Utah from the 1840s to 1890. In the Esshom collection, 72.4% of married males were listed as having only one wife at any given time in their lives; polygynists with two wives accounted for 19.4%; those with three wives for 5.7% and those with four or more wives constituted 2.5% of the married population. Our data show that when second marriages of monogamists, i.e. marriages taking place after the death or divorce of the first wife, are excluded, wives in monogamous marriages have an average completed fertility of 7.82 births, whereas those in polygynous unions have an average of 7.46 births. There is an increasing return from the second wife and diminishing return from the third wife: the man with two wives has

more than double the fertility of his monogamist counterpart, but the addition of a third wife only increases male fertility by a further 25% rather than the expected 50%. The data also shows that Mormons in the latter half of the nineteenth century had not yet begun to accept family limitation to the extent then current in the United States, where total fertility rate had fallen from 7.04 in 1800 to 3.56 in 1

Data Sources: A volume of genealogies collected by Frank Esshom from 1907 to 1913: Frank Esshom, *Pioneers and Prominent Men of Utah* (Salt Lake City: Pioneer Book Publishing Company, 1913)

Countries: United States (Utah)

Subjects/Variables: US Mormons

Discipline: Sociology, Psychology

Sobotka, Tomáš.; Adigüzel, Feray.

Sobotka, T., & Adigüzel, F. (2002). *Religiosity and spatial demographic differences in the Netherlands*

Summary: This paper investigates whether current differences in religiosity between the Dutch regions are also manifested in spatial demographic patterns. We use cluster analysis to distinguish relatively homogeneous clusters of regions, specified by religious affiliation and the frequency of churchgoing among their populations. Although the regional demographic differences are relatively modest in the Netherlands, between-clusters contrasts are consistent with the expected influence of religiosity. The cluster including the most conservative region, the so-called Bible Belt, also displays the most traditional demographic patterns. In order to differentiate the impact of religiosity from the social and economic factors, we perform stepwise regression of selected indicators of fertility, union formation and living arrangements. The frequency of churchgoing rather than the fact of belonging to a certain denomination manifested the strongest impact on the regional demographic contrasts.

In case of fertility of parity four and higher, marriage rate and the proportion of young women cohabiting, churchgoing turned out to be the most important predictor of regional differentiation.

Data Sources: Internet database of the Statistics Netherlands (CBS STATLINE, 2002): Regional data on religiosity, demographic indicators, socio-economic variables;

1999 Permanent Survey of Life Situation among the adult population (POLS – Permanent Onderzoek Leefsituatie): indicators of religiosity.

Countries: Netherlands

Subjects/Variables: 38 600 persons; Orthodox Calvinists churches, Dutch Reformed Church, Roman Catholic Church, other (mostly Muslim), no religious affiliation.

Discipline: Demography; Economics

Solak, Ferruh; Hancioglu, Attila

Solak, F. H., Attila. (2005). *Islam and Reproductive Health Policies in Turkey*. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 102-117). London: Hurst.

Summary: Outlines history and nature of Islam in Anatolia and Turkey. Examines the influence of Islamic ideology on the formulation of population and reproductive health policies. Religious arguments did not feature prominently in either the pro-natalist policies followed until 1965 or in the change to an anti-natalist policy. In the 1980s and 1990s, radical Islamic views entered the discourse

about population policy, without, however, leading to any change in policy. So Islam has played little role in shaping population policies and people's demographic behaviour in Turkey.

Countries: Turkey

Subjects/Variables: Turkish Muslims

Discipline: Demography

Somers, Angelo; Van Poppel, Frans

Somers, A., & Van Poppel, F. (2003). Catholic priests and the fertility transition among Dutch Catholics, 1935-1970. *Annales de démographie historique*, 106(2), 57-88.

Abstract: Many studies have related the relatively late decline in fertility in the Netherlands to the fact that Dutch Roman Catholics maintained a high fertility level until 1960. It was argued that Dutch Roman Catholics distinguished themselves from other Catholics by their strong communal organisation and religious élan, making possible a strong degree of control on the religious practices of the members and intensified observance of Catholic standards regarding contraception and sexuality.

We analyse what role the clergy played in the fertility transition among Dutch Catholics during the period 1935-1970 by studying the way in which the priests themselves saw their role. We present results from in-depth interviews with 22 priests who worked in the diocese of Breda. We describe the way in which priests were prepared for their task as teacher and explainer of Catholic teaching on marriage, sexuality, and birth control, the ways in which they were confronted with problems in these areas when acting as a pastor and their opinion on an attitude toward the use of birth control by their parishioners. The main conclusion is that there were distinct differences between the image that the clergy itself draws of its role and that which emerges from studies among Catholic couples and studies focussing on the institutional development of the Catholic Church.

Data Sources: Interviews with 22 priests working in Breda, Netherlands

Countries: Netherlands

Subjects/Variables: Dutch Catholics, 1935-1970

Discipline: Sociology

Sotelo, Lilia Susana Padilla y; Acharya, Arun Kumar

Sotelo, L. S. P. y., & Acharya, A. K. Religion and India's Growing Population: Evidence from some selected states of India. *Caminhos de Geografia*, 1(15), 1-12.

Abstract: We demographers rarely consider religious beliefs, rituals and traditional practices as an important intermediate fertility variable of population change. Recent data from the Census of India, however, shows that religion is a factor behind growing population rates in India, especially within the Muslim community. The census identified that from 1981- 91 to 1991-2001, the Muslim population grew from 12 per cent to 13 per cent of the country's total, with annual growth rate rising from 34.5 per cent to 36 per cent, whilst the Hindu population declined from 81.24 per cent to 80.58 per cent of the total - with the annual growth dropping from 25.1 per cent to 20.3 per cent. So, this study attempts to see how religion is a factor determining population change in India,

arguing that religion to be a direct determinant of fertility rates. For this study, data has been taken from the Census of India and National Family Heath Survey-I&II.

Data Sources: Census of India and National Family Heath Survey-I&II

Countries: India

Subjects/Variables: Indians; Hindu and Muslim

Discipline: Geography, Anthropology

Spicer, Judith C.; Gustavus, Susan O.

Spicer, J. C., & Gustavus, S. O. (1974). Mormon fertility through half a century: Another test of the Americanization hypothesis. *Biodemography and Social Biology*, 21(1), 70-76.

Abstract: It is the purpose of this paper to test the "Americanization" hypothesis (Blake 1966) in respect of Mormons. Specifically we will (1) examine the literature of the Mormon church to ascertain the reproductive ideals of Mormon leaders for their membership, and (2) examine the actual birth rates of Mormons from 1920 to 1970 in comparison with the birth rates of all Americans, Utah residents, and the ideals of church leaders.

Data Sources: The Historical Department of the Church of Jesus Christ of Latter-day Saints

Countries: United States

Subjects/Variables: US Mormons

Discipline: Sociology

Spoorenberg, Thomas

Spoorenberg, T. (2014). Fertility Trends by Religion in Mongolia. In B. J. Grim, T. M. Johnson, V. Skirbekk, & G. A. Zurlo (Eds.), *Yearbook of International Religious Demography 2014* (pp. 151-156). Leiden: Brill.

Summary: While it is true that Mongolia has not been the subject of very many studies in demography, the role of religion in shaping demographic behaviors has remained largely neglected in studies of this country. This chapter aims to partly fill this gap by examining fertility trends by religion in Mongolia over the last two decades. It first reviews the percentage distribution of Mongolia's population by religious groups using census and survey data. Doing so, the consistency of the religious figures across data sources is assessed. The chapter then turns to the presentation of the data and methods used to estimate fertility trends by religion in Mongolia. The 'results' section of the chapter presents and discusses fertility trends by religion in Mongolia. A concluding section summarizes the main contributions, as well as the limitations, of this study. Only after the end of socialism in the 1990s did fertility become differentiated by religion.

Data Sources: 2010 Population and Housing Census; 2010 Multiple Indicator Cluster Survey; 2003 Reproductive Health Survey

Countries: Mongolia

Subjects/Variables: 8,399 Mongolian households; Buddhists, No religion, Muslims, Shamans, Christians

Discipline: Demography

Srinivas, Mysore Narasimhachar

Srinivas, M. N. (1989). Culture and Human Fertility in India. In M. N. Srinivas (Ed.), *The Cohesive Role of Sanskritization and Other Essays* (pp. 123-144). Oxford: Oxford University Press.

Countries: India

Discipline: Sociology

Srivastava, J.N.; Saksena, D.N.

Srivastava, J. N., & Saksena, D. N. (1989). Hindu-Muslim differentials in family size ideals by socio-economic status. *Journal of Family Welfare*, 35(4), 38–48.

Abstract: This paper analyzes the responses of 2 communities in a Primary Health Centre area in central Uttar Pradesh, India, to demographic survey questions on ideal family size. The data are based on a reanalysis of data collected from 1256 women of childbearing age--1152 Hindus and 104 Muslims--between 1984 and 1985 in Uttar Pradesh. The findings reveal that among all the sociodemographic and economic groups, Muslim respondents considered a relatively larger number of children ideal than did Hindus. The finding contradicts the commonly given explanation which attributes higher family size ideals among the Muslims to their lower socioeconomic status. Further, the differences between the 2 communities, in general, are seen to be relatively smaller among the lower socioeconomic strata and larger among the higher socioeconomic strata. This is possibly due to the fact that the higher socioeconomic level did not exercise any significant depressing influence on family size ideals among the Muslims in the study area, while it did so among the Hindus, thereby aggravating the Hindu-Muslim differences in this regard at the higher socioeconomic level.

Data Sources: Survey

Countries: India

Subjects/Variables: 256 women of childbearing age--1152 Hindus and 104 Muslims--between 1984 and 1985 in Uttar Pradesh

Discipline: Demography

Steele, Liza G.

Steele, L. G. (2011). "A Gift from God": Adolescent Motherhood and Religion in Brazilian Favelas. *Sociology of Religion*, 72(1), 4-27.

Abstract: This study seeks to understand how young, unmarried mothers and mothers-to-be in the favelas (shantytowns) of Rio de Janeiro, Brazil, have experienced religious morality as applied to themselves and other adolescents in their communities, as well as how religious leaders grapple with the moral issue of unmarried adolescent maternity in their midst. Drawing on more than 50 interviews conducted in Rio with young mothers, Catholic and evangelical religious leaders who work with the poor, and staff members of non-governmental organizations, this paper seeks to understand the acceptance—or even approval—that unmarried pregnant teens and adolescent mothers usually encounter, which casts doubt on whether the issue is actually posing a moral

dilemma for these religious institutions. The realities of everyday life in Rio's favelas, most prominently the ever-present specter of violence, high rates of teen motherhood, strong popular opposition to abortion, the high value accorded to motherhood, and the intense competition of the religious marketplace appear to influence the ways in which favela residents and religious leaders understand and interpret morality. More generally, this study offers an example of how religious groups working in impoverished communities throughout the world might adapt traditional moral codes to suit their circumstances.

Data Sources: Ethnographic research

Countries: Brazil

Subjects/ Variables: 54 semi-structured in-depth interviews, including 38 with teen mothers and adult women who had been teen mothers; Catholic, Protestant

Discipline: Sociology

Stokes, C. Shannon

Stokes, C. S. (1972). Religious Differentials in Reproductive Behavior: A Replication and Extension. *Sociological Analysis*, 33(1), 26-33.

