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Changing roles of religiosity and patriarchy in women's employment in different religions in Europe between 2004 and 2016

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Abstract

Objective: This paper seeks to understand the changing roles of religiosity and gender attitudes in the employment of women in Europe between 2004 and 2016.

Background: Religiosity and gender traditionalism are both considered to decrease the likelihood of women's employment. This study argues that this relationship needs to be decoupled, as religiosity and gender traditionalism have different underlying mechanisms.

Method: We analysed rounds 2 (2004), 4 (2008), 8 (2010), and 10 (2016) of the European Social Survey (ESS), which include, among other data, information on employment, religious affiliation, religiosity, and gender role attitudes in 16 countries (N=39,233).

Results: We show that taking religiosity into account further increases the already increased likelihood of employment for Catholic, Protestant, and Jewish women compared to women with no religion. We also find, however, that religiosity decreases the employment gap between Muslim and Orthodox women on the one hand and secular women on the other. Including gender role attitudes in the model only marginally explains the employment gap.

Conclusion: Our findings support the idea that the mechanisms that underlie the relationships religiosity and traditional gender role attitudes have with women's employment differ. Over time, the likelihood of employment increases for women of all religions, except for Muslim women, among whom it drops.

Key words: women's employment, religious affiliation, religiosity, gender attitudes, Europe

1. Introduction

Compared to other regions of the world, Europe arguably has the highest levels of gender-egalitarian views, the lowest levels of religious observance (religiosity)[1], and the highest rates of women's employment in the world, albeit with considerable variation between European countries (Bussemaker et al. 2017; Guveli & Platt 2020; Pfau-Effinger 2017; Spierings 2018). The research traditions for each of these outcomes are extensive, and are interlinked by a core recurring argument that over the course of industrialisation and educational expansion, religious observance and its importance in shaping people's lives will fade, and traditional gender role patterns will dissolve, with a concomitant effect on women's labour market participation (Inglehart 1997; Inglehart & Norris 2003; Guveli & Platt 2011, 2020; Guveli et al. 2016, 2017). Indeed, research has shown that religiosity is decreasing and gender egalitarianism is increasing for the majority populations in most European countries (Ruiter & Van Tubergen 2009; Guveli & Platt 2020; Spierings 2018).

At the same time, however, a growing number of studies on the labour market outcomes of Muslim and migrant women in Europe have called into question the clear-cut linkages between religiosity, gender role attitudes, and women's employment (Brynin & Guveli 2012; Guveli at al. 2016; Van Klingeren & Spierings 2020; Koenig, Maliepaard & Guveli 2016; Diehl, Koenig & Ruckdeschel 2009; Khoudja & Fleischmann 2015; Röder 2014). The labour market participation rates of migrant women, and especially of Muslim women, are disproportionately low. However, studies that have compared the roles of religiosity and patriarchal gender attitudes in accounting for this gap have generated conflicting results (Blommaert & Spierings 2019; Khattab & Hussein 2018; Khoudja & Fleischmann 2015; Guveli at al. 2016; Koopmans 2016; Pastore & Tenaglia 2013). For instance, Koopmans (2016) concluded that religiosity and patriarchal gender attitudes fully explain the Muslim employment gap, while others have found that these factors only partly explain the differences (Khoudja & Fleischmann 2015), or that religiosity has no additional explanatory power (Khoudja & Platt 2018).

Connecting these two literatures may help to shed light on the question of whether decreases in religiosity and patriarchal gender attitudes develop simultaneously with increases in labour market participation, and on the question of whether developments in women's labour market participation rates can be explained by changes in religiosity and gender attitudes. In this study, we seek to improve our understanding of these dynamics by assessing whether religiosity and patriarchal gender attitudes can (partly) explain employment changes over time and between religious groups. We theorise that the role of religiosity and gender attitudes in shaping employment decisions might have changed. This argument draws in particular from the literature on integration, Islam, and gender, which posits that in the context of secularised or European Islam, there has been a "decoupling" of gender and religion (Röder 2014; Spierings 2016; Van Klingeren & Spierings 2020). Building on this literature, we examine the question of whether the

1 We use the concept of "religiosity" or "religious observance" to denote the extent to which people follow and practice religious duties or prescriptions. We use "religion" or "religious group" to denote the religion with which people are affiliated. Finally, we use "no religion" to refer to people who are not affiliated with any religion.

impact of religiosity and gender attitudes on women's employment has developed differently for different religions. Taking a temporal perspective, we asked the following question: *How have religiosity and gender attitudes affected the likelihood of employment of women from different religious groups in Europe over time?*

2. Theoretical background

2.1 Religiosity and gender attitudes as drivers of women's employment

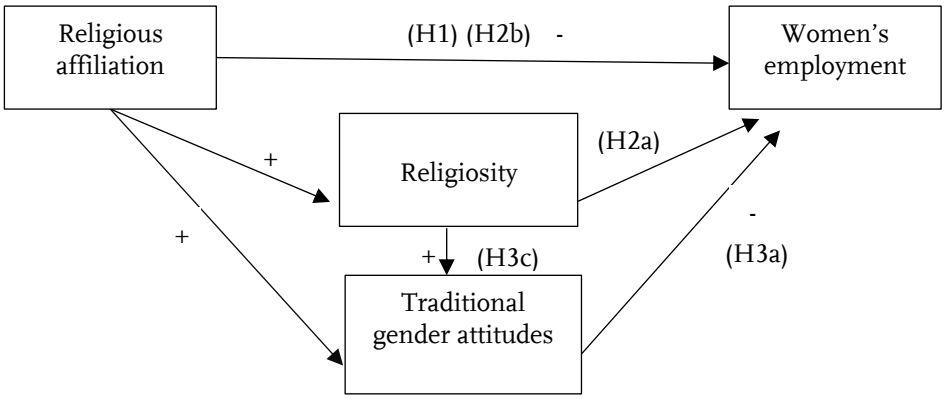
Research on how religiosity and patriarchal gender attitudes have affected the participation of women in the labour market is fairly extensive, and has a long tradition (Lehrer 1995; Brinkerhoff & MacKie 1988). Both factors are generally treated as part of the cultural domain of explanations (e.g., Moghadam 2013; Pettit & Hook 2005; Spierings 2016; Steiber & Haas 2012; Van der Lippe & Van Dijk 2002). For Europe, for instance, Fortin (2005) has shown that perceptions of women as primarily being homemakers, and the belief that being a housewife is just as fulfilling as working for pay, are closely associated with lower rates of women's employment. Pastore and Tenaglia (2013) examined the influence of religion on women's labour market participation in 47 European countries, and concluded that Eastern Orthodox and Muslim women are more likely to be jobless than agnostic women. Similarly, Guetto, Luijkx, and Scherer (2015) and Dildar (2015) found that both religiosity and traditional gender views are (indirectly) negatively associated with female labour force participation.

Theoretically, such cultural explanations share a common logic: both piety and patriarchal attitudes reduce women's labour market participation because of their interpretations of the role of women in the family and elsewhere in society. First, people's attitudes, perspectives, and opinions inform their behaviour; thus, more conservative views on gender roles and sex segregation are related to lower levels of female employment. Second, the dominant interpretation of all major world religions is gender complementarity, whereby men are considered primarily responsible for and well-suited to earning an income, while women are mainly seen as mothers and homemakers (see also Schnabel 2016). Therefore, the more religious a group of people are, the more likely they are to have traditional gender attitudes; and, consequently, the less likely the women in the group are to enter the labour market. Third, these mechanisms are not restricted to individual-level attitudes and religiosity, as they are institutionalised through policies, norms, and views at the community or household level (Amin & Alam 2008; Pettit & Hook 2005; Spierings 2014a, 2016; Van der Lippe & Van Dijk 2002).

While the literature specifies and operationalises these cultural dimensions in different ways, the predominant view is that conservative religions, higher levels of religiosity, and patriarchal gender attitudes feed into lower female labour market participation rates (Amin & Alam 2008; Bozzano 2017; Camussi 2013; Davis & Gao 2020; Dildar, 2005; Guetto, Luijkx & Scherer 2015; Guveli 2011; Lisaliner & Bhatti 2005; Spierings 2014a, 2014b). Implicit in this logic is the path from religion to gender attitudes to employment. Bozzano (2017), for instance, showed that both the religious culture and

the degree of religiosity in a society are strongly linked to a more unequal representation of women in politics and in top managerial positions in that country.

Figure 1: Direct and mediating relationships between religion, religiosity, and gender attitudes in shaping women`s employment



While it is not inherent to the logic presented above, the literature has tended to discuss the linkages between religiosity, gender attitudes, and women's employment in the context of larger modernisation processes, suggesting that the trend towards higher levels of employment among women is due to secularisation and the adoption of more progressive attitudes (e.g., Inglehart 1997; Lerner 1958; Richards & Gelleny 2007). However, some scholars have argued that these developments are recursive and nonlinear (Moghadam 1996; Pampel & Tanaka 1986; Spierings 2015, 2018; Walby 2009), drawing attention to processes and changes that occur over a long period of time. In other words, changes in the role of religiosity and gender attitudes in women's likelihood of employment should be partly or fully due to developments (such as modernisation, industrialisation, and secularisation) over time.

The above discussion leads to the visualisation of the mechanism (1) underlying the relationships between religion, religiosity, and gender attitudes, including the formulation of three core hypotheses:

We expect to find that women who belong to a religion are less likely to be employed than women who are not affiliated with a religion (H1). Furthermore, we expect to observe that the more religious women are, the less likely they are to be employed (H2a), and that this association partly mediates the negative impact of belonging to a religion (H2b). Likewise, we expect to find that the more traditional women's gender attitudes are, the less likely they are to be employed (H3a), and that this association partly mediates the negative impact of belonging to a religion (H3b) and religiosity (H3c).

