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## Muslim by default or religious discrimination? Results from a cross-national field experiment on hiring discrimination

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### ABSTRACT

We use data from a cross-nationally harmonised field experiment to examine discrimination towards Muslim job applicants in five European countries (Germany, the Netherlands, Norway, Spain and the United Kingdom). We focus on job applicants originating from countries that have a substantial Muslim population: of these, some signalled closeness to Islam in their job application while others did not. With this design, we can empirically disentangle anti-Muslim discrimination (a ‘disclosed Muslim’ effect) from the possible stigma of originating from countries where Islam is prevalent (a ‘Muslim by default’ effect). Our double-comparative design allows us to compare the extent of anti-Muslim discrimination faced by different origin groups in destination countries characterised by a varying history of church-state relations and distinctive approaches to grant cultural and religious rights to minorities. We find alarming levels of discrimination, especially towards male applicants from more visible groups. Anti-Muslim discrimination and origin-based discrimination independently contribute to the severe disadvantage faced by ethnic and religious minorities, a disadvantage that is especially severe in the Norwegian labour market.

### KEYWORDS

Field experiment; religious discrimination; Muslim; ethnic penalties; correspondence test

## Introduction

Over the past few years, the arrival on European shores of asylum seekers fleeing predominantly Muslim countries has fuelled heated debates on the socio-economic and cultural integration of Muslims in Western societies. The Muslim population in Europe is expected to grow even further in the near future, in absolute as well as relative terms, partly as a result of the simultaneous shrinkage of the non-Muslim population (PEW 2017). The issue of Muslim integration is all the more salient given the relatively strong religious commitment of Muslim migrants, the visibility of their religious garments and the alleged incompatibility between Muslim beliefs and the values, traditions and customs of historically Christian and highly secular destination countries, where the ‘bright boundary’ of religion may confine Islam to a marginal position in society (Foner and Alba 2008).

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Previous studies on the employment opportunities of migrants compared to majority populations have reported especially strong penalties for Muslims, regardless of their ethnicity (e.g. Khattab 2009; Lindley 2002). Such ‘Muslim penalties’ were confirmed in a series of recent correspondence tests, in which candidates who signalled their affiliation to Islam in the job application were at a severe disadvantage compared to equally qualified candidates of different religions (Adida, Laitin, and Valfort 2010; Pierné 2013; Valfort 2017). These studies, however, were all conducted in France and it would be premature, without a comparative design, to generalise their findings to other European countries. Furthermore, existing works typically analyse one national origin group only. Yet, average levels of religious commitment vary widely among origin countries (PEW 2017). Origin countries also differ with regard to other characteristics such as GDP, living standards and phenotype of their inhabitants. Given the heterogeneity of Europe’s Muslim populations, more research is needed to map how Muslims originating from geographic regions as varied as the Middle East and North Africa, Sub-Saharan Africa, South Asia and Eastern Europe fare in the labour market of their countries of settlement.

In this study, we rely on a cross-nationally harmonised correspondence test to study the economic integration of Muslim migrants originating from various countries of origin and applying for jobs in multiple countries of destination (on the advantages of double-comparative designs, cf. van Tubergen, Maas, and Flap 2004). We sent fictitious applications in five European countries – Germany, the Netherlands, Norway, Spain and the United Kingdom (UK)<sup>1</sup> – characterised by different levels of religious climates, a varying history of church-state relations and distinctive approaches to grant cultural and religious rights to minorities. We included 15 countries of origin, characterised by a substantial Muslim population and spread across four geographic regions. To signal religion, we followed common practice in the field experimental literature and varied the name of the organization where applicants did volunteer work in the CV and cover letter. This organization had either a religious connotation (i.e. a *Muslim* community centre) or a neutral one (i.e. a *local* community centre). As such, we compare: (1) ethnic minorities from countries with a sizeable Muslim population who mentioned Islam in their application (‘disclosed Muslims’) with ethnic minorities from the same countries who did not (‘Muslims by default’); and (2) ethnic minorities who volunteered in a secular organization with majority group members who volunteered in the same organization (i.e. ‘Muslims by default’ vs. majority group). By varying both applicants’ origin country and their closeness to Islam, we can separate the religious signal from the country of origin of the job applicant. An additional advantage of our study is the inclusion of multiple countries of origin in the design, for it increases the external validity of our findings.

Our contribution to the literature is twofold. First, we disentangle a ‘religious closeness effect’, i.e. a discriminatory act on grounds of applicants’ religion, from a mere ‘geographic origin effect’, i.e. a discriminatory act towards applicants originating from areas commonly associated with Islam. Second, our cross-national analysis, albeit descriptive, adds to recent efforts to understand the impact of national institutions on Muslims’ integration within their country of settlement (e.g. Fleischmann and Phalet 2012; Statham and Tillie 2016). To foreshadow our findings, applicants originating from countries with a sizeable Muslim population experience strong discrimination, and this disadvantage further widens if closeness to Islam is explicitly mentioned in the job application. The levels of

discrimination faced by job applicants is particularly strong for males originating from Africa and the Middle East and varies across destination countries, with Spain being the most accommodating context and Norway the least favourable to Muslim integration.

## The labour market integration of Muslims in European countries

### *The ethnic penalties literature: ethnicity, religion or neither?*

Migrants from Muslim countries started to arrive in Western Europe in the 1950s and 1960s, as part of guest worker recruitment programmes (e.g. Turkish and Moroccans in Belgium, Germany and the Netherlands) or post-colonial flows (e.g. South Asians in the UK). Their numbers increased over the years due to high fertility rates, family reunification and, lately, refugee migration. Muslim migrants are a far more recent phenomenon in Southern Europe, with Morocco, Egypt or Albania being the main source countries (Koenig, Maliepaard, and Güveli 2016; Voas and Fleischmann 2012). According to PEW Research Centre calculations, between 2010 and 2016, 53% of all migrants to Europe (including refugees and regular migrants) were Muslim, totalling about 3.7 million people. Recent Muslim migrants originate primarily from Morocco, Turkey, Pakistan, Bangladesh and, in the case of refugees, Syria, Afghanistan and Iraq (PEW 2017).