Abstract: A number of studies have demonstrated the influence of religion on reproductive behavior. The different social and economic composition of the religious groups, however, may possibly confound the influence of religion with other factors. In the present study, precision-matching is used to test whether Catholic-Protestant fertility differentials may be due to differences in duration of marriage, socioeconomic status, and education of wife. The findings indicate that religion exerts an independent influence on fertility, and that future research might profitably focus on the mechanisms through which this factor operates. Catholic couples desire, expect, and have had higher fertility than Protestants.

Data Sources: Interviews with 304 couples from Lexington, Kentucky

Countries: United States (Kentucky)

Subjects/ Variables: Catholic and Protestant residents of Kentucky, controlled for duration of marriage, socioeconomic status, and education of wife

Discipline: Sociology

Stonawski, Marcin; Skirbekk, Vegard; Hackett, Conrad; Potančoková, Michaela; Connor, Phillip; Grim, Brian J.

Stonawski, M., Skirbekk, V., Hackett, C., Potančoková, M., Connor, P., & Grim, B. J. (2015). Global Population Projections by Religion: 2010-2050. In B. J. Grim, T. M. Johnson, V. Skirbekk, & G. A. Zurlo (Eds.), *Yearbook of International Religious Demography 2015* (pp. 101-118). Leiden: Brill.

Summary: The role of demography for the future size and composition of religious groups has been raised by several scholars (Kaufmann 2010, Norris and Inglehart 2011). Application of multi-state population projection methodology proved fruitful for shedding more light on possible future changes in the religious landscape (Goujon, Skirbekk and Fliegenschnee 2007, Goujon, Malenfant and Skirbekk 2013, Skirbekk, Kaufmann and Goujon 2010). The role of religion has often been

understated in global population projections, partly due to the difficulties in collecting and analyzing global data. The change in the world's religious composition can be caused by differences in population structure such as age and sex, demographic processes such as fertility differences and migration, and non-demographic determinants such as religious conversions between different groups. Ignoring demographic influences such as age structure can lead to incorrect projections -- if a religion has a young age structure, it may grow due to population momentum and cohort replacement (older cohorts being replaced by younger cohorts belonging to different religious groups). Fertility differences, both in terms of their levels and their age-pattern, affect the growth of different religious groups. Outgoing and incoming migrants can also change the religious composition of countries, especially for religious minorities. Studying these phenomena is important in terms of understanding the global future of religion. Our project is an attempt to fulfill this gap and deliver detailed demographic information on religious groups and their possible futures, taking observed trends from the past into consideration. This article presents the motivation, outlines the methodology applied, and presents key findings from the projections.

Data Sources: Censuses

Countries: Whole world

Subjects/ Variables: Buddhists, Christians, Hindus, Jews, Muslims, members of folk religions, other religions, unaffiliated

Discipline: Demography

Stonawski, Marcin; Skirbekk, Vegard; Kaufmann, Eric; Goujon, Anne

Stonawski, M., Skirbekk, V., Kaufmann, E., & Goujon, A. (2015). The End of Secularisation through Demography? Projections of Spanish Religiosity. *Journal of Contemporary Religion*, 30(1), 1-21.

Abstract: This article presents the first projection, to our knowledge, of the intensity of religiosity in a population, which has a strong bearing on the critical question of the religious future of Europe. Spain has, in recent decades, simultaneously experienced rapid religious decline and marked demographic change through high immigration and declining fertility. To investigate future trends, we carry out population projections by religion and religiosity to the year 2050. We find that both fertility and immigration increase the share of the highly religious, as the more religious tend to have more children and immigrants tend to be more religious than non-immigrants. The non-religious population grows because people switch from religion to no-religion and because they are younger. Our findings suggest that in the longer term (2050), there may be growth in the no-religion population, a decline in the share of highly religious Christians, and moderate development of low religious Christians. The Muslim population would substantially increase, unless there is an end to migration and fertility differentials.

Data Sources: International Religious Freedom Report (IRFR); surveys and municipal registers; micro-data from the 2010 Barometro Autonomico II survey (CIS), Centro de Investigaciones Sociologicas (CIS)

Countries: Spain

Subjects/ Variables: Christians (predominantly Roman Catholics), Muslims, Unaffiliated, and Others

Discipline: Demography

Stouffer, Samuel A.

Stouffer, S. A. (1935). Trends in the Fertility of Catholics and non-Catholics. *American Journal of Sociology*, 41(2), 143-166.

Abstract: Analysis of the confinement rates of 40,766 urban families in Wisconsin shows that between 1919 and 1933 the fertility of Catholics declined at a faster rate than the fertility of non-Catholics. When the data were divided into twenty-four groups by residence, age of wife, occupation of husband, and interval after marriage, it was found that births among Catholic families fell off in twenty-three of the twenty-four groups, while in twenty-one groups the Catholic fertility dropped faster than the non-Catholic fertility. The decline in Catholic fertility was as much in evidence among people with Slavic and Romance-language names in each Catholic occupational group as it was among people with Teutonic, Irish, and English names. That these findings may be generalized beyond Wisconsin is suggested, though not proved, by a partial correlation analysis which shows, with several factors held constant, that the northern and western cities of the United States with a relatively large percentage of Catholics tended to decline in fertility at a more rapid rate between 1920 and 1930 than the northern and western cities with a relatively small percentage of Catholics.

Data Sources: Study by University of Wisconsin and the Wisconsin State Board of Health, September 1933 - May 1935

Countries: United States

Subjects/Variables: 40,766 Wisconsin urban families, married between 1919 and 1930

Strassmann, Beverly I.; Kurapatia, Nikhil T.; Huga, Brendan F.; Burkeb, Erin E.; Gillespiec, Brenda W.; Karafetd, Tatiana M.; Hammerd, Michael F.

Strassmann, B. I., Kurapatia, N. T., Huga, B. F., Burkeb, E. E., Gillespiec, B. W., Karafetd, T. M., & Hammerd, M. F. (2012). Religion as a means to assure paternity. *PNAS*, 109(25), 9781-9785.

Abstract: The sacred texts of five world religions (Buddhism, Christianity, Hinduism, Islam, and Judaism) use similar belief systems to set limits on sexual behavior. We propose that this similarity is a shared cultural solution to a biological problem: namely male uncertainty over the paternity of offspring. Furthermore, we propose the hypothesis that religious practices that more strongly regulate female sexuality should be more successful at promoting paternity certainty. Using genetic data on 1,706 father-son pairs, we tested this hypothesis in a traditional African population in which multiple religions (Islam, Christianity, and indigenous) coexist in the same families and villages. We show that the indigenous religion enables males to achieve a significantly ($P = 0.019$) lower probability of cuckoldry (1.3% versus 2.9%) by enforcing the honest signaling of menstruation, but that all three religions share tenets aimed at the avoidance of extrapair copulation. Our findings provide evidence for high paternity certainty in a traditional African population, and they shed light on the reproductive agendas that underlie religious patriarchy.

Data Sources: Genetic data on 1,706 father-son pairs

Countries: Mali

Subjects/Variables: Dogon of Mali, West Africa; Evangelical Protestantism introduced by conservative American missionaries; Catholicism introduced by French Jesuits who focused on humanitarian projects; Islam; and the indigenous Dogon religion, which is monotheist

Discipline: Anthropology

Subahar, Abdul Halim; Faturachman

Subahar, A. H. F. (2005). Islamic Teachers and Reproductive Health Issues in Madura, Indonesia. In G. W. K. Jones, Mehtab S. (Ed.), *Islam, the State and Population* (pp. 157-173). London: Hurst.

Summary: Examines the role of five Kiais, religious leaders, and their role in reproductive health matters in Madura. Higher rates of early childbearing in Madura may be related to the Islamic teaching the people receive.

Data Sources: Study of five Kiais

Countries: Indonesia (Madura)

Subjects/Variables: Indonesian Muslims

Discipline: Sociology

Sujatha, D.S.; Murthy, M.S.R.

Sujatha, D. S., & Murthy, M. S. R. (1993). Religiosity and Fertility among Brahmins. *Journal of Family Welfare*, 39(1), 13-16.

Abstract: Fertility behavior among the Vaidiki and Niyogi Brahmins of Andhra Pradesh, India, was examined with an emphasis on traditional cultural measures and education. Although both groups are Brahmins, their life styles and attitudes toward modernization are quite different. Examination was made of the differences in attitude toward the observance of "Sakuna," and practices such as: settling marriages through use of horoscopes, wearing special clothes during religious activities, living in Brahmin enclaves, and intercast marriage. The random sample included 375 eligible couples out of a possible 750 couples residing in towns of Tirupathi, Nellore, and Vijayawada in Andhra Pradesh. The results showed that Vaidiki Brahmins preferred the practice of Sakuna; these couples, whether Vaidiki or Niyogi Brahmin showed a decline in the number of living children with an increase in wife's educational level by 1 child. Wife's education also significantly influenced fertility of those couples who disagreed with Sakuna. Vaidiki Brahmins preferred matching horoscopes for marriages; these Vaidiki Brahmins, who were also college educated, had 2.0 fewer children than illiterate or primary educated Vaidiki. Niyogi who believed in horoscopes for matching and had college educations had only 1.6 fewer children than those less educated. Vaidiki Brahmins preferred wearing saris during religious ceremonies. When this practice was combined with educational level, college-educated Vaidiki women had 2.0 fewer mean number of children and Niyogi educated women had 1.2 fewer children. The difference between religious and nonreligious women was 1.0 for Vaidiki and .7 for Niyogi. Vaidiki Brahmins preferred to live in exclusive Brahmin enclaves only. The mean number of living children declined by 2.0 and 1.5, respectively, among Vaidiki and Niyogi Brahmins preferring Brahmin neighborhoods compared with .8 and .5 who did not. Niyogi Brahmin preferred intercast marriages. College-educated Vaidiki and Niyogi favoring intercast marriages had a decline in fertility of 1.7 and 1.0, respectively, while women not preferring such marriages had declines of 1.9 and .2, respectively. Niyogi had fewer children, almost 39% had received a secondary

education, and 53%, a college education, while 52% of Vaidiki women had secondary education, only 14% had college educations, and higher fertility.

Data Sources: Survey of Vaidiki and Niyogi Brahmins

Countries: India

Subjects/Variables: 750 couples residing in towns of Tirupathi, Nellore, and Vijayawada in Andhra Pradesh; Vaidiki and Niyogi Brahmins

Sun, Te Hsiung

Sun, T. H. (2002). Modernization in Progress: Demographic Development and Value Change in Contemporary Europe and East Asia. In A. Klein, R. Lützel, & H. D. Ölschleger (Eds.), *Demographic Transition and Value Changes in Taiwan* (pp. 159-185). Bonn: Bier'sche.

Surkyn, Johan; Lesthaeghe, Ron

Surkyn, J. L., Ron. (2004). Values Orientations and the Second Demographic Transition (SDT) in northern, western and southern Europe: An update. *Demographic Research, Special Collection*, 3, 45–86.

Abstract: The new types of household formation via more prolonged single living, premarital cohabitation, and progression to parenthood within cohabiting unions have steadily gained ground in Europe. These features of the SDT initially appeared in Scandinavia during the 1960s, spread to western Europe in the 1970s, reached the Iberian populations in the mid-1980s, and apparently expanded to central Europe as well during the 1990s. For all regions listed above, we found a clear statistical association between a variety of values orientations and household types, and this association persists after controls for age, gender, education, profession and urbanity. The patterning of the values profiles according to household types is quite similar in the various regions of Europe. To bring this out more clearly, we have added the profiles of a group of central and a group of eastern European countries to those of the three regions used here. From this enlarged set of values profiles we can draw a number of conclusions.