2.2 *Changing roles of religiosity and gender attitudes in different religions*

Whereas some scholars see religiosity and gender attitudes as linked, others have suggested that the underlying mechanisms that link religiosity and patriarchy to women' socio-economic participation and paid employment differ (e.g., Essers & Benschop 2009; Spierings 2014a). Indeed, a closer look at the studies described above suggests that these linkages are not universal. For instance, Guveli (2011) showed that in Turkey, which has a majority Muslim population, local governments with more progressive policies and platforms do not necessarily provide more labour market opportunities for women. Moreover, in their work on Indonesia, Malaysia, and Nigeria, Amin and Alam (2008) and Spierings (2014b) found no clear evidence that the labour force participation of Muslim women is lower than that of women from other religions. Finally, Davis and Gao (2020) estimated the happiness gain associated with being employed for men and women belonging to six world religions and for the non-religious, and found that this happiness gain helps to explain the gender employment gap among Buddhists, Orthodox Christians, and the non-religious; but not among Hindus, Muslims, Catholics, and Protestants.

In short, the impact of religiosity on patriarchal gender attitudes and low levels of female employment is less clear than is often assumed, and might differ across religions. While early research on Christian denominations and Judaism has shown a fairly strong association between religiosity and gender attitudes (Lehrer 1995; Brinkerhoff & MacKie 1988), scholars of Islam and gender (Glas & Alexander 2020; Glas, Spierings & Scheepers 2018; Glas & Spierings 2019) and of the Muslim immigrant population in Europe (e.g., Diehl, Koenig & Ruckdeschel 2009; Röder 2014; Van Klingeren & Spierings 2020) arguably provide the clearest theoretical explanation for why the impact of religion varies.

The patriarchal ideologies and gender traditionalism that emerged in male-dominated societies and religious traditions demand that people demonstrate their commitment and adherence to certain social norms, values, attitudes, and behaviours (Schwartz & Sagie 2000). Individuals with these attitudes assign greater importance to traditional family values and norms, which implies that men and women have distinct roles and primary responsibilities in society. These sharp divisions originate from patriarchal traditions and from the teachings of all of the Abrahamic religions, including Roman Catholicism, Protestantism, Judaism, Orthodox Christianity, and Islam (Inglehart & Norris 2003; Kandiyoti 1988; Spierings 2016; Walby 2009; Epstein 2007). The assumption that women should look after the home and family and prioritise motherhood, and should respect the division of labour between men and women (with the man being the primary breadwinner), are among the most salient features of patriarchal cultures.

However, different interpretations of these role patterns exist within these religions. Recently, extensive research has shown that interpretations of the role of women in Muslim societies differ. Among the interpretations that have been reported are that women should be restricted to homemaking; that women and men cannot interact, but women can work in certain settings, such as in women-only factories or services; that women are primarily mothers, but can work outside the home if they do not have children; and that mothers should have an education (Badran 2015; Blommaert & Spierings 2019; Lisaniler & Bhatti 2005; Miyata & Yamada 2016; Price 2015; Spierings, Smits & Verloo 2010; Spierings 2014a). Each of these interpretations has different

employment implications, and can shift. Moreover, it is far from exceptional for people to combine a strongly religious orientation with progressive gender attitudes, including progressive views on women's economic roles. Such combinations are on the rise, especially in societies where feminism and Islam are constructed as being less contradictory (Glas & Alexander 2020; Glas & Spierings 2019; Glas, Spierings, Lubbers & Scheepers 2020; Glas, Spierings & Scheepers 2018). Thus, based on these studies, we theorise that the gender role implications of being religious are not immutable, and are informed by the larger context of the society in which they are embedded.

Changes in views on the religion-gender linkage reflect more recent developments in the literature that analyses the impact of religiosity and gender traditionalism on the economic participation of women with a migration background. A number of studies have shown that women with a migration background, and especially those from Muslim countries, are far less likely than native European women to be employed (Fleischmann & Hohne 2013; Khoudja & Platt 2018; Guveli at al. 2016; Koopmans 2016; Naseema & Adnan 2019; Zuccotti et al. 2017). However, these studies reached different conclusions when they looked at the extent to which religiosity or patriarchal gender attitudes explain this difference (e.g., Blommaert & Spierings 2019; Khoudja & Fleischmann 2015; Khoudja & Platt 2018; Koopmans 2016). Furthermore, some scholars have argued that religiosity does not explain the differences found between religious groups, attributing them instead to a "Muslim penalty" (Blommaert & Spierings 2019; Daoud & Khattab 2020; Khattab & Hussein 2018; Khattab, Johnston & Manley 2017; Abdelhadi 2017).

Religion's impact on women's employment is informed by the larger societal context. The relationship between religion and employment among migrant women is ambiguous, and there are signs that attitudes about women's economic activities are becoming more favourable in Europe (Spierings 2018). The question of whether the link between religiosity and employment has weakened over time has not been tested or theorised for employment, but the literature has suggested this might occur through "decoupling" (Röder 2014; Van Klingeren & Spierings 2020). That is, as women become more liberal in their gender role attitudes in increasingly diversifying and egalitarian societies, those who adhere to traditional gender roles will be gradually marginalised, and will be less likely to seek paid employment.

At the same time, as people's religious affiliations and religiosity are becoming increasingly personal, and are disconnecting from dominant religious interpretations, responses to the challenges and inequalities women face are changing (Guveli 2015; Norris & Inglehart 2011). This process that has been theorised in the extensive literature on the supply side of religion (Finke & Iannaccone 1993). These scholars have argued that while demand for religion is constant over time, the supply of it is changing to meet the newly emerging needs in various societies and at different times. Therefore, religions are continuously reformulated, reinterpreted, and adapted to align with socioeconomic needs and individual lifestyles (Finke & Iannaccone 1993). The importance of the most dominant and institutionalised religions is fading, especially in Western Europe, but also increasingly in developing countries (Inglehart & Norris 2003). However, individualised religions and religiosities might provide a sense of belonging and identity, and often represent a source of spiritual and personal fulfilment. Although patriarchal gender attitudes inherently constrain women's social, political, and labour market participation,

religiosity has various dimensions and manifestations that are open to multiple interpretations and experiences. Accordingly, decoupling the role of gender attitudes from religiosity in shaping women's employment patterns takes time, and requires a relatively progressive context. This fits the setting of our study, as we are focusing on the relatively progressive context of European countries, while acknowledging the considerable degree of variation within these societies.

When we apply the decoupling logic to our study, we expect to observe that the association between religiosity and employment gradually becomes weaker over time. At the same time, we expect to find that the connection between gender attitudes and women's likelihood of employment increases over time because progressive gender role attitudes conflict less with the new interpretations of religiosity. Moreover, we expect to observe that the relationship between gender traditionalism and women's labour market participation becomes stronger over time; or at least remains the same, because those individuals who continue to have conservative gender role attitudes tend to become marginalised in increasingly gender liberal societies. Consequently, we expect to find that the negative relationship between religiosity and women's likelihood of employment weakens over time (H4), and that the negative relationship between traditional gender attitudes and women's employment strengthens over time (H5).

2.3 Variations in changes in religiosity and gender attitudes in different religions

Finally, the decoupling logic presented above might take different forms among women in different religious groups. Religiosity and gender ideologies are more closely linked in traditional societies than in secular societies. Given the relatively progressive context of Europe, decoupling is more likely to occur in more conservative religions because the connection is strongest in these religions.

Moreover, the decoupling of religiosity and gender traditionalism might already have taken place in highly secularised religions, such as in the Roman Catholic, Protestant, and Jewish faiths, whereas gender traditionalism and religiosity might be more interlinked in more traditional religions, such as in Islam (Inglehart & Norris 2003). Some scholars have argued that European societies are still in the process of developing a Euro-Islam or secularised version of Islam (Asad 2003; Cesari 2009, 2015); i.e., that Islam in Europe and in other developing countries is evolving in response to modernisation processes, with new interpretations and their everyday reflections engendering individualised Islams, and fuelling the decoupling of religiosity from patriarchy. Thus, we might expect the role of religiosity and gender traditionalism in shaping women's labour market outcomes to be more pronounced for Muslim women because of the relatively strong connections between traditionalism and religion in Islam (Guveli & Platt 2020; Inglehart & Norris 2003). A similar argument could be made for the Eastern Orthodox religion, which is arguably the second-most traditional of the main religions in Europe (Inglehart & Norris 2003).

The reasoning above implies that, particularly among Muslim and Orthodox women, the likelihood of being employed will increase more among the most religious, and less

among the most gender traditional. Consequently, we might expect to find that over time, the negative relationship between religiosity and women's employment weakens more for Muslim and Orthodox women than for other women (H6). Likewise, we would expect to observe that over time, the negative relationship between traditional gender attitudes and women's likelihood of employment strengthens more for Muslim and Orthodox women than for other women, or stays the same (H7).

3. Data and methodology

The European Social Survey (ESS) datasets are the only large-scale European datasets that allow researchers to make comparisons over time. The data have been used for studies on religiosity, migrant integration, and labour market participation within Europe, including on traditionalism and women's employment (e.g., Guveli 2015; Guveli & Platt 2020; Immerzeel & van Tubergen 2013; Spierings 2018; Van Tubergen & Sindradóttir 2011; Zuccotti et al. 2017). For our purposes, the ESS datasets have two novel strengths: 1) all questions are asked the same way in all countries; and 2) all questions are asked the same way in the ESS 2004, 2008, 2010, and 2016 rounds, which allows us to trace changes over time. The ESS is designed to collect high-quality data on the beliefs, attitudes, and behaviours of representative samples of the populations of the participating countries, and enables the analysis of continuity and change over time. We have chosen to use these ESS rounds because they include information on paid employment, on religiosity, *and* on gender role attitudes; as well as on education, marital status, children living at home, and migration status.

The countries in our sample participated in at least three of the four rounds, and we included only countries with more than 30 respondents for each religious group. As we were analysing women's employment, we only selected women, and excluded respondents for whom we had missing data on other measures, including our key dependent measure of paid employment. Our final analytic sample comprised 39,233 respondents.

3.1 Dependent and independent variables

Our dependent variable was *paid employment*, measured with a question on whether respondents were in employment in the last seven days, coded as 1 = employed, and as zero otherwise. We dropped respondents still in education from the analysis, and only included respondents aged 18 to 65, because those are considered the working ages in most countries. Table 1 shows the mean employment rates of women in the countries and across the ESS rounds between 2004 and 2016.[2] The table indicates that there was an

2 To produce the descriptive findings, we weighted the data for the population size, which generates more representative descriptive statistics. We have not used weighting for the multiple regression results because it increases the standard errors. Moreover, weighting by population size would drive the results towards the countries with the largest population sizes. Without weighting the regression results by population size, respondents count more or less equally across countries, leading to valid results across contexts. Therefore,

overall increase in the employment rates of women over this period, with some fluctuations in some countries – including declining or stagnating rates in 2010 in most countries, which were most likely due to the 2008 financial crisis (Spierings 2018). The highest female employment rates were in the Nordic countries of Denmark, Norway, and Sweden; while the lowest rate was in Greece.

Religious affiliation was measured with the question: "Do you consider yourself as belonging to any particular religion or denomination?" We allocated those who answered "no" to the category of "no religion". For those who answered "yes", the options were: Roman Catholic; Protestant; Eastern Orthodox; other Christian denomination; Jewish; Islamic; Eastern religions; other non-Christian religions. We combined Eastern religions and other non-Christian religions into a single "Other" category. Because of the small size and heterogeneity of this category, we included it in analyses for completeness, but we do not discuss it in detail here.

Table 1: Share of women's employment in countries across ESS rounds

	ESS round 2 2004	ESS round 4 2008	ESS round 5 2010	ESS round 8 2016
Belgium	55.1	61.7	66.2	65.1
Switzerland	68.7	67.7	75.1	76.2
Czech Republic	55.9	61.2	60.9	72.2
Germany	59.4	68.5	66.1	75.4
Denmark	76.0	77.0	74.2	No survey
Spain	58.2	58.5	59.5	63.7
France	No survey	64.0	67.6	65.3
UK	63.3	62.4	63.7	72.2
Greece	41.2	55.3	43.8	No survey
Ireland	57.5	49.0	45.7	60.0
Israel	No survey	59.3	57.2	70.2
Netherlands	61.3	64.3	69.2	70.1
Norway	79.1	81.7	81.6	80.4
Russia	No survey	65.4	65.2	67.4
Sweden	78.2	84.8	82.1	81.1
Slovenia	59.9	58.0	60.5	62.6
Total N	10,299	9,247	13,283	10,820

Source: European Social Surveys
Notes: Findings are weighted for population size.

We included ESS rounds 2 (2004), 4 (2008), 5 (2010), and 8 (2016) in all models, which serve as proxies for the time trends. Table 2 shows the proportion of all religions and no religion in each ESS round (2, 4, 5, and 8). The largest category in the table is the "no religion" group; Roman Catholic women form the largest religious group, followed by Protestant women, and then by Eastern Orthodox women. Muslims constitute about two

we display the unweighted regression results here, but we include the weighted regression results for Table 4 in Appendix A3. They provide similar conclusions.

per cent of the sample in 2004 and four per cent of the sample in 2016, and thus represent one of the smallest religious groups in the ESS data (and in Europe).

Table 2: Share of religious groups across ESS rounds

	Round 2 2004	Round 4 2008	Round 5 2010	Round 8 2016	Total
No religion	47.3	42.0	42.8	45.1	44.0
Roman Catholic	28.8	20.5	19.7	19.5	21.2
Protestant	15.7	12.4	10.8	10.2	11.8
Eastern Orthodox	5.1	19.4	19.7	17.7	16.9
Jewish	0.02	1.4	1.2	1.2	1.1
Islam	1.5	3.1	3.6	4.2	3.3
Other religions	1.6	1.2	2.0	2.1	1.8
Total N	9,093	9,018	11,610	9,512	39,233

Notes: Findings are weighted for population size.

Our two main independent variables were *religiosity* and *gender role attitudes*. To operationalise religiosity, we used information on how often respondents prayed,[3] which was collected with the following question in the survey: "How often do you pray apart from at religious services?" The answer categories were: 0 = never; 1 = less often; 2 = only on special holidays; 3 = at least once a month; 4 = once a week; 5 = more than once a week; 6 = every day. The question on *gender role attitudes* was repeated in all selected ESS rounds (2004, 2008, 2010, and 2016) using the following statement: "Men should have more right to a job than women when jobs are scarce". The answer categories ranged from 1 = disagree strongly to 5 = agree strongly.

3.2 Control variables

We included a number of individual-level characteristics shown to be important in determining women's labour market participation. We included age to control for whether

3 There are two other measures for religiosity in the datasets. One is subjective religiosity, which was measured with the question: "Regardless of whether you belong to a particular religion, how religious would you say you are?" with responses on a scale from zero (not at all religious) to 10 (very religious). We ran the analyses by replacing praying with subjective religiosity, which provided similar conclusions (available upon request). Since subjective religiosity is more sensitive to contextual factors, such as discriminatory experiences or certain societal debates or events that can make identities more manifest (Guveli 2015), we decided to use information on the frequency of praying as our religiosity variable. This variable is less sensitive to contextual factors because it asks about the frequency of praying. We did not use the religiosity indicator attendance at religious meetings because of the high shares of missing values, especially for Muslim women, and because it measures exposure and socialisation, whereas our theoretical focus was on individual forms of religiosity. We did not construct a scale using all three measures because different mechanisms underlie each of these measures, and they are conceptually distinct across religions and between migrants and natives, with different effects on gender issues (Guveli 2015; Spierings 2019, Van Klingeren & Spierings 2020).

age might (partly) account for the relationship between religiosity and labour market participation. Age might also (partly) account for the relationship between gender role attitudes and women's likelihood of employment. That is, it might be the case that gender attitudes and religiosity are more common among older women in some religions, while they are less dependent on age in other religions. Family structure and the presence of dependent children are other important factors in women's labour market participation levels (Naseema & Adnan 2019; Spierings 2014a; Van der Lippe & Van Dijk 2002). Therefore, we included marital status as a categorical variable: 1 = married/cohabiting/in legal partnership; 2 = divorced/widowed/separated; 3 = never married. Finally, for having children, we added a dummy variable: 1= having children living at home, and zero otherwise.

As the ESS provides information on each respondent's country of birth, as well as on the birthplace of her/his father and mother, we could take into account the differences between majority Europeans (natives) and first- and second-generation migrants. We defined the categories as follows: *natives* – neither the respondent nor either of the respondent's parents was born abroad; *migrants* (first generation) – the respondent and both parents were born abroad; *second generation* – at least one of the respondent's parents was born abroad, but the respondent was born in the survey country.

A key variable commonly linked to labour market participation is educational level. Women with higher qualifications are more often economically active, even if they are married and have children, although some may be more likely to experience unemployment due to discrimination in recruiting practices or to their choices or preferences based on their religion (Bayrakdar & Guveli 2020; Blommaert, Coender & Van Tubergen 2014a, 2014b; Daoud & Khattab 2020; Khattab & Hussein 2018; Naseema & Adnanb 2019; Zuccotti et al. 2017; Güveli 2006). We included education measured in years, as this was the only feasible way of proxying educational attainment across a diverse range of countries. A description of all of the variables is provided in Appendix A1.

3.3 Analytical approach

Our dependent variable *paid employment* was dichotomous; therefore, we estimated a series of logistic regressions. In our base model (Model 1), along with the control variables in all models (age, age^2, marital status, children living at home, education, migration status) for compositional influences on paid work, we included only the main effects for religions and the time trend (ESS rounds)[4]. Model 2 examined the relationship between religiosity (praying) and women's paid employment. Model 3 looked at the relationship between gender role attitudes and paid employment without the variable religiosity. Model 4 added both religiosity and gender attitudes to determine whether they explained the differences in women's likelihood of employment in different religious groups. These models allowed us to test Hypotheses 1 through 3.

4 We have operationalised time with "ESS-round" as a covariate in our regression models, which shows a fairly linear relationship with the dependant variable employment. However, there is a slight diversion from linearity in the year 2010 (round 5) across all religions and countries, as Table 1 and Figure 2 demonstrate.

We also estimated models with two-way interactions between time (survey years) and religiosity (Model 5, testing Hypothesis 4), and time and gender role attitudes (Model 6, testing Hypothesis 5). Our final model (Model 7) incorporated all two-way interactions and a three-way interaction between time, religiosity, and religions, as well as a three-way interaction between time, gender role attitudes, and religions, to reveal changes in the association between employment and gender role attitudes and religiosity in particular religions (Hypotheses 6 and 7). Models 5, 6, and 7 are presented in Appendix A2.

In the following, we discuss our findings on the evolution of the effects of religiosity and gender role attitudes on women's paid employment. The odds ratios of the logistic regression are presented in Appendix Table A2. For the purposes of visual presentation and ease of interpretation, particularly given the challenges of reading results from three-way interactions in tables, we present our main results for Model 7 (Table A2) in graphical form in Figures 1 and 2. We discuss the results from other models to the extent they are relevant to answering our main research question. For completeness, we provide the full sequence of models (Models 5, 6, and 7) in Appendix Table A2.