1. There is a set of features that is present in all country groups studied so far. Firstly, childless cohabitants typically have the most pronounced non-conformist orientation in the various values sets pertaining to secularisation, ethics, civil morality, egalitarianism, anti-authoritarianism, expressive values in work and socialisation, tolerance, world orientation etc. Secondly, married parents who never cohabited are always at the other end of the spectrum with the lowest nonconformist score of all. Thirdly, married parents who ever cohabited are always more nonconformist than their counterparts who never cohabited. This suggests that the earlier cohabitation experience has a lasting effect operating in the non-conformist direction.
2. There are also several features which are not found in all regions, but that are still very common. For instance, single living is also associated with very high non-conformist across a wide variety of dimensions. And also, when compared to married persons, divorcees and separated individuals who are not yet in a new union seem to return to distinctly more non-conformist values.

Data Sources: European Values Surveys of 1999
Countries: Europe
Subjects/Variables: 1,000 respondents per European country
Discipline: Demography

Suwal, Juhee Vajracharya

Suwal, J. V. (2001). Socio-Cultural Dynamics of Birth Intervals in Nepal. *Contributions to Nepalese studies*, 28(1), 11-33.

Abstract: Fertility depends not only on the decisions of couples but also on many socioeconomic, demographic, health-related as well as tradition-related and emotional factors. The factors affecting fertility may have varying effects on child spacing. Women's education and age at marriage are the most widely analyzed determinants of birth intervals. A couple's decision on the timing of the first baby or the second or the third may depend on traditional norms and cultural practices as well. Place of residence may be another important factor influencing birth intervals. The purpose of this paper is to analyze three consecutive birth intervals to gain a better understanding of the fertility behaviour of Nepalese women. The variables tested are ethnicity, religion, education, and occupation.

Data Sources: The Nepal Fertility, Family Planning and Health Survey, 1991, conducted under the Demographic Health Survey (DHS), Macro International Inc., Maryland, USA.

Countries: Nepal

Subjects/Variables: 25,384 women aged 15-49 who were living with their husbands; Hindu, Buddhist, Muslim, other.

Discipline: Anthropology/Demography

Tantawai, M.S.

Tantawai, M. S. (1988). Birth Planning and Religious Point of View. *Population Science*, 8, 1-14.

Abstract: Discussion of Islamic law on birth control by the Grand Mufti of Egypt.

Thomas, John L.

Thomas, J. L. (1956). The Catholic Family Today *The American Catholic Family* (pp. 127-147). Englewood Cliffs, NJ: Prentice-Hall.

Summary: A summary of the population characteristics of US Catholics. The overview finds that US Catholics are primarily urban, but with Catholic schooling counteracting the effects of secularization. A summary of differential fertility studies shows higher birth rates for Catholics, but also a faster decline. Fertility for French Catholics in Louisiana was much higher than that of Anglo-Saxon Protestants.

Data Sources: The Official Catholic Directory

Countries: United States

Subjects/Variables: US Catholics

Discipline: Sociology

Thompson, Warren S.

Thompson, W. S. (1925). Size of Families from Which College Students Come. *Journal of the American Statistical Association*, 20(152), 481-495.

Abstract: Catholic students' families are on the average larger (by about 1 child) than those of people of similar occupational groups in the same cities. Our study seems to indicate that the economic status of the Catholic families averaged a little lower than that of the Protestant families. This is shown in part by the rather large proportion of Catholic students coming from homes of skilled laborers. Furthermore, a careful perusal and comparison of the original schedules leads one to believe that Catholics engaged in trade and in managerial work are, on the whole, in positions where the income is less than the average among Protestants. Our data are, however, not sufficiently extensive or detailed to enable us to arrive at definite conclusions regarding the relative importance of religion and class status in determining the size of Catholic families. All one can safely say is that not all the difference between Protestant and Catholic families is due to the religious beliefs of the latter, for in addition there is the difference in economic status and the question of nativity to consider, as it seems likely that there are more students having foreign-born parents among Catholics than among Protestants.

Data Sources: Sociology classes in Midwest and Southern universities

Countries: United States

Subjects/ Variables: Families of university students

Discipline: Sociology

Thornton, Arland

Thornton, A. (1979). Religion and Fertility: The Case of Mormonism. *Journal of Marriage and Family*, 41(1), 131-142.

Abstract: The influence of religion on childbearing has been of great interest to students of the family and population. The large families of Catholics, Moslems, Fundamentalist Protestants, and Hutterites have been observed. The purpose of this paper is to focus attention on another religious group, the Church of Jesus Christ of Latter-Day Saints, more commonly known as Mormons. Data are presented to establish that in the United States and Canada adherents of Mormonism historically have had and continue to have higher than average rates of childbearing. Second, data are discussed which suggest that the high fertility of Mormons is not the result of their occupying positions in the social structure in which childbearing is high. That is, the data are consistent with the hypothesis that there is something about Mormonism which influences childbearing, and this effect cannot be accounted for by social and economic characteristics.

Data Sources: (US) Censuses for US and Utah, 1850-1970; vital statistics, 1920-1975; (Canada) Censuses, 1931-1971

Countries: US, Canada

Subjects/ Variables: Mormon women (15-49), children

Discipline: Demography

Thornton, A. (1988). Reciprocal Influences of Family and Religion in a Changing World. In D. L. Thomas (Ed.), *The Religion and Family Connection: Social Science Perspectives* (pp. 27–50). Provo: Religious Studies Center, Brigham Young University.

Summary: This paper considers family change during the last two centuries and examines several interrelationships between family and religion. The paper investigates both the influence of religious institutions and values on changing family structure and the impact of family trends on religious teachings and programs.

Data Sources: Summary of research

Discipline: Sociology

Thornton, Patricia; Olson, Sherry

Thornton, P., & Olson, S. (2006). The religious claim on babies in nineteenth-century Montreal. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 207-234). Dordrecht: Springer.

Summary: Analysis of a full-year cohort of births from the 1881 Montreal nominal census, matched to mothers, reveals signs of declining fertility as early as 1880. Differences in the rates of overall fertility between three communities (French-speaking Catholics, English-speaking Catholics, English-speaking Protestants) were substantial, inflected by differences in “starting” behaviors. Irish Catholics married considerably later than others, and women born outside the province (more common among Protestants) were marrying much younger. Religion had a significant effect on levels of fertility within marriage with variations extending to differences among the Protestant denominations, but it had no effect on marriage, where origin seems to be important. The authors argue that religious affiliation reinforced social boundaries and ensured persistence of the three distinct demographic regimes. They infer that religious affiliation alone is an inadequate indicator of “cultural difference.” In this context, an effective “community of communication” requires a multivariate definition, taking into account language and origin.

Data Sources: Nominal census (1881); parish registers

Countries: Canada

Subjects/ Variables: Montreal (19th century). French-speaking Catholics, English-speaking Catholics, English-speaking Protestants.

Discipline: Geography

Tietze, Christopher

Tietze, C. (1957). Reproductive Span and Rate of Reproduction among Hutterite Women. *Fertility and Sterility*, 8, 89-97.

Abstract: The Hutterite community do not control their fertility, so evidence natural fertility. The reproductive span varied widely from under 35 to 45 and over. The intervals between confinements also showed statistically significant variation.

Data Sources: Eaton and Mayer (1953)

Countries: United States

Subjects/Variables: 209 Hutterite women once-married prior to 25, living with husbands at age 45
Discipline: Demography

Toney, Michael B., ; Golesorkhi, Banu; Stinner, William F.

Toney, M. B., Golesorkhi, B., & Stinner, W. F. (1985). Residence Exposure and Fertility Expectations of Young Mormon and Non-Mormon Women in Utah. *Journal of Marriage and the Family*, 47, 459-465.

Abstract: Utah's fertility rate is about double the nation's, and it increased during the 1970s as the nation's fertility declined. The fertility expectations of young non-Mormon females living in this setting (2.4 children) resemble those of young females in the nation as a whole, rather than the expectations of the young Mormon females in Utah (4.4 children). Significant differences between Utah's young Mormon and non-Mormon females remain after adjustments for other variables. These findings suggest (a) that residence in a high fertility area per se does not affect fertility and (b) that Mormon/non-Mormon fertility differences are likely to persist into the foreseeable future.

Data Sources: Statewide survey of Utah's graduating high school seniors (N=3,304); 1979 National Longitudinal Survey's (NLS) youth cohort and from a 1980 Current Population Survey (CPS)

Countries: United States

Subjects/Variables: Utah Mormons, non-Mormons

Discipline: Sociology

Underwood, Carol

Underwood, C. (2000). Islamic Precepts and Family Planning: The Perceptions Of Jordanian Religious Leaders and Their Constituents. *International Perspectives on Sexual and Reproductive Health*, 26(3), 110-117+136.

Abstract: Context: Muslim religious leaders are often viewed as real or potential obstacles to family planning. Research is needed to understand more fully their knowledge, attitudes and beliefs about family planning and how they differ from those held by the general public.

Methods: Two nationally representative surveys, one of 1,000 married women aged 15–49 and the other of 1,000 men married to women aged 15–49, and a census of all Muslim religious leaders in Jordan collected information on knowledge, attitudes and beliefs regarding family planning, and sources of information about it.

Results: Eighty percent of men, 86% of women, 82% of male religious leaders and 98% of female religious leaders believe that family planning is in keeping with the tenets of Islam. Among religious leaders, 36% reported that they had preached about family planning in the year preceding the survey. Seventy-five percent of women and 62% of men in the general public said that they had spoken about family planning with their spouse, and 9% and 17%, respectively, reported having spoken with a religious leader. On a scale of 0–10 measuring agreement with statements regarding the benefits of family planning (with 10 being complete agreement), women averaged 9.4 and men 8.8, while male religious leaders averaged 6.5 and female religious leaders 7.2. Among the general public, 74% of women and 58% of men said that deciding to practice contraception is a joint decision between husband and wife. About 90% of religious leaders agreed or agreed strongly with the statement that

contraceptive decisions should be made jointly by husband and wife. Women were significantly more likely than men to believe that specific contraceptive methods are permitted under Islam, and male religious leaders were more likely than were men in the general population to find specific methods acceptable. Only 26% of men cited interpersonal communication as a source of family planning information, compared with 66% of women, 73% of male religious leaders and 89% of female religious leaders. Almost three-quarters of men and women said they want to know more about family planning.

Conclusion: Although Islamic religious leaders in Jordan cite different reasons than the general public to justify the use of contraceptives, they are as likely as others in the population to approve of family planning.

Data Sources: National surveys of 1,000 married women aged 15–49 and 1,000 men married to women aged 15–49; census of Muslim religious leaders in Jordan

Countries: Jordan

Subjects/Variables: Jordanians

Discipline: Demography

van Bavel, Jan; Kok, Jan

van Bavel, J., & Kok, J. (2005). The role of religion in the Dutch fertility transition: Starting, spacing, and stopping in the heart of the Netherlands, 1845-1945. *Continuity and Change*, 20(2), 247-263.

Abstract: This contribution investigates how religion retarded the Dutch fertility transition by looking at how denominations were associated with the timing of first births (starting), the length of birth intervals (spacing), and the timing of last births (stopping). First, we apply a simple descriptive model of starting, spacing, and stopping to life-course data from the province of Utrecht. Then, we apply multivariate regression to assess the independent effects of religious denominations, net of socio-economic status, on stopping behaviour. The results indicate that liberal Protestants were more prone to adopt stopping behaviour than orthodox Protestants and Catholics.

Data Sources: Historical Sample of the Netherlands: a random sample (0.5 per cent) of Dutch birth certificates of 1812–1922

Countries: Netherlands (Utrecht)

Subjects/Variables: Residents of Utrecht, Netherlands (1845–1945); Liberal Protestants, Orthodox Protestants, Catholics

Discipline: Demography

van de Kaa, Dirk J.

van de Kaa, D. J. (2001). Postmodern Fertility Preferences: From Changing Value Orientation to New Behavior *Population and Development Review* (pp. 290-331): Population Council.

Summary: Examines the Second Demographic Transition via the lens of the concept of Postmodernity. Correlates postmodernity against the fertility transition.

Data Sources: World Values Surveys, 1990s; Fertility and Family Surveys, UN Economic Commission for Europe

Countries: Europe, United States

Subjects/ Variables: Europeans, Americans

Discipline: Demography

van de Walle, E.

van de Walle, E. (1987). *The Cultural Roots of African Fertility Regimes: Proceedings of the Ife Conference, February 25-March 1, 1987*. Department of Demography and Social Statistics, Obafemi Awolowo University, Ile-Ife, Nigeria, and Population Studies Center, University of Pennsylvania.

van de Walle, E.; Knodel, John

van de Walle, E., & Knodel, J. (1980). Europe's fertility transition: New evidence and lessons for today's developing world. *Population Bulletin*, 34, 1-43.

Van Den Brink, T.

Van Den Brink, T. (1954). Leveling of differential fertility trends in the Netherlands. *Eugenics Quarterly*, 1(4), 230-234.

Abstract: The study examines marriages in the Netherlands between 1924 and 1943. Fertility of married couples in rural districts which is 50 per cent higher than in urban districts for marriages 1922-1926. For the marriage cohorts 1906-1911 the fertility of Roman Catholic women (maximum) is 60 per cent higher than that of women having "no religion" (minimum), while for the women married in the years 1922-1926, the maximum lies 90 per cent above the minimum. To 1947, among the group with the highest fertility (Roman Catholic marriages) in the past 20 years a more rapid decline would have taken place than has been registered before. In respect of husband's occupation, for the marriage cohorts 1906-1911: agricultural workers had 677 live births per 100 marriages; salaried employees 369 per 100 marriages. The difference in fertility of these occupational groups has shown a considerable decline since that time: for the marriage cohorts 1922-1926 the figures were 475 and 278 live births per 100 marriages, respectively.

Data Sources: Dutch Population Censuses of 1930 and 1947

Countries: Netherlands; Catholic, Protestant, no religion

Subjects/ Variables: Women married before their 25th birthday and who had been married for more than 20 years on Census day

Discipline: Demography

Van Heck, F.

Van Heek, F. (1954). *Het geboorte-niveau der Nederlandse Rooms-Katholieken: Een demografisch-sociologische studie van een geëmancipeerde minderheidsgroep*. Leiden: H.E. Stenfert Kroese.

van Heek, F. (1956). Roman-Catholicism and Fertility in the Netherlands: Demographic Aspects of Minority Status. *Population Studies*, 10(2), 125-138.

Abstract: The Netherlands are exceptional among Western European countries in having birth rates which are considerably higher than those of its neighbours. The religious factor has contributed to the relatively high level of the Dutch birth rate. The Dutch differences become negligible when non-Catholic Groningen and Danish Jutland are compared. The difference is due particularly to the Dutch Catholics, who form nearly 40% of the total population. In Holland, the fertility of Catholics is 45% above that of members of the Dutch Reformed Church, and 15% above that of the Calvinists. The important question is why Dutch Catholic fertility has fallen more slowly than that of other Dutch groups or that of Catholics in other countries. Three factors which raise the birth rate among Dutch Catholics are: Catholics are highly represented in the agricultural areas which lie in the sandy part of the country, where agriculture is less mechanized and more workers are required per square mile; Catholics are less than proportionately represented in the Dutch big towns; and Catholics are relatively overrepresented in occupations which have a high birth rate. Comparisons with border towns in Belgium and Germany show a 60%/50% difference from neighbouring Dutch Catholics. Interviews with Belgian Catholic medical practitioners indicated that Dutch Catholic clergy were more active than their Belgian colleagues in their insistence on the strict application of Catholic standards to the birth rate issue. Dutch Roman Catholics are distinguished from other Catholics by their aggressiveness, characterised by a comparatively strong and combative communal organisation and a strong religious élan, manifesting itself in an intensified observance of specifically Catholic standards of theological ethics. This attitude strongly influences the birth rate of the group.

Data Sources: Dutch vital statistics; interviews with Belgian Catholic medical practitioners

Countries: Netherlands

Subjects/Variables: Dutch Catholics, Dutch Reformed, Calvinists; Belgian and German Catholics

Discipline: Sociology

Van Heek, F. (1984). *Stad en platteland in demografisch perspectief: De Nederlandse situatie in de periode 1850-1960*. The Hague

van Poppel, Frans

van Poppel, F. (1983). Differential fertility in the Netherlands: an overview of long-term trends with special reference to the post-World War I marriage cohorts. *Working Paper*, 39.

Abstract: Results from the Netherlands censuses of 1930, 1947, 1960, and 1971 are examined to determine the influence that religious denomination and social group have exerted on the fertility of marriages contracted before the wife is age 25 in the period 1876-1959. An analysis of the data indicates that in 19th and 20th century Holland both religious denomination and social group had an important influence on fertility and that both variables overlap each other; it is concluded that the religious denomination has had the strongest influence on the differences in fertility, although the social group also had effects on fertility behavior. Roman Catholics had the highest average number of children/marriage, followed by Calvinists and Dutch Reformed. Catholics gave birth to nearly 5.4

more children than their Protestant colleagues. Certain groups can be identified which were especially responsible for the late decline in fertility in the Netherlands; Roman Catholics, particularly those working in the agricultural sector but also Catholic workers and self-employed outside agricultural workers insofar as they lived in the south of the Netherlands or in some specific regions in the west. One theory of why these groups had high fertility was that many 19th century family households were characterized by a combination of the following elements: 1) the familial nature of the economic production, 2) labor was the dominant factor of production, and 3) net transfers of goods, money, and services within the households took place from young to old. Among Catholic households there was an especially high proportion of family businesses for which large families were advantageous, in addition to resistance to fertility decline as that involved changing established moral standards. The latter resistance was strengthened by the strong religious and social framework of Catholics. By exercising influence and social control within this institutional framework it was possible also to maintain the taboos regarding the use of contraception for a long time, well into the 20th century. Also, the church's social program tried to mitigate the personal and social disintegration, including birth control, that one associated with industrialization. An indirect cause of Catholic high fertility was the sense of sacrifice generated by the large hard-working Catholic family which was proclaimed to be the cornerstone of society. In addition the lower breastfeeding rate, higher infant mortality rate, and high percentage of children contributing to family income helped to maintain high fertility.

Data Sources: Netherlands censuses of 1930, 1947, 1960, and 1971

Countries: Netherlands

Subjects/ Variables: Dutch (1876-1959); Catholics, Calvinists, Dutch Reformed

Discipline: Demography

van Poppel, F. (1985). Late fertility decline in the Netherlands: The influence of religious denomination, socioeconomic group and region. *European Journal of Population/Revue Européenne de Démographie*, 1(4), 347–373.

Abstract: Both published results from the 1930, 1947, 1960 and 1971 censuses and unpublished ones are used to examine the influence that religious denomination, socio-economic group and region exerted on the fertility of marriages contracted between 1876 and 1959. A theory formulated by Lesthaeghe and Wilson on the relation between modes of production and secularization and the pace of fertility decline in Western Europe offers — in combination with van Heek's views on the special position of Dutch Roman Catholicism — a starting point for an explanation of why the fertility decline of Roman Catholics, self-employed and agricultural labourers lagged behind.

Data Sources: 1930, 1947, 1960 and 1971 censuses and unpublished ones

Countries: Netherlands

Subjects/ Variables: Dutch (1876-1959)

van Poppel, Frans; Derosas, Renzo

van Poppel, F., & Derosas, R. (2006). Introduction. In R. Derosas & F. v. Poppel (Eds.), *Religion and the Decline of Fertility in the Western World* (pp. 1-20). Dordrecht: Springer.

Summary: The Introduction outlines the history of demographic research into religious differentials of the decline in fertility in the West, from the late 19th century onwards. It discusses the European Fertility Project, initiated by Ansley J. Coale at the Office of Population Research at Princeton

University, and the role of cultural factors. This is followed by a discussion of more recent theoretical work on religious variables in demographic behaviour - following seminal studies of cultural variables by Goldscheider, Kertzer, Greenhalgh - by McQuillan; Chatters and Taylor. The principles guiding contributions to this volume are (1) use of micro-level data on as large a number of dimensions of religion, family and family size as possible; (2) identification of and controlling for other socioeconomic and demographic factors; (3) inclusion of minimum information on a collection of biological, economic, cultural variables; (4) following of a clear theoretical approach; (5) focusing on the variety of reproductive differences (beyond mere number of children), the variety of religious influences on starting, spacing, stopping reproduction, and the variety of religious institutions, practices, and beliefs which could influence reproductive behaviour; (6) placing their micro-level analysis in its proper historical, political, economic contexts. The volume focuses on the fertility decline in Western Europe and Canada in the period 1850-1930.

Data Sources: See individual studies.

Countries: France; Italy; Canada; Germany; Switzerland; Netherlands

Subjects/Variables: Catholics; Levantine Sephardic Jews; Ashkenazi Jews, Lutherans, Orthodox Christians; liberal Calvinists

Verona, Ana Paula de Andrade; Dias, Cláudio Santiago

Verona, A. P. d. A., & Dias, C. S. (2012). Religião e fecundidade entre adolescentes no Brasil [Religion and fertility among adolescents in Brazil]. *Revista Panamericana de Salud Pública*, 31(1), 25-31.

Abstract: OBJECTIVE: The objective of this study was to examine the association between the age of having one's first child in adolescence and before marriage and religious involvement in Brazil, measured by religious affiliation and frequency of attendance at religious services or masses. The objective of this study was to examine the association between the age of having one's first child in adolescence and before marriage and religious involvement in Brazil, measured by religious affiliation and frequency of attendance at religious services or masses.

METHODS: Transverse data obtained from the National Survey of Demographics and Health of 1996 and the National Survey of Demographics and Health of Women and Children of 2006 were utilized. Cox proportional risks models were employed to estimate the association between religion and age of having one's first child premaritally and during adolescence.

RESULTS: The results indicate a strong association between premarital fertility in adolescence and religious involvement in both 1996 and 2006. In 1996, frequency of attendance at religious service s or masses was more important than religious affiliation in explaining the age at which one had her first child. In 2006, belonging to a Pentecostal church comes to predominate.

CONCLUSIONS: The results presented in this study are encouraging insofar as they show that Protestant adolescents, particularly Pentecostals, have a reduced risk of adolescent premarital motherhood. This result was not expected, given that Pentecostalism predominates in the less advantaged population groups, with lower incomes and levels of education and residence in urban areas, where adolescent fertility is also concentrated in Brazil. Future studies must be undertaken with the purpose of understanding how the various mechanisms of religious influence operate in the life and behavior of adolescents in Brazil.