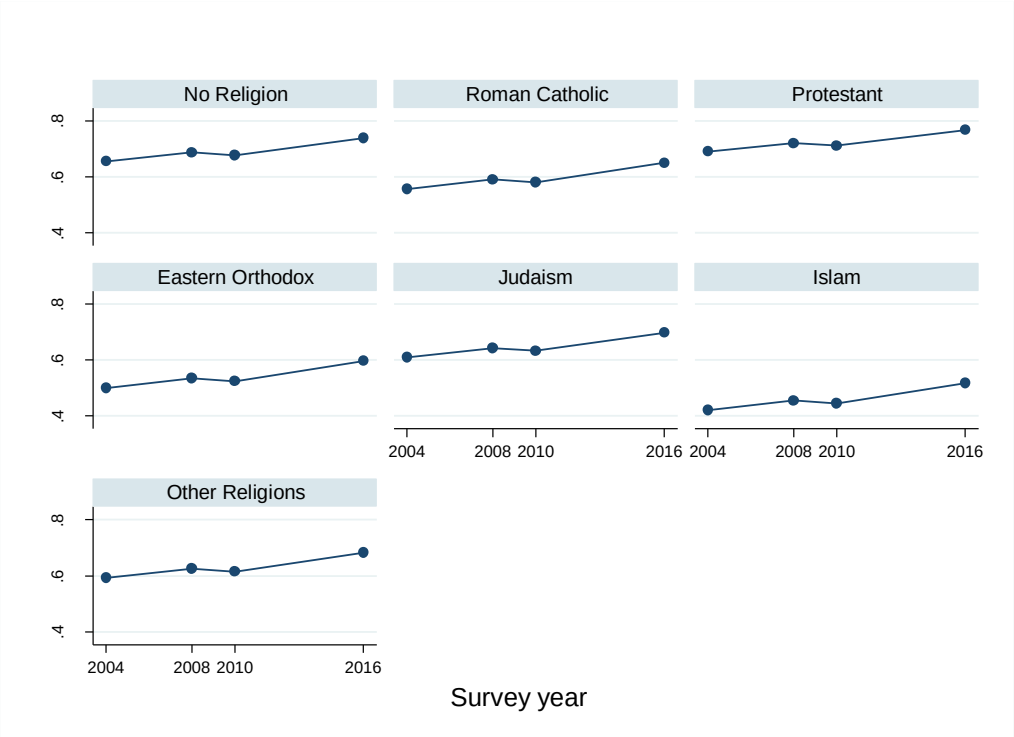
Note that our aim was not to estimate contextual effects. Rather, we were analysing the evolution of the effects of religiosity and gender attitudes on women's paid employment over time (across 16 European countries, or, more precisely, ESS countries). There has been some discussion of the best models to apply in the analysis of cross-national surveys like the ESS (Bryan & Jenkins 2016; Te Grotenhuis et al. 2015). To account for all of the country-level factors that might be associated with the distribution of female employment rates, religiosity, and gender attitudes across countries, we included country fixed effects in all of our models (Clarke et al. 2015). This is a conservative approach (Bryan & Jenkins 2016), but it enabled us to identify the patterns we were most interested in.

4. Results

4.1 Bivariate results

Over time, women in all religions became increasingly likely to be in paid employment, as Figure 2 shows – albeit with declining or stagnating rates in 2010 across religious groups and countries, which were likely due to the 2008 financial crisis. This pattern is also clear in Table 1, which displays women's employment rates per country. Protestant women had a higher percentage of employment than women in any other group, and a percentage that was very similar to that of women with no religion across all time points between 2004 and 2016. Muslim women had the lowest percentage of employment, but they had the largest increase in employment between 2004 and 2016. While Eastern Orthodox women had the second-lowest percentage of employment in 2004, their employment rates also increased in this period. Women with no religious affiliation did not have the highest employment share, which contradicts the assumption that belonging to a religion in general impedes women's employment.

Figure 2: Religious groups and their employment rates across ESS rounds (times)



Notes: Weighted results for population size

Table 3 shows the rank correlation between gender attitudes and religiosity in each religious group over time. The overall correlation between them for all religions was moderate to weak; i.e., it was 0.18 in 2004, and had declined to 0.12 in 2016. The strongest correlations in 2004 were for Eastern Orthodox women, Muslim women, and women in other religions, but they decreased sharply over time. Our finding that these correlations were declining supports the claim that there was a decoupling of gender attitudes and religiosity in religions from industrialising countries (Eastern Orthodox, Islam, and Other religions). The correlation between religiosity and gender attitudes was weak but relatively stable over time for women in all other religious groups and for women with no religion, which indicates that the decoupling had already taken place in religions from post-industrial and highly secularised European countries.

Table 3: Spearman correlation coefficient between religiosity and gender attitudes, per religious groups and ESS rounds

	Round 2 2004	Round 4 2008	Round 5 2010	Round 8 2016
Overall correlation	0.18	0.17	0.17	0.12
No religion	0.06	0.08	0.10	0.10
Roman Catholic	0.08	0.06	0.07	0.06
Protestant	0.17	0.18	0.19	0.17
Eastern Orthodox	0.25	0.14	0.07	0.03
Jewish	0.15	0.11	0.17	0.19
Islam	0.21	0.09	0.02	0.06
Other religions	0.27	0.08	0.12	0.15

Note: Weighted for population size

4.2 Multiple regression results

To determine whether these differences were significant and to take into account other factors that might be driving them, we performed multiple regression analysis. Table 4 shows the results for the four models used to test our expectations. We accounted for country-level differences with fixed effects in all models, but to avoid overly long tables, these coefficients are not displayed in the table. The table shows the odds ratios: the closer the coefficient is to one, the smaller the effect; coefficients below one indicate negative effects, and coefficients above one indicate positive effects.

Model 1 shows that compared to women who were not affiliated with any religion, Eastern Orthodox and Muslim women and those from other religions were significantly less likely to be in paid employment. Jewish women were significantly more likely to have a paid job than women with no religion. There were no significant differences between Catholic and Protestant women. Thus, our first hypothesis was only partly confirmed (H1). With religiosity added, Model 2 shows that the women who prayed more often were significantly less likely to have a paid job. Religiosity fully explained the lower likelihood of employment for Eastern Orthodox women and for women in other religions than for non-religious women; while the gap between Muslim women and those with no religion also decreased, as the coefficient moved closer to zero. The results confirm Hypotheses 2a and 2b. That is, religiosity partly explained the lower employment rates of Muslim women, but it accounted for most of the differences in the employment rates of Muslim and secular women.

Moreover, once religiosity was taken into account, the insignificant but negative relationship between Catholic women and the likelihood of employment (in Model 1) became significant and positive (Model 2). That is, Catholic and Protestant women were significantly more likely to be in paid employment than women with no religion when taking the religiosity of these women into account.

Model 3 of Table 4 shows the relationship between gender attitudes and the likelihood of employment. As expected, and in line with previous research findings and Hypothesis 3a, women agreeing with the statement that men have more right to have a job than

women when jobs are scarce were significantly less likely to be in paid employment than women who disagreed with this statement. However, adding traditional gender attitudes explained only a marginal part of the differences observed between religious groups, refuting Hypothesis 3b. Moreover, when both religiosity and gender role attitudes were added to Model 4, the results confirmed the previous results, and suggested that gender role attitudes did not really mediate religiosity's impact.

Furthermore, when religiosity and gender role attitudes were added together, their coefficients were not different from those in Model 2 and Model 3, which corresponded with the low correlations shown in Table 3. That is, the roles of religiosity and of gender attitudes in shaping women's likelihood of employment were found to be independent of each other. This finding refuted our H3c, which stated that the negative relationship between religiosity and employment is mediated by gender role attitudes.

Model 1 demonstrated that over time, the likelihood of employment increased significantly. In contrast to our findings regarding the differences between religious affiliations, adding religiosity hardly changed this positive trend, but adding gender role attitudes partly and marginally explained this trend. Religiosity and gender role attitudes thus seemed to explain the different patterns in women's employment.

Table 4: Odds ratios for the effects of religiosity and gender role attitudes on the likelihood of employment

	Model 1	Model 2	Model 3	Model 4
Survey year (ESS round)	1.065***	1.063***	1.046***	1.045***
	(0.0066)	(0.0066)	(0.0066)	(0.0066)
Religions (ref: No religion)				
Roman Catholic	0.983	1.116**	1.006	1.125**
	(0.0332)	(0.0407)	(0.0341)	(0.0412)
Protestant	1.066	1.194***	1.089*	1.204***
	(0.0457)	(0.0532)	(0.0468)	(0.0537)
Eastern Orthodox	0.855*	0.964	0.871*	0.969
	(0.0599)	(0.0687)	(0.0612)	(0.0693)
Jewish	1.347*	1.429**	1.286+	1.360*
	(0.1782)	(0.1892)	(0.1709)	(0.1806)
Muslim	0.463***	0.548***	0.502***	0.582***
	(0.0373)	(0.0452)	(0.0407)	(0.0483)
Other religions	0.765**	0.916	0.793**	0.930
	(0.0676)	(0.0828)	(0.0703)	(0.0843)
Praying (1-5)		0.946***		0.951***
		(0.0056)		(0.0057)
Traditional gender attitudes (0-6)			0.841***	0.846***
			(0.0093)	(0.0094)
N	39,233	39,233	39,233	39,233

Notes: Standard errors in parentheses; all models include country fixed effects; all models are controlled for age, age^2, education, marital status, having children at home, and migration status; Weighted results are demonstrated in Appendix A3; *** p<0.001, ** p<0.01, * p<0.05, + p<0.1.

4.3 Evolution of the roles of religiosity and gender attitudes

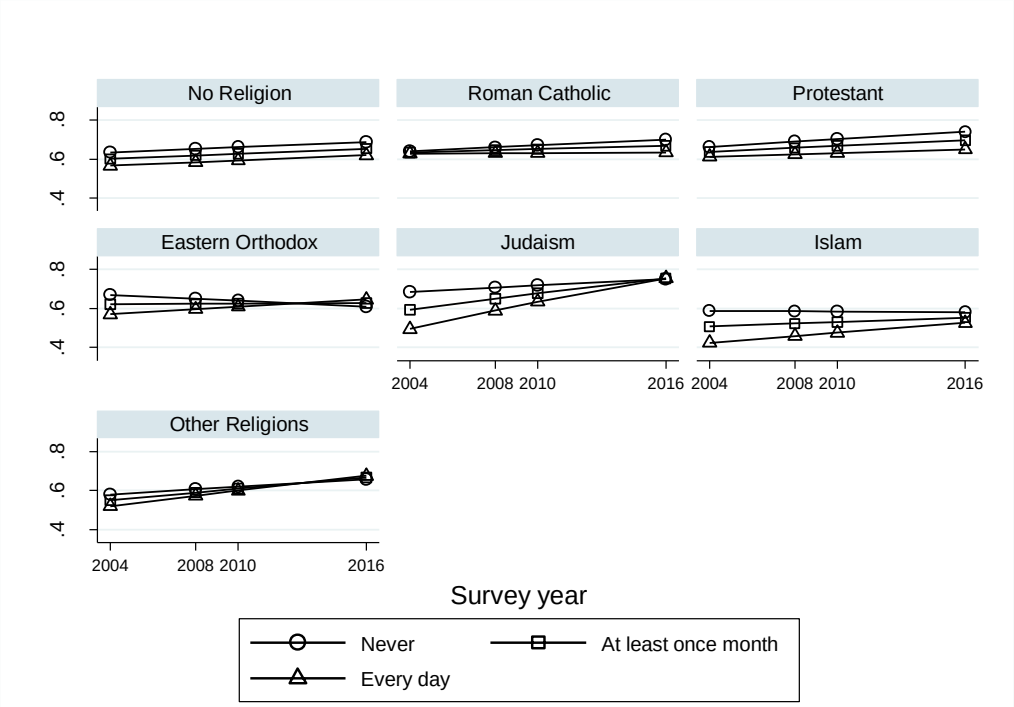
To assess the changing influences of religiosity and gender attitudes over time, we interacted the time variable (survey year/ESS round) with religiosity (Model 5, Appendix A2) and gender attitudes (Model 6), and added the three-way interactions with the religious affiliations (Model 7). To estimate the three-way interactions correctly, we also interacted time with the religious affiliations (Model 7). The results for Model 7 showed no stark differences in the changes over time in the likelihood of employment for women across religious groups, except for Muslim women. Controlling for other factors in the model, the likelihood of employment for Muslim women fell during this period (Model 7 of Appendix A2), which may indicate that they were hit hardest by the economic crisis, and were "last in line" (Blommaert & Spierings 2019). This downwards trend in the likelihood of employment for Muslim women found in the multiple regression model was contrary to the finding in the bivariate result (i.e., not controlled for education, parenthood, etc.) in Figure 2, which shows a substantial increase in the employment rate for Muslim women between 2004 and 2016. These differences might indicate that there were changes in Muslim women's characteristics that led to an increase in their employment rate, such as an increasing level of education over time. This issue merits more detailed scrutiny in future research.