Data Sources: Pesquisa Nacional de Demografia e Saúde [National Demographic and Health Survey], Brazil, 1996 (PNDS 1996)

Countries: Brazil

Subjects/Variables: 4528 women between the ages of 15 and 24 in 1996 (Catholic, Protestant, Evangelical, Spiritist, Afro-Brazilian religions; Eastern religions, Jews, and other religions) and 4996 in 2006 (Catholic, Protestant, Pentecostal, Spiritist, Afro-Brazilian religions, and other religions)

Discipline: Demography, Sociology and Anthropology

Vijayasri, Sonti

Vijayasri, S. (2004). *Fertility Decline among the Muslims of Andhra Pradesh*. Hyderabad: B.R. Ambedkar Open University.

Visaria, Leela

Visaria, L. (1974). Religious Differentials in Fertility. In A. Bose (Ed.), *Population in India's Development, 1947-2000*. New Delhi: Vikas Publishing House.

Summary: During 1961-1971, Muslims experienced an increase of 30.8%, Hindus 23.7%. A survey of recent surveys and NSS data suggest that there are differentials in marital fertility between Hindus and Muslims. However, urban Muslims show consistently lower fertility, and urbanization is higher among Muslims than Hindus, suggesting that the trend might spread faster among Muslims.

Data Sources: Indian Censuses; Mysore Population Study, 1951-1952 (United Nations); Edwin Driver's study, Nagpur District, 1958; Lucknow study, 1954-1955, by Mukerjee and Singh; Lucknow study by Ishrat Husain, 1966-1967; El Badry's study, Lucknow, 1966-1967; NSS study, 1960-1965

Countries: India

Subjects/Variables: Indians; Hindu, Muslim

Discipline: Demography

Walsh, Brendan M.

Walsh, B. M. (1970). *Religion and demographic behaviour in Ireland* *Summary:* The aim of the present study is modest, namely, to use the published data sources to construct as complete a picture as possible of the demographic behaviour of the religious groups in both parts of Ireland. For the most part, the facts are presented without commentary, although some of the more obvious implications are underlined. While it emerges from the present study that the use of religion to classify the population of Ireland is meaningful from a demographic point of view (since there is a sharp contrast in the demographic behaviour of Catholics and the rest of the population), this need not be taken to imply that religion is the only, or even the most important, source of social conflict in Ireland today.

Data Sources: Census reports

Countries: Ireland, Northern Ireland

Subjects/Variables: Whole population

Discipline: Economics

Washofsky, Mark

Washofsky, M. (2009). Faith and Fertility in Reform Jewish Thought. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 225-245). London: Jessica Kingsley Publishers.

Summary: In Chapter 9 Mark Washofsky illustrates this interaction between the Orthodox traditional and Reform Jewish values in relation to the first commandment concerning procreation. In contrast to the Orthodox view, Reform Jewish thought does not hold that procreation is a duty more incumbent upon males than upon females. The egalitarian approach towards women in Reform Judaism significantly distinguishes it from Orthodox Judaism, and has an impact on its views on abortion, the status of the embryo, assisted conception, surrogacy and sex selection. Washofsky concludes that the tension between Orthodox Jewish thought and the need to reconcile it with the challenges of social changes and technological innovations results in a plural conception of moral truth in Reform Judaism.

Data Sources: Theoretical discussion

Weeden, Jason; Cohen, Adam B.; Kenrick, Douglas T.

Weeden, J., Cohen, A. B., & Kenrick, D. T. (2008). Religious Attendance as Reproductive Support. *Evolution and Human Behavior*, 29, 327-334.

Abstract: We argue that a central function of religious attendance in the contemporary U.S. is to support a high-fertility, monogamous mating strategy. Although religious attendance is correlated with many demographic, personality, moral, and behavioral variables, we propose that sexual and family variables are at the core of many of these relationships. Numerous researchers have assumed that religious socialization causes people to feel moral reactions and engage in behaviors promoted by religious groups. On our view, mating preferences are centrally involved in individual differences in attraction to religious groups. In a sample of 21,131 individuals who participated in the U.S. General Social Survey, sexual behaviors were the relatively strongest predictors of religious attendance, even after controlling for age and gender. Effects of age and gender on religious attendance were weaker, and substantially reduced when controlling for sexual and family patterns. A sample of 902 college students provided more detailed information on religious, moral, and sexual variables. Results suggest that 1) moral views about sexual behavior are more strongly linked to religious attendance than other moral issues, and 2) mating strategy is more powerful than standard personality variables in predicting religious attendance. These findings suggest that reproductive strategies are at the heart of variations in religious attendance.

Data Sources: US General Social Survey; sample of 902 students at four US universities

Countries: United States

Subjects/Variables: US Protestants, Catholics, Jews, Muslims, Orthodox Christians, Buddhists, others, and no religious affiliation; religiosity (attendance)

Discipline: Psychology

Weeks, John Robert

Weeks, J. R. (1988). The demography of Islamic nations. *Population Bulletin*, 43(4), 5-54.

Abstract: This report examines the demographic dynamics of the Moslem world, focusing primarily on the causes and consequences of the rapid rate of population growth in those nations in which a significant fraction of the population follows the Islamic faith. The material is presented in short sections with tables and figures. The beginning offers a description of Islam and discusses social relationships including male-female relations, marriage and divorce. Islamic nations are defined and their demographic distinctiveness is discussed. The 40 nations included are those in which the majority of the populations adhere to Islam and another 7 nations in which a significant minority of the population is Moslem. Various information regarding fertility in Islamic nations, such as levels and trends, explanations of fertility levels, and the status of women is then reviewed. Mortality and migration in Islamic nations are also reviewed. Subsumed under the latter topic is a discussion of international migration, urbanization and refugees in Islamic nations. The age and sex composition of Islamic societies is described. The population growth and economic development is presented along with population policies in Islamic nations. There is considerable diversity among Islamic nations; few demographic patterns in Islamic nations appear to be a direct result of religious influence. The high fertility found in many Islamic nations is thought to be a consequence of the recency of social and economic development in nearly all Islamic nations.

Data Sources: Richard V. Weekes, *Muslim Peoples: A World Ethnographic Survey*, 2nd ed. (1984); Mark S. Hoffman, ed. *The World Almanac and Book of Facts 1988* (1987); censuses

Countries: 40 majority-Muslim countries, 7 countries with significant Muslim minorities

Subjects/Variables: Muslims

Discipline: Sociology

Weitzman, Gideon

Weitzman, G. (2009). 'Give me Children or else I am Dead': Orthodox Jewish Perspectives on Fertility. In E. Blyth & R. Landau (Eds.), *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times* (pp. 205-224). London: Jessica Kingsley Publishers.

Summary: Rabbi Gideon Weitzman, in Chapter 8, indicates that while there are different groups in Orthodox Judaism, all of them are committed to following and acting upon the Halachah, the Jewish legal system that guides the actions of an Orthodox Jew. The Halachah comprises the Five Books of Moses and the Oral Law that is the interpretation of the law. In Orthodox Judaism, the normative religious behaviour is based on an ongoing explanation of the Halachah. There is no one central authority that determines the daily behaviour of Orthodox Jews, which is rather guided by the rich halachic literature that includes previous decisions and their interpretations pertaining to issues in everyday life, and the examination of new situations in view of those precedents. While each rabbi may participate in the halachic debate, there are some rabbis whose opinions carry greater weight and cannot be ignored. The first commandment of the Torah – 'be fruitful and multiply' – reflects the great importance of having and raising children in the Jewish tradition. Based on various halachic sources, Rabbi Weitzman examines the halachic views, as perceived by Orthodox Judaism,

on fertility testing, modern fertility treatments, third-party assisted conception, the status of the embryo and related issues.

Data Sources: Theoretical discussion

Weller, Robert H.; Bouvier, Leon F.

Weller, R. H., & Bouvier, L. F. (1972). The three R's: Residence, religion, and reproduction. *Demography*, 9(2), 231–240.

Abstract: Survey research data collected in Rhode Island over a three year interval are used to test six propositions: 1) Suburbanites have higher family size than central city residents. 2) Any differences in family size between Catholics and non-Catholics are larger in central city than in suburban areas. 3) Within religious categories, suburbanites attend church more regularly. 4) Among Catholics, suburban residence is associated with less frequent Communion reception. 5) Among Catholics, church attendance frequency is positively associated with family size. Among non-Catholics no relationship exists. 6) The frequency with which Catholics receive Communion is more strongly associated positively with family size than is church attendance frequency. Propositions 1, 2 and 5 are rejected. Propositions 4 and 6 are accepted. Proposition 3 is accepted for non-Catholics only.

Data Sources: Three samples of the population of Rhode Island, in the autumns of 1967, 1968, and 1969 under the auspices of the Population Research Laboratory of Brown University

Countries: United States

Subjects/Variables: Male and female respondents who were currently married at the time of the survey and had not been married before, wives between the ages of 15 and 49

Discipline: Sociology

Westoff, Charles F.

Westoff, C. F. (1959). Religion and Fertility in Metropolitan America *Thirty Years of Research in Human Fertility* (pp. 117-134). New York: Milbank Memorial Fund.

Summary: A report on the early stages of The Study of the Future Fertility of Two-Child Families, conducted by the Office of Population Research, Princeton University. The average total number of children desired by the wife is (both Protestant) 3.0; (both Catholic) 3.6; (both Jewish) 2.7; (wife Protestant, husband Catholic) 3.1; (wife Catholic, husband Protestant) 3.2. Correlations between religiosity and fertility were not significant, but there was a positive correlation for Catholics.

Catholic women who went to college and whose education was exclusively in Catholic schools want an average of over 5 children, as compared to the 3.4 children desired by Catholic college women whose education was exclusively secular.

Data Sources: The Study of the Future Fertility of Two-Child Families, conducted by the Office of Population Research, Princeton University

Countries: United States

Subjects/Variables: 1,165 couples who had their second child in the same month and year; Protestants, Catholics, Jews; religiosity (church attendance and subjective)

Discipline: Demography

Westoff, C. F. (1979). The Blending of Catholic Reproductive Behaviour. In R. Wuthnow (Ed.), *The Religious Dimension: New Directions in Quantitative Research* (pp. 231-240). New York: Academic Press.

Westoff, Charles F.; Bumpass, Larry.

Westoff, C. F., & Bumpass, L. (1973). The Revolution in Birth Control Practices of U.S. Roman Catholics. *Science*, 179, 41-44.

Abstract: There has been a wide and increasing defection of Roman Catholic women from the traditional teaching of their Church on the subject of birth control over the past two decades and a resulting convergence of Catholic and non-Catholic contraceptive practices. By 1970, two-thirds of all Catholic women were using methods disapproved by their Church; this figure reached three-quarters for women under age 30. Perhaps the most significant finding is that the defection has been most pronounced among the women who receive Communion at least once a month. Even among this group, the majority now deviates from Church teaching on birth control; among the younger women in this group, the proportion not conforming reaches two-thirds.

Data Sources: 1970 National Fertility Study (6752 ever-married women of reproductive age (under 45) nationwide)

Countries: US

Subjects/Variables: Currently married, white Catholic women living with their husbands

Discipline: Sociology

Westoff, Charles F.; Frejka, Tomas

Westoff, C. F., & Frejka, T. (2007). Religiousness and Fertility among European Muslims. *Population and Development Review*, 33(4), 785-809.