We had expected to find that over time, the effect of religiosity on the paid employment of women would weaken, while the association between gender role attitudes and employment would become stronger. The association between religiosity and paid employment was negative in 2004, but we saw no change in this association over time (in Model 5 of Table A2), thus refuting H4. The association between traditional gender role attitudes and women's likelihood of employment was significant and negative in 2004, but this negative impact on employment weakened over time (Model 6 of Table A2). This result contradicted our expectations, and thus refuted H5.

Finally, in Model 7, we assessed whether these patterns differed by religious affiliation (Appendix A2), as shown in Figures 3 and 4. Figure 3 plots the *predicted probabilities* for women who never prayed, who prayed at least once a month, and who prayed every day – the two opposite and marginal categories and the middle category. Figure 3 shows that when other variables were taken into account (Model 7 in Appendix A2), religiosity was not a significant determinant of women's likelihood of employment over time for secular, Roman Catholic, Protestant, and Eastern Orthodox women. This pattern is visualised by the lines in Figure 3 being close to each other instead of showing substantial deviation. However, there were some noteworthy patterns for Jewish and Muslim women, in line with Hypothesis 6. Over time, the gap between more and less religious women closed, which made religiosity a weaker determinant of employment for the women in these groups. For instance, in 2004, the likelihood of employment for Jewish women who never prayed was substantially higher than that for Jewish women who prayed every day; whereas in 2016, the likelihood of employment increased significantly for Jewish women overall, but the difference between these two groups was insignificant. As we derived our logic mostly from the literature on migration and Islam, it was interesting to observe that Muslim women who never prayed had a higher likelihood of being in paid employment in

2004 than their counterparts who prayed every day, but that these groups converged over time *without increasing their overall likelihood of paid employment*.

Figure 3: Average predicted probabilities from model results. Effects of religiosity ("*How often do you pray apart from at religious services?*") on the employment of women belonging to different religions between 2004 and 2016

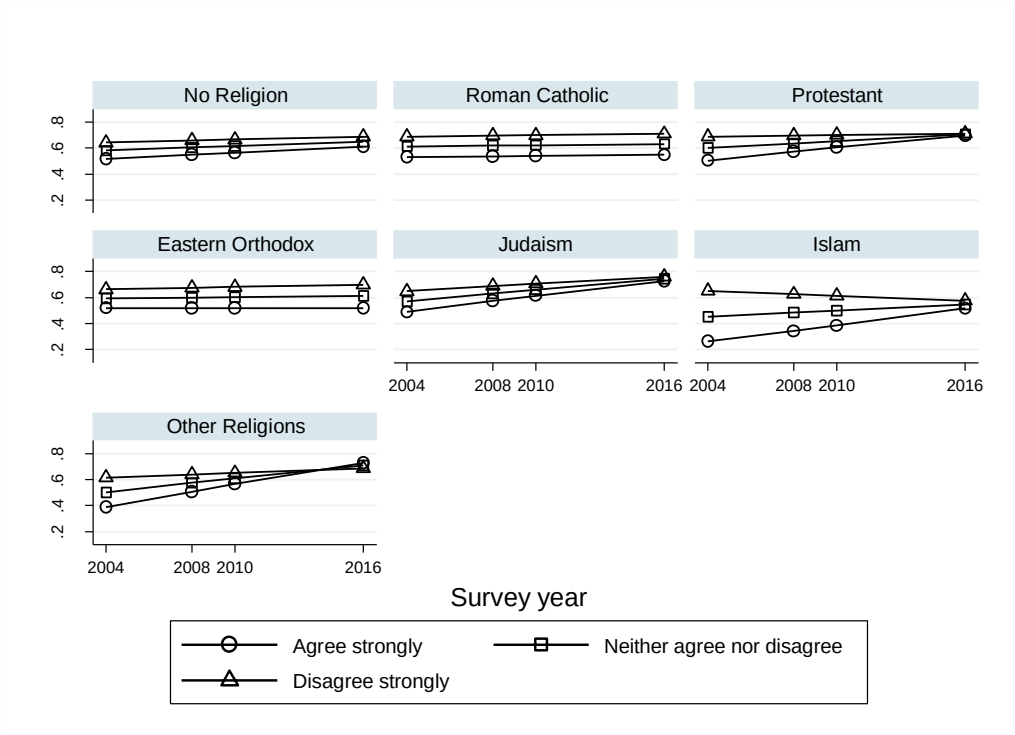


Note: Controlled for country, age, age^2, education, marital status, having children at home, and migration status.

To analyse gender role attitudes, we distinguished between women who strongly disagreed, neither agreed nor disagreed, and strongly agreed with the statement: "Men should have more right to a job than women when jobs are scarce". The results appear in Figure 4, which are based on Model 7 in Appendix A2. The association between gender role attitudes and women's employment remained fairly constant for secular, Roman Catholic, and Protestant women (i.e., the lines are rather horizontal), but the association for Eastern Orthodox women showed some divergence over time, which was in line with our expectation in Hypothesis 7. That is, Eastern Orthodox women with more egalitarian gender attitudes were more likely to be in paid employment than their counterparts with conservative gender role attitudes in 2004, and the likelihood of employment of these two groups was becoming less similar over time. For Orthodox women, this finding was in line with Hypothesis 7. However, the overall expectation was not confirmed in the results for Jewish and Muslim women, and was only somewhat confirmed for Protestants. The

likelihood of employment for women with traditional gender role attitudes increased considerably over time for Jewish and Muslim women, and for women in other religions. The biggest differences in the likelihood of employment were between the progressive and the traditional Muslim women in 2004; the most progressive women had the highest likelihood of employment, and the most traditional had the lowest. Over time, the differences converged, with the likelihood of being in paid employment increasing for traditional Muslim women and slightly decreasing for the most progressive women; this pattern was similar to, but less pronounced than, the association between religiosity and the likelihood of employment over time for Muslim women.

Figure 4: Average predicted probabilities from model results. Gender attitudes ("*Men should have more right to a job than women when jobs are scarce*") in the employment of women belonging to different religions between 2004 and 2016



Note: Controlled for country, age, age^2, education, marital status, having children at home, and migration status.

5. Conclusion

At the outset, we argued that religiosity and traditional gender role attitudes may impede women's likelihood of employment, and that these factors might explain the differences

in the employment rates of women in different religious groups (Inglehart & Norris 2003). After reviewing the literature on the decoupling of religiosity and gender attitudes, we expected to find that the role of religiosity in employment weakens, whereas the negative association between gender attitudes and employment becomes stronger over time. We examined these expectations using ESS data ranging from 2004 to 2016.

If anything, our results underscore that it is far too simple to assume that there is a recursive process in which women's likelihood of employment increases across the board, or to use religiosity and gender role attitudes to explain employment differences between religious groups, and particularly the Muslim employment gap (Khattab & Hussein 2018; Khattab et al. 2017). Both religiosity and traditional gender role attitudes were shown to impede employment, but only religiosity really explained the differences between different religious groups, and only traditional gender role attitudes slightly explained the developments over time. Moreover, after taking both factors into account, some group differences remained, mainly between Muslim women and other women.

After controlling for gender role attitudes and religiosity, Catholic, Protestant, and Jewish women had the highest likelihood of employment of all the religious groups studied. When religiosity was considered, the higher employment rates for Catholic, Protestant, and Jewish women relative to women with no religion became more prominent, while the lower employment rates for Muslim and Eastern Orthodox women decreased. This finding of our multiple regression analysis was in line with our descriptive findings that women with no religion had the highest employment rates by far. Future research should examine the dynamics at play in the association between religiosity and women's employment for women of different religions.

Delving more deeply, we found that different religious groups were also affected differently by gender attitudes and religiosity. Notably, over time, the effects of religiosity decreased among Jewish and Muslim women; and the effects of traditional gender role attitudes decreased among Jewish, Muslim, and, to some extent, Protestant women. For all other combinations, the developments appeared to be parallel, with no strongly increasing effects.

While these results support our overarching expectation that women's employment rates would not follow the same trajectories for all religious groups, our specific expectations were only partly supported. We found support for the idea that religiosity and traditional gender role attitudes have their own underlying mechanisms that explain their relationships to women's employment. However, our findings contradicted the expectation that the negative association between gender role attitudes and likelihood of employment would become stronger over time. In fact, it became weaker. That is, the likelihood of employment for women with more traditional gender attitudes increased over time between 2004 and 2016 – although a somewhat different trend was observed for Eastern Orthodox women, which was in line with our expectations. One explanation for these findings might be that the role of gender role attitudes in entering paid employment became less important because these attitudes were overridden by economic pressures in societies where men and women were expected to earn their own living. However, future research should investigate this question more in detail.

Our research represents a starting point in the analysis of gender traditionalism and religiosity and their associations with the employment of women belonging to different

religions. Future research should study these associations in longer time windows, and look at changes over the life course. Including contextual factors in the analysis might shed more light on the significantly lower and decreasing likelihood of employment found for Muslim women, even after religiosity and gender traditionalism are taken into account. To conduct a detailed analysis, more data and a longer time span are needed. Such an analysis might also provide us with a better understanding of our finding that the association between gender traditionalism and employment has been decreasing over time among Muslim women in Europe.

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References

Abdelhadi, E. (2017). Religiosity and Muslim women's employment in the United States. *Socius: Sociological Research for a Dynamic World*, 3, 1-17. https://doi.org/10.1177/2378023117729969

Amin, S. & Alam, I. (2008). Women's employment decisions in Malaysia: Does religion matter? *The Journal of Socio-Economics*, 37, 6, 2368-2379. https://doi.org/10.1016/j.socec.2008.04.012

Asad, T. (2003). *Formations of the secular: Christianity, Islam, modernity*. Stanford: Stanford University Press.

Badran, M. (2005). Between secular and Islamic feminism/s reflections on the Middle East and Beyond. *Journal of Middle East Women's Studies*, 1, 1, 6-28. https://muse.jhu.edu/article/408727

Bayrakdar, S. & Guveli, A. (2020). Understanding the benefits of migration: Multigenerational transmission, gender and educational outcomes of Turks in Europe. *Journal of Ethnic and Migration Studies*, online first, 1-22. https://doi.org/10.1080/1369183X.2020.1736531

Blommaert, L., Coenders, M. & Van Tubergen, F. (2014a). Ethnic discrimination in recruitment and decision makers' features: Evidence from laboratory experiment and survey data using a student sample. *Social Indicators Research*, 116, 3, 731-754. https://doi.org/10.1007/s11205-013-0329-4

Blommaert, L., Coenders, M. & Van Tubergen, F. (2014b). Discrimination of Arabic-named applicants in the Netherlands: An internet-based field experiment examining different phases in online recruitment procedures. *Social Forces*, 92, 3, 957-982. https://doi.org/10.1093/sf/sot124

Blommaert, L. & Spierings, N. (2019). Examining ethno-religious labor market inequalities among women in the Netherlands. *Research in Social Stratification and Mobility*, 61, 38-51. https://doi.org/10.1016/j.rssm.2019.01.005

Bozzano, M. (2017). On the historical roots of women's empowerment across Italian provinces: Religion or family culture? *European Journal of Political Economy*, 49, 24-46. https://doi.org/10.1016/j.ejpoleco.2016.12.002

Brinkerhoff, M.B. & MacKie, M. (1988). Religious sources of gender traditionalism. In: Thomas, D.L. (ed.): *The religion and family connection: Social Science Perspectives*. Provo, UT: Religious Studies Center, Brigham Young University, 232-57.

Bryan, M.L. & Jenkins, S.P. (2016). Multilevel modelling of country effects: A cautionary tale. *European Sociological Review*, 32, 1, 3-22. https://doi.org/10.1093/esr/jcv059

Brynin, M. & Guveli, A. (2012). Understanding the ethnic pay gap in Britain. *Work, Employment and Society*, 26, 4, 574-587. https://doi.org/10.1177/0950017012445095

Bussemakers, C., van Oosterhout, K., Kraaykamp, G. & Spierings, N. (2017). Women's worldwide education–employment connection: a multilevel analysis of the moderating impact of economic, political, and cultural contexts. *World Development*, 99, 28-41. https://doi.org/10.1016/j.worlddev.2017.07.002

Camussi, S. (2013). Female labour market participation and cultural variables. *Occasional Paper No. 178*. Bank of Italy. http://dx.doi.org/10.2139/ssrn.2297874

Cesari, J. (2009). *The securitisation of Islam in Europe* (Vol. 15). CEPS.

Cesari, J. (Ed.). (2015). *The Oxford handbook of European Islam*. Oxford: Oxford UP.

Clarke, P., Crawford, C., Steele, S. & Vignoles, A. (2015). Revisiting fixed- and random-effects models: some considerations for policy-relevant education research. *Education Economics*, 23, 3, 259-277. https://doi.org/10.1080/09645292.2013.855705

Daoud, Y. & Khattab, N. (2020). Women, labour market outcomes and religion: Evidence from the British labour market. *Review of Social Economy*, (online). https://doi.org/10.1080/00346764.2020.1739321

Davis, L. & Gao, J. (2020). Preferences or patriarchy: Why do religious women work less? *Social Indicators Research*, 147, 287-310. https://doi.org/10.1007/s11205-019-02152-6

Diehl, C., Koenig, M. & Ruckdeschel, K. (2009). Religiosity and gender equality: Comparing natives and Muslim migrants in Germany. *Ethnic and Racial Studies*, 32, 2, 278-301. https://doi.org/10.1080/01419870802298454

Dildar, Y. (2015). Patriarchal norms, religion, and female labour supply: Evidence from Turkey. *World Development*, 76, 40-61. https://doi.org/10.1016/j.worlddev.2015.06.010

Epstein, C.F. (2007). Great divides: The cultural, cognitive, and social bases of the global subordination of women. *American Sociological Review*, 72, 1, 1-22. https://doi.org/10.1177/000312240707200101

Essers, C. & Benschop, Y. (2009). Muslim businesswomen doing boundary work: The negotiation of Islam, gender and ethnicity within entrepreneurial contexts. *Human Relations*, 62, 3, 403-423. https://doi.org/10.1177/0018726708101042

Finke, R. & Iannaccone, L.R. (1993). Supply-side explanations for religious change. *The Annals of the American Academy of Political and Social Science*, 527, 1, 27-39. https://doi.org/10.1177/0002716293527001003

Fleischmann, F. & Höhne, J. (2013). Gender and migration on the labour market: Additive or interacting disadvantages in Germany? *Social Science Research*, 42, 5, 1325-1345. https://doi.org/10.1016/j.ssresearch.2013.05.006

Fortin, N.M. (2005). Gender role attitudes and the labour-market outcomes of women across OECD countries. *Oxford review of Economic Policy*, 21, 3, 416-438. https://doi.org/10.1093/oxrep/gri024

Glas, S. & Alexander, A. (2020). Explaining support for Muslim feminism in the Arab Middle East and North Africa. *Gender & Society*, 34, 3, 437-466. https://doi.org/10.1177/0891243220915494

Glas, S. & Spierings, N. (2019). Support for feminism among highly religious Muslim citizens in the Arab region. *European Journal of Politics and Gender*, 2, 2, 283-310. https://doi.org/10.1332/251510819X15538590890492

Glas, S., Spierings, N., Lubbers, M. & Scheepers, P. (2019). How polities shape support for gender equality and religiosity's impact in Arab countries. *European Sociological Review*, 35, 3, 299-315. https://doi.org/10.1093/esr/jcz004

Glas, S., Spierings, N. & Scheepers, P. (2018). Re-understanding religion and support for gender equality in Arab countries. *Gender & Society*, 32, 5, 686-712. https://doi:10.1177/0891243218783670

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. https://doi.org/10.1177/0001699315573335

Güveli, A. (2006). *New social classes within the service class in the Netherlands and Britain. Adjusting the EGP class schema for the technocrats and the social and cultural specialists*. Nijmegen: Dissertation Radboud University Nijmegen.

Guveli, A. (2011). Social and economic impact of the headscarf ban on women in Turkey. *European Societies*, 13, 2, 171-189. https://doi.org/10.1080/14616696.2010.547942

Guveli, A. (2015). Are Movers More Religious than Stayers? Religiosity of European Majority, Turks in Europe and Turkey. *Review of Religious Research*, 57, 1, 43-62. http://www.jstor.org/stable/43920079

Guveli, A. & Platt, L. (2011). Understanding the religious behaviour of Muslims in the Netherlands and the UK. *Sociology*, 45, 6, 1008-1027. https://doi.org/10.1177/0038038511416165

Guveli, A. & Platt, L. (2020). Recent trends in religiosity of majority and minority European populations, *Social Policy Working Paper 02-20*, London: LSE Department of Social Policy.

Guveli, A., Ganzeboom, H.B.G., Baykara-Krumme, H., Platt, L., Eroglu, S., Spierings, N., Bayrakdar, S., Nauck, B. & Sozeri, E. (2017). 2,000 Families: Identifying the research potential of an origins-of-migration study. *Ethnic and Racial Studies*, 40, 14, 2558-2576. https://doi.org/10.1080/01419870.2016.1234628

Guveli, A., Ganzeboom, H.B.G., Platt, L., Nauck, B., Baykara-Krumme, H., Eroğlu, Ş., Bayrakdar, S., Sözeri, E.K. & Spierings, N. (2016). *Intergenerational consequences of migration: Socio-economic, family and cultural patterns of stability and change in Turkey and Europe*. London: Palgrave Macmillan.

Immerzeel, T. & Van Tubergen, F. (2013). Religion as reassurance? Testing the insecurity theory in 26 European countries. *European Sociological Review*, 29, 2, 359-372. https://doi.org/10.1093/esr/jcr072

Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic, and political change in 43 societies*. Princeton: Princeton University Press.

Inglehart, R. & Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge: Cambridge University Press.