Abstract: Based on official data on religion, national origin, and other indicators of ethnic origin, Muslim fertility in 13 European countries is higher than that for other women, but in most countries with trend data the differences are diminishing over time. Fertility varies by country of origin of immigrants. Various European survey data show that higher proportions of Muslim women are married and their commitment to traditional family values is greater than among other women. Muslim women are more religious than non-Muslim women and religiousness is directly associated with fertility. Among Muslim women, religiousness and commitment to family values are equally important for fertility, while for non-Muslim women religiousness is much less important.

Data Sources: Censuses (religious data only in Austria, Bulgaria, Croatia, Slovenia, and Ukraine censuses; immigrant data only in France, Netherlands, Norway, England and Wales; foreign citizenship/nationality in Belgium, West Germany, Switzerland, Italy), European Values Study (1990-2000); European Social Surveys 2002, 2004

Countries: Europe

Subjects/Variables: European Muslims and non-Muslims (1970s-2000s)

Discipline: Sociology

Westoff, Charles F.; Jones, Elise F.

Westoff, C. F., & Jones, E. F. (1977). The Secularization of U.S. Catholic Birth Control Practices. *Family Planning Perspectives*, 9(5), 203-207.

Abstract: Except for sterilization, Catholic and non-Catholic contraceptive practices are now quite similar. Within several years, even sterilization will probably be adopted by the same proportions of Catholics as non-Catholics, and the rhythm method is destined to be of historical interest only. The wide gulf between official Catholic doctrine and the birth control behavior of Catholics can only deepen in the next few years.

Data Sources: National Fertility Study 1975, codirected by Norman B. Ryder and Dr. Westoff under contract with the Center for Population Research of the National Institute of Child Health and Human Development

Countries: United States

Subjects/Variables: surveys of married women of reproductive age conducted at five-year intervals from 1955 through 1975

Discipline: Demography

Westoff, C. F., & Jones, E. F. (1979). The End of "Catholic" Fertility. *Demography*, 16(2), 209-217.

Abstract: Catholic and non-Catholic fertility during the post-World War II period are compared in this paper. Evidence accumulated across five sample surveys of fertility in the United States, which were conducted at five-year intervals from 1955 through 1975, forms the basis for the analysis; both cohort and period measures are employed. Starting from a situation where Catholic fertility was very little higher than that of non-Catholics, it is shown that the differential increased markedly during the baby boom and then declined to a point where the two trends nearly come together in the mid-1970s. Interpretation of the recent convergence in the light of various theories that have been put forward to explain the differential suggests that it will be an enduring phenomenon.

Data Sources: National Fertility Study (1955-1975)

Countries: US

Subjects/Variables: Catholics and non-Catholics.

Discipline: Sociology

Westoff, Charles F.; Marshall, Emily A.

Westoff, C. F., & Marshall, E. A. (2010). Hispanic Fertility, Religion and Religiousness in the U.S. *Population Research and Policy Review*, 29(4), 441-452.

Abstract: Is the higher fertility of Hispanics in the United States due to their religion and/or to their greater religiousness? Evidence from national survey data indicates no difference in fertility between Protestant and Catholic Hispanic women but Hispanics are more religious than non-Hispanics in terms of the perceived importance of religion in their personal lives. Religiousness is associated with higher fertility but Hispanic fertility is higher than non-Hispanic fertility regardless of religion or religiousness. Ethnic differences in education and income in turn are more important for fertility than the religious dimension.

Data Sources: The 2002 and the 1995 National Surveys of Family Growth; the four General Social Surveys between 2000 and 2006; the 2006 survey of Hispanics by the Pew Forum on Religion and Public Life and the Pew Hispanic Center

Countries: United States

Subjects/Variables: Hispanics and non-Hispanics; Catholics, Protestants, other; religiosity

Discipline: Sociology

Westoff, Charles F.; Potter, Robert G.; Sagi, Philip C.

Westoff, C. F., Potter, R. G., & Sagi, P. C. (1963). *The Third Child*. Princeton: Princeton University Press.

Westoff, C. F., Potter, R. G., & Sagi, P. C. (1964). Some Selected Findings of the Princeton Fertility Study: 1963. *Demography*, 1(1), 130-135.

Abstract: After three years, we carried out a re-interview of a probabilistic sample of respondents who lived in seven of the largest metropolitan areas of the United States and who had had the second child six months before the first interview. It was found in the previous survey that the effectiveness of the contraception was comparatively low between marriage and the birth of the first child, and did not improve greatly between the first and second children. The re-interview revealed, however, that after the birth of the second child the efficiency of contraception was greatly improved. The authors conclude that birth control is practiced primarily to space children in the first years of marriage and with a comparatively low efficiency. As couples reach the desired family size, the effectiveness of their contraceptive practice increases strongly. The survey once again explored a wide range of hypotheses related to social and psychological factors linked to fertility. It was found that religion is an important factor. Catholics who have attended church schools especially colleges tend to show greater fertility than others. It was found that the variable socio-economic category had a low correlation with fertility, and that the correlation was positive for Catholics and negative for Protestants. Social mobility was not related to fertility.

Data Sources: Princeton Fertility Study

Countries: United States

Subjects/Variables: 1165 respondents represented couples having a second birth in September of 1956, six months before the first interview, and who were at the time residing in one of the seven largest Standard Metropolitan Areas of the United States, native-white and English-speaking with marital histories uncomplicated by divorce, permanent separation, death, or extensive pregnancy wastage; Protestant, Catholic, Jewish

Discipline: Demography

Westoff, Charles F.; Potter, Robert G.; Sagi, Philip C.; Mishler, Elliot G.

Westoff, C. F., Potter, R. G., Sagi, P. C., & Mishler, E. G. (1961). *Family Growth in Metropolitan America*. Princeton: Princeton University Press.

Summary: Study of primary fertility variables (fecundity, contraception, birth intervals, desired family size) and social and psychological determinants (religion, class, religiosity, socio-economic status,

social mobility, residence and migration, age and sex composition of family, social relations within family, personality characteristics). The average total number of children desired by the wife is 3.6 (both parents Catholic), 3.0 (both Protestant), 2.7 (both Jewish), 3.1 (wife Protestant, husband Catholic), 3.2 (wife Catholic, husband Protestant). In mixed-marriages performed by a Catholic priest, family-size preference was significantly higher. Religion is a better predictor of family size than class. There is a positive correlation between desired family size and religiosity (church attendance, religion included in home activities, self-rating of wife, perception of importance of spiritual and religious values) for Catholics and mixed Catholic, but none for Protestants. There is a strong positive correlation between desired number of children and religious education (usually Catholic). Fertility differed significantly among Catholics of different ethnic backgrounds, which may be explained by levels of religiosity rather than class (mean number of desired children per women: Irish, 4.1; German 3.7; Slavic, 3.6; Italian, 3.3).

Data Sources: Longitudinal study 1,165 eligible wives from 7 US metropolitan areas, after birth of second child in September 1956, reinterviewed three years later.

Countries: United States

Subjects/ Variables: 1,165 white once-married wives; Protestant, Catholics, Jewish; religiosity

Discipline: Demography

Westoff, Charles F.; Potvin, Raymond H.

Westoff, C. F., & Potvin, R. H. (1966). Higher Education, Religion and Women's Family-Size Orientations. *American Sociological Review*, 31(4), 489-496.

Abstract: Is the high fertility of Catholic women who have attended Catholic institutions of higher education primarily a consequence of that experience or a reflection of selectivity for other characteristics relevant to family formation? Does a non-sectarian education diminish the number of children desired by women of all religious groups? These questions are answered by a study of nearly fifteen thousand women in a probability sample of 45 colleges and universities throughout the country. Although not without qualifications, the main conclusion is that selectivity is more important than college experience in explaining differentials in family-size preference among Catholic college women. The one exception is found among women who were graduated from Catholic high schools and enrolled in a non-sectarian institution; for them a decline in family-size preference, apparently not due to selectivity, was observed. Though some decline is also observed for the other groups, the differentials are slight and could easily be due to factors other than the college experience itself.

Data Sources: Sample of four-year universities, liberal arts colleges, and teacher's colleges, with full-time undergraduate female enrollments of at least 300 students

Countries: United States

Subjects/ Variables: 15,000 freshmen and senior women at 45 institutions of higher learning

Discipline: Demography

Westoff, C. F., & Potvin, R. H. (1967). *College Women and Fertility Values*. Princeton: Princeton University Press.

Summary: Earlier surveys revealed non-Catholic women with four years secondary school had same fertility as those with less than four years, but higher than those with tertiary/college education. But Catholic women with more education had higher fertility, where the education was under Catholic

auspices, and especially strong where wholly in Catholic institutions. The main analytical question of the study is whether higher education influences the number of children that women would like to have. The study is designed to determine whether the association of higher fertility with Catholic education is selectivity or the actual educational experience. The study finds that the content of Catholicism, and also the religion of Mormonism, carries more direct substantive connotations for fertility values than for Protestant or Jewish women, who, in their fertility attitudes, differ hardly at all from women with no religious preference. Both Mormons and Catholics possess a basically traditional family ideology. Catholics have a strong tendency to reject birth control. Large families are not seen as a duty or obligation, or as relating to the church's teaching that it is an obligation, but is nonetheless connected with the extent and intensity of identification with the religious system. Their family-size preferences appear as a commitment to a communal-traditional way of life in which religion is the integrating factor. Religiosity (by behaviour and attitudes) is a predictor of fertility for Catholics, and is based on system of beliefs that have some bearing on the formation of fertility values. The influence includes direct forms (eg. esp. position on birth control) and more indirect forms that define the ideal role of the woman (marriage is viewed as a career option and only if the goal is to produce children, and is thought incompatible with having another career) But these principles do not act in a vacuum, affecting women within the church body which generates primary-group orientations among its members, the primary source of informal social relations that can affect family-size preference (for Catholics and Mormons). But for Catholics educated at Catholic high schools but now enrolled in nonsectarian institutions, exposure to contradictory norms often forces a reconsideration of beliefs and values that underlie rules of behaviour.

Data Sources: Based on the longitudinal study, Office of Population Research, Princeton University (Freedman, Whelpton and Campbell, 1959; Whelpton, Campbell and Patterson, 1966; Westoff, Potter, Sagi, Mishler, 1961; Westoff, Potter, Sagi, 1963), involving 683 schools.

Countries: United States

Subjects/ Variables: 15,000 completed questionnaires (72% response rate) of freshmen and senior women from 45 four-year institutions of higher education in the United States. Catholics, Protestants, Jews, Mormons, no religion; religiousness by behaviour and attitudes.

Discipline: Demography

Westoff, Charles F.; Ryder, Norman B.

Westoff, C. F., & Ryder, N. B. (1977). *The Contraceptive Revolution*. Princeton: Princeton University.

Whelpton, P. K.; Kiser, Clyde V.

Whelpton, P. K. K., Clyde V. (1946 -1958). *Social and Psychological Factors Affecting Fertility*. New York: Milbank Memorial Fund.

Whelpton, P. K. K., Clyde V. (1959). Social and Psychological Factors Affecting Fertility: Summary of chief findings and implications for future studies. *The Eugenics Review*, 51(1), 35-42.