Kandiyoti, D. (1988). Bargaining with patriarchy. *Gender and Society*, 2, 3, 274-89. https://doi.org/10.1177/089124388002003004

Khattab, N. & Hussein, S. (2018). Can religious affiliation explain the disadvantage of Muslim women in the British labour market? *Work, Employment and Society*, 32, 6, 1011-1028. https://doi.org/10.1177/0950017017711099

Khattab, N., Johnston, R. & Manley, D. (2018). Human capital, family structure and religiosity shaping British Muslim women's labour market participation. *Journal of Ethnic and Migration Studies*, 44, 9, 1541-1559. https://doi.org/10.1080/1369183X.2017.1334541

Khoudja, Y. & Fleischmann, F. (2015). Ethnic differences in female labour force participation in the Netherlands: Adding gender role attitudes and religiosity to the explanation. *European Sociological Review*, 31, 1, 91-102. https://doi.org/10.1093/esr/jcu084

Khoudja, Y. & Platt, L. (2018). Labour market entries and exits of women from different origin countries in the UK. *Social Science Research*, 69, 1-18. https://doi.org/10.1016/j.ssresearch.2017.10.003

Koenig, M., Maliepaard, M. & Guveli, A. (2016). Religion and new immigrants' labor market entry in Western Europe. *Ethnicities*, 16, 2, 213-235. https://doi.org/10.1177/1468796815616159

Koopmans, R. (2016). Does assimilation work? Sociocultural determinants of labour market participation of European Muslims. *Journal of Ethnic and Migration Studies*, 42, 2, 197-216. https://doi.org/10.1080/1369183X.2015.1082903

Lehrer, E.L. (1995). The effects of religion on the labor supply of married women. *Social Science Research*, 24, 3, 281-301. https://doi.org/10.1006/ssre.1995.1011

Lerner, D. (1958). The passing of traditional society: Modernizing the Middle East. Glencoe (Illinois): Free Press

Lisaliner, F.G. & Bhatti, F. (2005). Determinants of female labour force participation: A study of North Cyprus. *Review of Social, Economic & Business Studies*, 5, 6, 209-226. https://www.researchgate.net/profile/Fatma_Guven_Lisaniler/publication/262005349_Determinant_of_Labor_Force_Participation_A_Case_of_Cyprus/links/02e7e5363ee6d89956000000.pdf

Miyata, S. & Hiroyuki, Y. (2016). Do female gender role attitudes affect labour market participation in Egypt? *The Journal of Development Studies*, 52, 6, 876-894. https://doi.org/10.1080/00220388.2015.1113262

Moghadam, V.M. (1996). *Patriarchy and economic development. Women's positions at the end of the twentieth century*. Oxford: Clarendon Press.

Moghadam, V.M. (2013). What is democracy? Promises and perils of the Arab Spring. *Current Sociology*, 61, 4, 393-408. https://doi.org/10.1177/0011392113479739.

Naseema, J. & Adnan, W. (2019). Being a second-generation Muslim woman in the French labour market. Understanding the dynamics of (visibility of) religion and gender in labour market access, outcomes and experiences. *Research in Social Stratification and Mobility*, 61, 79-93. https://doi.org/10.1016/j.rssm.2019.02.003

Norris, P. & Inglehart, R. (2011). *Sacred and secular: Religion and politics worldwide*. Cambridge: Cambridge University Press.

Pampel, F.C. & Tanaka, K. (1986). Economic development and female labor force participation: A reconsideration. *Social Forces*, 64, 3, 599-619. https://doi.org/10.1093/sf/64.3.599

Pastore, F. & Tenaglia S. (2013). Ora et no labora? A test of the impact of religion on female labour supply. *IZA Discussion Paper Series* No. 7356. https://ssrn.com/abstract=2260671

Pettit, B. & Hook, J. (2005). The structure of women's employment in comparative perspective. *Social Forces*, 84, 2, 779-801. https://doi.org/10.1353/sof.2006.0029

Pfau-Effinger, B. (2017). *Development of culture, welfare states and women's employment in Europe*. London & New York: Routledge.

Price, A. (2015). How national structures shape attitudes toward women's right to employment in the Middle East. *International Journal of Comparative Sociology*, 56, 6, 408-32. https://doi.org/10.1177/0020715215625494

Richards, D.L. & Gelleny, R. (2007). Women's status and economic globalization. *International Studies Quarterly*, 51, 4, 855-876. https://doi.org/10.1111/j.1468-2478.2007.00480.x

Röder, A. (2014). Explaining religious differences in immigrants' gender role attitudes: The changing impact of origin country and individual religiosity. *Ethnic and Racial Studies* 37, 14, 2615-2635. https://doi.org/10.1080/01419870.2013.854919

Ruiter, S. & Van Tubergen, F. (2009). Religious attendance in cross-national perspective: A multilevel analysis of 60 countries. *American Journal of Sociology*, 115, 3, 863-95. https://doi.org/10.1086/603536

Schnabel, L. (2016). Religion and gender equality worldwide: A country-level analysis. *Social Indicators Research*, 129, 2, 893-907. https://doi.org/10.1007/s11205-015-1147-7

Schwartz, S.H. & Galit, S. (2000). Value consensus and importance: A cross-national study. *Journal of Cross-Cultural Psychology*, 31, 4, 465-97. https://10.1177/0022022100031004003

Spierings, N. (2014a). The influence of patriarchal norms, institutions, and household composition on women's employment in twenty-eight Muslim-majority countries. *Feminist Economics*, 20, 4, 87-112. https://doi.org/10.1080/13545701.2014.963136

Spierings, N. (2014b). How Islam influences women's paid non-farm employment: Evidence from 26 Indonesian and 37 Nigerian provinces. *Review of Religious Research*, 56, 3, 399-431. https://www.jstor.org/stable/43186236

Spierings, N. (2015). Gender equality attitudes among Turks in Western Europe and Turkey: The interrelated impact of migration and parents' attitudes. *Journal of Ethnic and Migration Studies*, 41, 5, 749-771. https://doi.org/10.1080/1369183X.2014.948394

Spierings, N. (2016). *Women's employment in Muslim countries: Patterns of diversity*. London: Palgrave Macmillan.

Spierings, N. (2018). Popular opposition to economic gender equality and homosexual lifestyles. In: Verloo, M. (Eds.), *Varieties of opposition to gender equality in Europe*, London & New York: Routledge, pp. 172-194.

Spierings, N. (2019). The multidimensional impact of Islamic religiosity on ethno-religious social tolerance in the Middle East and North Africa. *Social Forces*, 97, 4, 1693-1730. https://doi.org/10.1093/sf/soy092

Spierings, N., Smits, J. & Verloo, M. (2010). Micro-and macrolevel determinants of women's employment in six Arab countries. *Journal of Marriage and Family*, 72, 5, 1391-1407. https://doi:10.1111/j.1741-3737.2010.00772.x

Steiber, N. & Haas, B. (2012). Advances in explaining women's employment patterns. *Socio-Economic Review*, 10, 2, 343-367. https://doi.org/10.1093/ser/mwr039

Te Grotenhuis, M., Scholte, M., de Graaf, N.D. & Pelzer, B. (2015). The between and within effects of social security on church attendance in Europe 1980–1998: The danger of testing hypotheses cross-nationally. *European Sociological Review*, 31, 5, 643-654. https://doi.org/10.1093/esr/jcv069

Van der Lippe, T. & Van Dijk, L. (2002). Comparative research on women's employment. *Annual Review of Sociology*, 28, 1, 221-241. https://doi.org/10.1146/annurev.soc.28.110601.140833

Van Klingeren, M., & Spierings, N. (2020). Acculturation, decoupling, or both? Migration's impact on the linkage between religiosity and gender equality attitudes. *Journal of Ethnic and Migration Studies*, 46, 15, 3079-3100. https://doi.org/10.1080/1369183X.2020.1733947

Van Tubergen, F. & Sindradottir, J.I. (2011). The religiosity of immigrants in Europe: A cross-national study. *Journal for the Scientific Study of Religion*, 50, 2, 272-288. https://doi.org/10.1111/j.1468-5906.2011.01567

Walby, S. (2009). *Globalization & inequalities. Complexities and contested modernities*. London, Thousand Oaks, CA: Sage.

Zuccotti, CV., Ganzeboom, H.B.G. & Guveli, A. (2017). Has migration been beneficial for migrants and their children? *International Migration Review*, 51, 1, 97-126. https://doi.org/10.1111/imre.12219

Appendix

Table A.1: Unweighted descriptive statistics (N = 43649)

	Mean/Proportion	Freq.	SD	Min.	Max.
Years of full-time education	13.18		3.69	0.00	48.0
Age	44.61		12.2	18.00	65.0
Doing paid work last 7 days	0.64				
Country					
BE Belgium	0.06	2390			
CH Switzerland	0.06	2386			
CZ Chech	0.08	3255			
DE Germany	0.09	3635			
DK Denmark	0.04	1472			
ES Spain	0.06	2526			
FR France	0.05	1890			
GB UK	0.07	2670			
GR Greece	0.07	2692			
IE Ireland	0.09	3344			
IL Israel	0.06	2427			
NL Netherlands	0.07	2567			
NO Norway	0.05	1922			
RU Russia	0.06	2520			
SE Sweden	0.05	1995			
SI Slovenia	0.04	1542			
Children living at home	0.54				
Marital status					
Married	0.62	24218			
Divorced/widowed	0.23	8911			
Never married	0.16	6104			
Migration status					
First-generation migrants	0.11	4278			
Second generation	0.09	3567			
Natives	0.80	31388			
Religion					
No religion	0.41	15945			
Roman catholic	0.25	9970			
Protestant	0.14	5390			
Eastern orthodox	0.10	4035			
Jewish	0.05	2015			
Islam	0.03	1159			
Other religions	0.02	719			
Survey year (ESS round)					
2 – 2004	0.23	9093			
4 – 2008	0.23	9018			
5 – 2010	0.30	11610			
8 - 2016	0.24	9512			

Table A.1: Unweighted descriptive statistics (N = 43649) (continued)

	Mean/Proportion	Freq.	SD	Min.	Max.
Pray (How often pray apart from at religious services)					
0 never	0.37	14537			
1 less often	0.16	6370			
2 only on special holidays	0.05	1781			
3 at least once month	0.06	2386			
4 once a week	0.06	2472			
5 more than once a week	0.09	3436			
6 every day	0.21	8251			
Gender attitudes (Men should have more right to job than women when jobs are scarce)					
1 disagree strongly	0.40	15864			
2 disagree	0.32	12724			
3 neither agree nor disagree	0.12	4661			
4 agree	0.11	4366			
5 agree strongly	0.04	1618			

Table A.2: Odd ratios role of religiosity and gender role attitudes on employment likelihood of women in different religion over time (Model 1, 2, 3 and 4 are in Table 4)

	Model 5	Model 6	Model 7
Country (Ref: Austria)			
CH Switzerland	2.156***	2.155***	2.155***
	(0.1506)	(0.1506)	(0.1513)
CZ Czech	1.085	1.082	1.071
	(0.0669)	(0.0667)	(0.0664)
DE Germany	1.152*	1.148*	1.146*
	(0.0708)	(0.0706)	(0.0707)
DK Denmark	1.773***	1.752***	1.765***
	(0.1531)	(0.1516)	(0.1557)
ES Spain	0.901	0.900	0.895+
	(0.0600)	(0.0599)	(0.0597)
FR France	1.132+	1.132+	1.129+
	(0.0811)	(0.0811)	(0.0811)
GB UK	1.048	1.045	1.036
	(0.0688)	(0.0686)	(0.0682)
GR Greece	0.728***	0.730***	0.701***
	(0.0659)	(0.0660)	(0.0674)
IE Ireland	0.587***	0.587***	0.571***
	(0.0367)	(0.0368)	(0.0363)
IL Israel	1.060	1.046	1.057
	(0.1337)	(0.1321)	(0.1367)
NL Netherlands	1.149*	1.147*	1.150*
	(0.0759)	(0.0758)	(0.0762)
NO Norway	2.207***	2.200***	2.223***
	(0.1786)	(0.1781)	(0.1810)
RU Russia	1.376***	1.360***	1.360***
	(0.1063)	(0.1054)	(0.1072)
SE Sweden	2.755***	2.743***	2.765***
	(0.2183)	(0.2175)	(0.2201)
SI Slovenia	1.066	1.062	1.072
	(0.0795)	(0.0793)	(0.0802)
Children living at home	0.658***	0.659***	0.658***
	(0.0188)	(0.0188)	(0.0189)
Marital status (Ref: Married)			
Divorced/widowed	1.095**	1.093**	1.097**
	(0.0327)	(0.0326)	(0.0329)
Never married	1.011	1.014	1.018
	(0.0401)	(0.0402)	(0.0405)
Years of full-time education completed	1.113***	1.113***	1.114***
	(0.0041)	(0.0041)	(0.0042)
Age	1.420***	1.420***	1.422***
	(0.0112)	(0.0112)	(0.0112)
Age^2	0.996***	0.996***	0.996***
	(0.0001)	(0.0001)	(0.0001)

Table A.2: Odd ratios role of religiosity and gender role attitudes on employment likelihood of women in different religion over time (Model 1, 2, 3 and 4 are in Table 4) (continued)

	Model 5	Model 6	Model 7
Migration status (Ref: First generation migrant)			
Second-generation	1.099+	1.100+	1.100+
	(0.0588)	(0.0588)	(0.0592)
Natives	1.297***	1.298***	1.298***
	(0.0522)	(0.0522)	(0.0527)
Religion (Ref: No religion)			
Roman Catholic	1.125**	1.126**	1.130
	(0.0412)	(0.0412)	(0.2022)
Protestant	1.203***	1.204***	1.432
	(0.0537)	(0.0537)	(0.3267)
Eastern Orthodox	0.971	0.971	1.436
	(0.0694)	(0.0694)	(0.4623)
Jewish	1.357*	1.364*	1.306
	(0.1803)	(0.1811)	(0.5639)
Islam	0.583***	0.581***	2.908+
	(0.0485)	(0.0482)	(1.7305)
Other religions	0.931	0.930	1.026
	(0.0844)	(0.0843)	(0.6163)
Praying (1-5)	0.959***	0.951***	0.943*
	(0.0121)	(0.0057)	(0.0246)
Survey year (ESS round)	1.050***	1.025*	1.036+
	(0.0089)	(0.0124)	(0.0194)
Pray*Survey year	0.998		0.999
	(0.0023)		(0.0050)
Roman Catholic*Pray			1.068+
			(0.0381)
Protestant*Pray			1.035
			(0.0446)
Eastern Orthodox*Pray			0.933
			(0.0535)
Jewish*Pray			0.860*
			(0.0661)
Islam*Pray			0.912
			(0.0828)
Other religions*Pray			1.004
			(0.1020)
Roman Catholic*Survey year			1.017
			(0.0336)
Protestant*Survey year			0.975
			(0.0433)
Eastern Orthodox*Survey year			0.943
			(0.0584)
Jewish*Survey year			1.004
			(0.0697)
Islam*Survey year			0.808*
			(0.0774)
Other religions*Survey year			0.948
			(0.1031)

Table A.2: Odd ratios role of religiosity and gender role attitudes on employment likelihood of women in different religion over time (Model 1, 2, 3 and 4 are in Table 4) (continued)

	Model 5	Model 6	Model 7
Roman Catholic*Pray*Survey year			0.992
			(0.0068)
Protestant*Pray*Survey year			0.992
			(0.0086)
Eastern Orthodox*Pray*Survey year			1.021+
			(0.0117)
Jewish*pray*Survey year			1.026+
			(0.0137)
Islam*pray*Survey year			1.013
			(0.0155)
Other religions*pray*Survey year			1.008
			(0.0188)
Traditional gender attitudes (0-6)	0.846***	0.809***	0.842***
	(0.0094)	(0.0208)	(0.0346)
Traditional gender attitudes*Survey year		1.010+	1.008
		(0.0051)	(0.0083)
Roman Catholic*Traditional gender attitudes			0.967
			(0.0601)
Protestant*Traditional gender attitudes			0.865
			(0.0780)
Eastern Orthodox*Traditional gender attitudes			1.027
			(0.0918)
Jewish*Traditional gender attitudes			0.965
			(0.1464)
Islam*Traditional gender attitudes			0.640**
			(0.1062)
Other religions*Traditional gender attitudes			0.807
			(0.1660)
Roman Catholic*Traditional gender attitudes*Survey year			0.991
			(0.0126)
Protestant*Traditional gender attitudes*Survey year			1.031
			(0.0195)
Eastern Orthodox*Traditional gender attitudes*Survey year			0.979
			(0.0178)
Jewish*Traditional gender attitudes*Survey year			1.009
			(0.0270)
Islam*Traditional gender attitudes*Survey year			1.061*
			(0.0294)
Other religions*Traditional gender attitudes*Survey year			1.047
			(0.0419)
N	39,233	39,233	39,233

Notes: Robust standard error in parentheses; *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table A.3: Odd ratios for role of religiosity and gender role attitudes on employment likelihood of women belonging to different religions (weighted for population size)

	1	2	3	4
Survey years (ESS round)	1.069***	1.068***	1.052***	1.052***
	(0.0098)	(0.0098)	(0.0098)	(0.0098)
Religions (ref: no Religion)				
Roman Catholic	1.070	1.180**	1.089+	1.185***
	(0.0496)	(0.0601)	(0.0508)	(0.0605)
Protestant	1.026	1.120+	1.045	1.128*
	(0.0581)	(0.0667)	(0.0594)	(0.0675)
Eastern Orthodox	0.903	0.988	0.905	0.979
	(0.0754)	(0.0851)	(0.0757)	(0.0845)
Jewish	1.121	1.184	1.081	1.136
	(0.2736)	(0.2887)	(0.2607)	(0.2738)
Islam	0.547***	0.615***	0.582***	0.644***
	(0.0581)	(0.0674)	(0.0618)	(0.0705)
Other religions	0.894	1.020	0.907	1.018
	(0.1131)	(0.1336)	(0.1151)	(0.1334)
Praying (1-5)		0.960***		0.965***
		(0.0086)		(0.0086)
Traditional gender attitudes (0-6)			0.852***	0.855***
			(0.0140)	(0.0141)
Observations	39,233	39,233	39,233	39,233

Notes: All models are controlled for age, age2, education, marital status, having children at home and migration status. All models include country fixed effects. *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Robust s.e. in parentheses

Information in German

Deutscher Titel

Veränderungen des Einflusses von Religiosität und Geschlechterrollenvorstellungen auf das Erwerbsverhalten von Frauen nach Religionszugehörigkeit in Europa zwischen 2004 und 2016

Zusammenfassung

Fragestellung: Dieser Beitrag untersucht den Zusammenhang von Religiosität, Geschlechterrollenvorstellungen und Erwerbsverhalten von Frauen in Europa zwischen 2004 und 2016.

Hintergrund: Religiosität und traditionelle Geschlechterrollenvorstellungen gelten als wesentliche Determinanten, die das Erwerbsverhalten von Frauen bestimmen. Dieser Beitrag argumentiert, dass diese beiden Faktoren differenziert betrachtet werden müssen, da der Einfluss, den Religiosität und Geschlechterrollenvorstellungen auf das Erwerbsverhalten ausübt, auf andere Mechanismen zurückgeführt werden muss.

Methode: Es werden die Daten des European Social Survey (ESS) aus den Jahren 2004, 2008, 2010 und 2016 (Welle 2, 4, 8, 10) verwendet, in denen u.a. Informationen zur Religiosität, Religionszugehörigkeit und zu den Geschlechterrollenvorstellungen für 16 Länder vorliegen (N=39.233).

Ergebnisse: Nach Kontrolle von Religiosität vergrößern sich die Unterschiede zwischen Personen ohne Religionszugehörigkeit und Personen mit römisch-katholischer, protestantischer oder jüdischer Religionszugehörigkeit. Hingegen reduzieren sich die Unterschiede zwischen Frauen mit islamischen und orthodoxem Glaubens in Vergleich zu säkularisierten Frauen. Die Hinzunahme von Geschlechterrollenvorstellungen erklärt die Erwerbsunterschiede nur marginal.

Schlussfolgerung: Dieser Beitrag unterstützt die Idee, dass Religiosität und traditionelle Geschlechterrollenvorstellungen durch verschiedene Mechanismen mit dem Erwerbsverhalten von Frauen verbunden sind. Über die Zeit ist die Erwerbsneigung für alle Frauen, unabhängig von der konfessionellen Zugehörigkeit gestiegen, abgesehen von islamischen Frauen, wo wir einen Rückgang beobachten können.

Schlagwörter: Erwerbstätigkeit von Frauen, Religionszugehörigkeit, Geschlechterrollenvorstellungen, Europa

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