Abstract: The facts of chief significance that were learned from the Indianapolis Study are discussed briefly under three headings: (A) Household Survey data on religion and fertility; (B) contraception, fecundity, and fertility, and (C) hypotheses on the relation of social and psychological factors to fertility planning status and size of planned family. The fertility rates were highest for the Catholic couples and lowest for the Jewish. The fertility rate standardized for age was about 18 per cent higher for Catholics than for Protestants. It was about 25 per cent lower for Jews than for Protestants. The fertility rate was relatively low for Protestant-Catholic mixed marriages. These marriages were about 10 per cent less fertile than Protestant unions and 23 per cent less fertile than Catholic unions. However, they were about 21 per cent more fertile than Jewish unions. The higher fertility rate for the Catholic than for the Protestant unions persisted at each level of education and rental value of the dwelling unit, except possibly at the lowest rental-value levels. The range of the variations in fertility was wider, and the inter-class differences in fertility by rental value of the home were sharper, for the Protestant unions than for the Catholic unions. Nevertheless, the general pattern of variation was much the same for the two religions.

Data Sources: Indianapolis Study

Countries: United States (Indianapolis)

Subjects/ Variables: White households in Indianapolis; Protestants, Catholics, Protestant-Catholic mixed marriages, Jews

Discipline: Demographics

Whelpton, P.K.; Campbell D.A.; Patterson, J.E.

Whelpton, P. K., & Campbell D.A.

Patterson, J. E. (1966). *Fertility and Family Planning in the United States*. Princeton: Princeton University Press.

Summary: The broad aims of the 1955 and 1960 Growth of American Families Studies are to see whether data on birth expectations can be used to help prepare forecasts of fertility rates and to describe many of the variables affecting family size in the United States. Some of these variables are the number of children couples want to have, the ability of couples to have children, whether or not couples use contraception, and how they plan family growth. Differences in the fertility of various religious, social, and economic groups arise mainly from two sources: differences in the number of children couples want and differences in their willingness and ability to control fertility. Other causes of variation, such as differences in fecundity and age at marriage, are of much less importance. Catholic authorities, unlike Protestant denominations stress the importance of procreation in marriage. The average expected total number of births is 3.7 for white Catholics and 2.9 for white Protestants. The proportion of white Catholic wives expecting five or more births (usually five to eight) is considerably more than twice as large as for white Protestant wives. White Jewish wives expected fewer births than either Catholics or Protestants. The higher expectations of white Catholics cannot be attributed to differences in socioeconomic characteristics. Within every major social and economic group, the study finds Catholic wives expect a substantially larger number of births than white Protestant and Jewish wives. There is a positive relationship between fertility and church attendance only for Catholics, and within each socioeconomic group. There is a direct relationship between the amount of Catholic education and the expected size of completed family, with expected births rising from 3.6 for Catholic wives without Catholic schooling to 4.2 with exclusive Catholic schooling.

Data Sources: Surveys in 1955 and 1960, Survey Research Center, University of Michigan and (1955 only) the Scripps Foundation (Growth of American Families Studies)

Countries: United States

Subjects/ Variables: 3,322 wives (white and non-white women, 18-39 years old in 1960; white women 40-44; white women, previously married, 23-44) interviewed in May-July 1960; Catholics, Protestants, Jews

Discipline: Demography

Whelpton, P.K.; Lauriat, Patience

Whelpton, P. K., & Lauriat, P. (1956). College Study Report -1956. *Population Bulletin*, 12.

Whelpton, Pascal K.

Whelpton, P. K. (1964). Trends and Differentials in the Spacing of Births. *Demography*, 1(1), 83-93.

Abstract: Compared to trends before the Second World War, women in the United States now have their first child within a shorter interval after their marriage, their second child on a date closer to that of the first child, and their third children on a date closer to the second. Both the fertility data presented by the tabulations of the United States Census Bureau and the 1960 Growth of American Families Survey show these results. This is a complete shift from the trend that predominated before the Second World War and especially with respect to the period of economic depression in the 1930s. Data from the Growth of American Families Survey provide additional knowledge regarding this phenomenon: (a) it occurs between couples of all socioeconomic levels; (b) in general, people of higher socio-economic status have children at greater intervals than those of lower socio-economic status, and Protestants have children at longer intervals than Catholics. The recent change has had the effect of diminishing these differences; (c) this trend towards a reduction of the intervals has occurred on a voluntary basis, since other data obtained through the survey indicate that a high percentage have complete knowledge and experience in the use of contraceptive methods.

Data Sources: Census, Family Growth in the United States survey

Countries: United States

Subjects/ Variables: White women first marrying from 1900-09 to 1930-34 and having one, two, or three or more children; Catholic, Protestant, Jewish

Discipline: Demography

Wilder, E.I.

Wilder, E. I. (2000). Socioeconomic and Cultural Determinants of Abortion among Jewish Women in Israel. *European Journal of Population / Revue Européenne de Démographie*, 16, 133-162.

Abstract: Religiosity emerged as the most significant determinant of induced abortion in Israel. There are higher rates of abortion among secular Jews and lowest rates of abortion among Orthodox Jews.

With socioeconomic development, some determinants lose their explanatory power, whereas others become increasingly important. For example, in 1974-1975 women who worked were more likely to seek abortion; by the late 1980s, abortion was much less common among highly educated women. Religiosity is also inversely associated with the use of birth control, and abortion is more likely to be under-reported by the more religious.

Data Sources: 1974-1975 Israel Fertility Survey; 1987-1988 Study of Fertility and Family Formation

Countries: Israel

Subjects/ Variables: Israelis

Discipline: Demography

Williams, Linda B.; Zimmer, Basil G.

Williams, L. B., & Zimmer, B. G. (1990). The Changing Influence of Religion on U.S. Fertility: Evidence From Rhode Island. *Demography*, 27(3), 475-481.

Abstract: Traditionally one of the indisputable generalizations in demography has been that Catholics have higher fertility than Protestants and Jews (Freedman, Whelpton, & Campbell 1959; Ryder & Westoff 1971; Westoff, Potter, & Sagi 1964; Whelpton, Campbell, & Patterson 1966). Recently, however, doubts have been raised about the continued validity of this longstanding and heretofore widely accepted generalization. We expected to find that greater commitment to the Catholic Church would be more highly associated with elevated fertility among the women interviewed in 1980 than among those interviewed in 1967. In addition, we anticipated that differences would still be found between the fertility levels of the Catholics and non-Catholics in our sample. Both hypotheses were supported. Whereas Catholic fertility was higher than that of non-Catholics at both points in time, the interaction between religious affiliation and frequency of church attendance was significant only among the women who took part in the replication survey. Thus as church attendance became more selective of the more committed Catholics, it became more highly associated with actual fertility behavior. What is certain is that among white first-married women in Rhode Island, Catholic fertility had not yet ended in the 1960s and 1970s. When in the minority, Catholics tend to find themselves living near and interacting primarily with non-Catholics. Under such circumstances, Catholics very often find that given similar resources, they cannot have large families and still maintain life styles similar to those of their non-Catholic neighbors. As a result, many take on the family-building patterns of those in the majority and limit the number of children they eventually have. As members of the majority, however, Catholics in Rhode Island live in close proximity to other Catholics, and church norms favoring larger families are reinforced.

Data Sources: Personal interviews with 1,127 households (1967) and 1,160 households (1980)

Countries: United States (Rhode Island)

Subjects/ Variables: White women in Providence, Rhode Island (aged 65 or less) in intact first unions

Willis, John

Willis, J. (1975). Mormon fertility and the Americanization hypothesis: Some further comments. *Social Biology*, 22(3), 282-284.

Wright, Paul; Davies, Shane

Wright, P., & Davies, S. (1974). Fertility behavior of a minority population: The Catholics in Northern Ireland. *Ekistics*, 37(221), 249-256.

Abstract: This study indicates that the drawing of a boundary line and the placing of the people on each side of the boundary line under different political rule can create differences in fertility behavior in a cultural group which had previously exhibited virtually identical fertility behavior. There are many cases of a partitioning of a homogeneous people, e.g., East and West Germany, and North and South Korea. A study of demographic trends among the homogeneous groups partitioned can reveal the role of differing political and economic systems in influencing demographic change.

Data Sources: Ulster Year Book, Censuses of Ireland and Northern Ireland

Countries: Ireland, Northern Ireland

Subjects/Variables: Irish; Catholics, Protestants

Discipline: Geography

Yaukey, David

Yaukey, D. (1963). Some Immediate Determinants of Fertility Differences in Lebanon. *Marriage and Family Living*, 25(1), 27-34.

Abstract: Marked fertility differences were found among six distinct and homogeneous social background types of Lebanese couples. Several involuntary and voluntary behavioral differences were investigated as possible immediate determinants of these fertility differences. Among the involuntary determinants treated, neither prolonged separations nor coital frequency helped to explain the fertility differences. If prolonged nursing had any effect, it would have served to decrease rather than cause the observed fertility differences. By far the major involuntary cause of the observed fertility differences was differential age of woman at marriage.

Data Sources: Lebanese Family Size Study 1959

Countries: Lebanon

Subjects/Variables: 909 women who varied greatly with respect to three main social background factors; religion, socioeconomic status, and rural-urban residence

Discipline: Demography

Yoder, Michael L.

Yoder, M. L. (1980). *Religion as a Determinant of Fertility Among White Americans, 1965*. Madison: University of Wisconsin.

Summary: The study investigates the following questions:

- 1) For which religious groups and subgroups within Protestantism can effects of the degree of religious commitment (religiosity) on fertility be noted?
- 2) Which dimensions of religiosity are most directly related to fertility?

3) Does religiosity affect wanted and unwanted fertility in similar or dissimilar ways, and are there differences here by religious group?

4) Are there other variables closely tied to religiosity which also affect fertility, either directly or indirectly through their relationship to religiosity?

Significant positive effects of religiosity on wanted fertility were found for both conservative and moderate/liberal Protestants. Church attendance had a negative effect on wanted fertility net of the effects of home religiosity and couples' religious mindedness combined. Yet there was a positive effect of religiosity on wanted fertility in home-centered and subjective dimensions of religiosity (home religiosity for both groups and couples' religious mindedness for conservatives). There were more wanted births for women opposed to abortion, for both groups of Protestants. An inverse relationship of religiosity and unwanted fertility was found for both groups of Protestant women. The apparent explanation is that more religious Protestants have become more responsible; but the alternative explanation is that more religious Protestants engage in post hoc rationalizations of unwanted births. The positive effect of religiosity on wanted fertility and the inverse effect on unwanted fertility for Protestants counterbalance each other to a large degree to produce essentially flat patterns of association of religiosity and total intended fertility. A very strong effect of religiosity on wanted fertility was found for Catholics, as hypothesized. Public practice religiosity, as measured by mass attendance, failed to show a net effect on wanted fertility. Rather, the influence was found in communion frequency and religious mindedness. Little effect of Catholic education on wanted fertility remained net of religiosity, lending support to past research finding this to be a spurious effect of selectivity involved in receiving Catholic education. A small effect of Catholic communalism was present net of religiosity, however. Significant ethnicity effects on wanted fertility were found only for Latin American Catholics, positive and French-descended Catholics, negative. A very strong effect of abortion attitudes on wanted fertility was found. The hypothesis of a positive effect of religiosity on unwanted fertility was not substantiated. The tendency toward an inverse association of religiosity and unwanted fertility for Catholics may be another case of differential post hoc rationalization of unwanted births as wanted. Both wanted and total intended fertility of Catholics show strong positive association to religiosity. For Mormons, a very strong effect of religiosity on wanted fertility was noted. There was also a strong effect of abortion attitudes on Mormon wanted fertility. No positive effect of religiosity on unwanted fertility for Mormons was substantiated, however. The overall pattern of relationships and fertility is much the same as for Catholics. No positive effect of Jewish religiosity on wanted fertility is supported, perhaps due to secularization.

Data Sources: 1965 and 1970 National Fertility Survey (Ryder and Westoff 1971)

Countries: United States

Subjects/ Variables: Sample of US women; Protestant, Catholic, Mormon, Jewish; religiosity

Discipline: Demography

Youssef, Nadia H.

Youssef, N. H. (1978). The Status and Fertility Patterns of Muslim Women. In L. Beck & N. R. Keddie (Eds.), *Women in the Muslim World* (pp. 69-99). Ann Arbor: Harvard University Press.

Zafar, M. Iqbal; Asif, Fawad; Adil, Sultan

Zafar, M. I., Asif, F., & Adil, S. (2003). Religiosity as a Factor of Fertility and Contraceptive Behavior in Pakistan. *Pakistan Journal of Applied Sciences*, 3(3), 158-166.

Abstract: A study was conducted in two major urban centres Faisalabad and Lahore of Pakistan to know the views of respondents about the contraceptive use and family size and composition. Total 1100 women (400 users and 700 non-users of contraception) were interviewed to explore objectives. The high level of fatalism regarding procreation with low sense of personal effectiveness in controlling fertility and prohibition of contraceptive use (perceived by people) in Islamic for birth spacing are undoubtedly responsible for high fertility in Pakistan. The Islamic view point on the issue of fatalism and contraceptive use clearly demonstrates that pronatalist tendencies in Islam stem less from direct injunctions to procreate than from the support of other socio-cultural values and misinformation about the religion. Islam imposes restriction, on procreation in terms of responsibilities involved in children's socialization. Islam does not encourage the viewpoint that predestination makes a human being skeptical with regard to control over his own actions. The use of wisdom to plan everyday life for the betterment of family and society is according to the principles of Islam. A number of hadiths permit the use of 'Al-azl or coitus interruptus' as a method of contraception. From the findings of this study it can be argued that fertility decline is only possible when it is no longer regarded as fatalistic and comes into the realm of perceived personal control.

Data Sources: Interviews

Countries: Pakistan

Subjects/ Variables: 1100 women (400 users, 700 non-users of contraception); Islam

Discipline: Sociology

Zafar, M.I.; Ford, N.; Ankomah, A.

Zafar, M. I., Ford, N., & Ankomah, A. (1995). Significance of Beliefs and Values in Predicting Fertility and Contraceptive Behaviour in Pakistan. *Journal of Biosocial Science*, 27, 301-318.

Abstract: A comparative study of 1100 women aged 25-45 years, users and non-users of modern methods of contraception, in the urban centres of Lahore and Faisalabad was conducted in 1991. The objective of the study was to investigate reproductive behaviour and the extent to which social, cultural and attitudinal variables, such as beliefs and values about family life, religiosity and fatalism, influence the fertility decision-making process. Preferences for smaller families were found to be consistently associated with modern attitudes and behaviour towards family and religious values and obligations. Family income, husband's occupation and religiosity offered no explanation of reproductive behaviour. It is concluded that cultural setting and tradition exert an important influence on reproductive behaviour, independent of economic development.

Data Sources: Two surveys in Lahore and Faisalabad

Countries: Pakistan

Subjects/ Variables: 1100 women aged 25-45 years

Discipline: Demography

Zhang, Li

Zhang, L. (2008). Religious affiliation, religiosity, and male and female fertility. *Demographic Research*, 18(8), 233–262.

Abstract: Religious studies of fertility typically focus on the effect of religious affiliation on fertility; the role of religiosity in determining fertility remains overlooked. Meanwhile, most studies focus on studying female fertility; whether religion and religiosity have significantly different impacts on men's and women's fertility rarely has been examined. To fill these gaps, this study uses data from the 2002 NSFG Cycle 6 on religious affiliation, religiosity, and children ever born (CEB) for both men and women to investigate the effects of religious affiliation and religiosity on male and female fertility. A series of hypotheses which aim to demonstrate the critical role of religiosity, particularly the importance of religious beliefs in people's daily life in shaping people's fertility behavior are tested. The findings show a shrinking pattern of fertility differentials among religious groups. However, religiosity, particularly religious beliefs, shows a substantially positive effect on fertility. The gender interaction terms are not significant which indicates that the effects of religion and religiosity on fertility do not vary by gender.

Data Sources: The 2002 National Survey of Family Growth (NSFG) Cycle 6, National Center for Health Statistics

Countries: United States

Subjects/ Variables: 7,643 women aged 15 to 44 years old and 4,928 men aged 15 to 45 years old in the United States, 2002; Catholic, fundamentalist Protestant (incl. Baptists/Southern Baptists), other Protestant (incl. Methodists, Lutherans, Presbyterians and Episcopalians), and other non-Christian religion; religiosity (attendance, importance to subject)

Discipline: Sociology

Zimmer, Basil G.; Goldscheider, Calvin

Zimmer, B. G., & Goldscheider, C. (1966). A further look at Catholic fertility. *Demography*, 3, 462-469.

Abstract: The purpose of this paper is to determine the extent to which suburbanization has influenced the traditional fertility differences observed between Catholics and Protestants. It is hypothesized that suburbanization has served to decrease religious differences in fertility, since in the more advanced stages of urbanism, that is, suburbanization, the Catholic population is likely to adopt the fertility patterns of the larger and more secularized society. Attention is focused on two objectives: (1) to examine selected aspects of fertility for Catholics and Protestants living in metropolitan areas and (2) to analyze religious differentials in fertility among residents in different parts of the metropolitan community. The data, consisting of a sample of households in six metropolitan areas in three population size classes, supported the general findings pertaining to religious differences in fertility that have been reported in the literature. Catholics had larger families, shorter average spacing between children, and longer fertility spans when compared to Protestants, even when a number of control variables were employed. Examining fertility differences between Catholics and Protestants in central city and suburban segments of large and small metropolitan areas, we found that the data indicated that marked Catholic-Protestant differences are still found in central cities. However, fertility differences between the two religious groups tended largely to

disappear among suburban residents. The convergence in the fertility patterns of suburbanites is due to combined effects of higher fertility among Protestant suburban residents when compared to central city Protestants and the tendency of suburban Catholics to have fewer children than those who live in the city. The net result is convergence in suburban fertility.

Data Sources: Sample of households in six metropolitan areas in three population size classes

Countries: United States

Subjects/Variables: US Catholics, Protestants

Discipline: Demography

Zurayk, Huda

Zurayk, H. (1979). A Two Stage Analysis of the Determinants of Fertility in Rural South Lebanon. *Population Studies*, 33(3), 489-504.

Abstract: An investigation of a sample of 1,054 married women in the Nabatieh district of south Lebanon has produced estimates of the levels of the important intermediate fertility variables and of the combined effect of these variables on the level of fertility in the area. The delayed age at marriage and the increasing practice of contraception in Nabatieh are the two main factors responsible for the observed reduction in the level of fertility in the area. Breast-feeding patterns still exert a negative influence on fertility while abortion seems to play no role in fertility control. Differentials in the levels of the intermediate variables by social class, religion and education were observed. As a result of these differentials, the fertility of women of high social status is expected to be lower than average, as is that of Maronite women and educated women. The changes in the intermediate variables and the resulting change in the level of fertility have implications for the well-being of families in south Lebanon, and in similar developing rural communities, which can be summarized as follows: (1) These changes, as well as the underlying developments particularly in educational opportunities in the south, are influencing the economic and social structure of the community. Development plans need to be initiated in the area to produce opportunities for productive employment of the young educated generation, contributing to the achievement of a more equitable distribution of income and population in the country. Special projects need to be implemented for the production use of the energies of the adult female population before reproduction starts, and after the desired number of children has been achieved. (2) The reduction in fertility has positive implications for the health of mothers and children. With the reduction in desired family size, however, effort should be directed at encouraging birth spacing. Moreover, the increased availability of contraceptives may influence patterns of breast-feeding to the detriment of the health and nutrition of the infant. It is the responsibility of family planning programmes adopting the community-based distribution approach to train their field workers to advise women on a proper regimen of breast-feeding and contraception post-partum.

Data Sources: Lebanon Family Planning Association (LFPA) survey of 40 villages in Nabatieh (1,054 women out of 49,167 inhabitants), 1976, with the support of the International Planned Parenthood Federation

Countries: Lebanon

Subjects/Variables: Nabatieh district, south Lebanon; Maronite Christian and Shiite Muslim

Čvorović, Jelena

Čvorović, J. (2011). The Differential Impact of Religion on Life History and Reproductive Strategy: Muslim and Orthodox Gypsies in Serbia. *The Mankind Quarterly*, 51(3), 330-348.

Abstract: Previous studies have found that Gypsy populations in Europe exhibit more of a low investment mode of reproduction than surrounding non-Gypsy populations. In Serbia, however, Orthodox Christian Gypsies differ from Muslim Gypsies in a variety of cultural and reproductive behaviors. Data gathered during fieldwork undertaken in three Gypsy settlements in Serbia are used to evaluate the hypothesis that religious affiliation predicts variation in reproductive strategies within Gypsy populations. This hypothesis is supported by data indicating that Orthodox Christian Gypsies give more parental care to each of their fewer children than do the Muslim Gypsies, regardless of their location, type of settlement, and socioeconomic status. Differences in the two religious traditions might be responsible for this pattern.

Data Sources: Fieldwork conducted during 2006-2010 in three different Gypsy settlements

Countries: Serbia

Subjects/ Variables: 223 female Gypsies who belong to two religious confessions: Islam and Orthodox Christianity, age 16-72

Discipline: Ethnography

Čvorović, J. (2012). A Research Report: Religion and Reproduction Muslim vs. Orthodox Serbs. *Mankind Quarterly*, 52(3-4), 358-387.

Abstract: This paper seeks to shed light on demographic differences between Muslim and Christian Orthodox populations in the Sandžak region, southwestern Serbia. The paper draws upon data collected in the course of anthropological fieldwork studies in the region. Demographic differences in this area are closely linked to the differences in religious affiliation that reinforce behavioral norms and promote compliance.

Data Sources: Anthropological fieldwork relying on extensive personal interviews in the Sandžak region, 2006-2007, 2011

Countries: Serbia

Subjects/ Variables: 235 Serbian non-Gypsy Muslims and 128 Christian Orthodox Serbs, living in the southern Serbian area of Sandžak

Discipline: Ethnography

Čvorović, J. (2015). Fertility Differentials Among Serbian Jews. *Journal of Modern Jewish Studies*, 14(2), 215-228.

Abstract: This paper investigates a link between religiosity and fertility among Serbian Jewish populations, namely the Sephardi and Ashkenazi Jews. It is found that among Serbian Jews, in spite of general low levels of fertility, religiousness (measured by time devoted to religious activities) and ethnic origin contribute to the fertility differentials. The Sephardi Jews have on average two children, while the Ashkenazim have one child. The majority of Sephardi Jews are strongly religious, as opposed to only 18% of Ashkenazi Jews. Furthermore, the fertility of Jews who reported mixed origin (one Jewish parent, the other Serbian) is lower than that of Jews from endogamous Jewish unions.

Data Sources: 136 personal in-depth interviews (2013, mostly in Belgrade)

Countries: Serbia

Subjects/ Variables: Jews; Ashkenazi and Sephardi; religiosity; mixed-race and endogamous

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