Overall, Muslim minorities in Europe experience a rather severe socio-economic disadvantage. In the recent EU-MIDIS II survey (FRA 2017), nearly 40 percent of Muslim respondents reported to feel discriminated against when looking for work, of whom 17 percent perceived discrimination on religious grounds and 27 percent on ethnic grounds. The same survey revealed considerable variation across origin countries and singled out Muslims from North Africa and Sub-Saharan Africa as the most vulnerable group. Worryingly, perceived religious discrimination seem to be on the rise compared to an earlier wave of the same survey.

An obvious limitation of self-reports is their subjective nature (Pager and Shepard 2008). Some respondents may be unable to tell whether the discrimination they experience is related to religion, ethnic origin or some other trait. Others may be unaware of discrimination and under-report it, or may misinterpret other people's behaviour as discriminatory and over-report it. A more objective analysis of Muslims' labour market disadvantage comes from the ethnic penalties literature. These studies are based on regression analysis of secondary data, typically labour force surveys or population surveys, and show that Muslim migrants, *ceteris paribus*, tend to be systematically disadvantaged in terms of labour market participation, employment and occupational attainments, relative to the majority group (e.g. Connor and Koenig 2015; Khoudja and Platt 2018; van Tubergen, Maas, and Flap 2004).

Disentangling ethnic penalties from religious penalties, however, is both conceptually and methodologically challenging due to the high correlation between religion and ethnicity. A number of British studies have leveraged the possibility to cross-classify migrant groups based on their self-reported ethnicity *and* religious affiliation: they unanimously found stronger penalties for Muslims than for other non-White groups (Cheung 2014; Heath and Martin 2013; Johnston et al. 2010; Khattab, Johnston, and Manley 2018; Lindley 2002). Employment penalties remained significant even after controlling for other relevant characteristics including ethnicity and, in some cases, language fluency

(e.g. Lindley 2002). Regardless of ethnic origin, Khattab, Johnston, and Manley (2015) found that Muslims were more likely to be in part-time employment and overqualified than the Christian White British majority and that these gaps widened after the 2008 economic recession. Heath and Martin (2013) as well as Cheung (2014) concluded that religion penalties are strong in magnitude and that ethnic penalties can largely be explained by religious affiliation. Khattab (2009, 319) went as far as saying that ‘ethnicity per se is not an important factor but operates as a proxy, and ... skin colour and culture (religion) are to a greater extent probably the main mechanisms that operate to reinforce disadvantage among some groups’.

Some of the ethnic penalty studies examined heterogeneous effects across Muslim groups. Their findings suggest that skin colour – as a visible marker of otherness – may exacerbate the religious penalties of specific groups. For example, Johnston et al. (2010) using British Census data found significantly higher returns to education for Indian Muslim males than Pakistani and Bangladeshi. In a later study, White-British Muslim women faced lighter unemployment penalties than all other Muslim groups, with Black Muslim women suffering the most severe earning and unemployment penalties (Khattab and Hussein 2018).

Taken together, these studies have made an explicit effort to categorise migrants along both ethnic and religious lines and empirically parse out ethnic penalties from religious ones. The evidence on ethno-religious penalties, however, is limited to the UK, as cross-national datasets like the European Social Survey do not distinguish between Muslim sub-groups of different ethnic origin. Another shortcoming of this literature is that the variable used to determine respondents’ religious affiliation does not provide any information on their actual involvement in religious practices, nor on the strength of their faith.

Another group of studies have looked at religious participation, beliefs and practices more closely. Within Europe, religiosity is often said to represent a barrier for the labour market integration of Muslims (Foner and Alba 2008). The argument is that migrants’ involvement in time-intensive religious practices commonly shared with co-ethnics may be a signal of strong in-group bonding (bonding social capital) and lack of contact with majority members (bridging social capital). While bridging social capital channels non-redundant information over job opportunities, bonding social capital with co-ethnics and co-religionists is not as effective (Lancee 2012). Overall, there is hardly any evidence of a negative association between religiosity and labour market participation or employment. Khattab, Johnston, and Manley (2018) found no relationship between religiosity and labour market participation among British Muslim women; however, those who reported higher levels of religiosity (in terms of both faith and religious participation) were also more likely to be unemployed. In a study comparing Germany, the Netherlands and the UK, Koenig, Maliepaard, and Güveli (2016) found that religious participation is entirely decoupled from the socio-economic integration of Muslims. Connor and Koenig (2015) showed that frequency of praying and adhering to more conservative value orientations did not mediate the employment gap between Muslims and non-Muslims; if anything, religious service attendance was even positively related to employment. One possible explanation for this very weak correlation between religiosity and labour market outcomes is that, in secularised European societies with a Christian heritage and widespread anti-Muslim attitudes, Muslims may be categorised

based on rather general signals of religious affiliation, such as names, ‘regardless of actual religious practice’ (Connor and Koenig 2015, 192). In other words, they may be considered Muslim ‘by default’ (Pierné 2013, 3).

Finally, recent research has called into question the assumption, common in the ethnic penalties literature, that unexplained labour market gaps between Muslims and the majority group are, at least partly, due to discrimination on the part of employers. For example, Koopmans (2016) drew attention to the role of sociocultural variables such as interethnic social ties and gender values. In his analysis, once these variables are taken into account, the employment gaps recorded between Muslims and non-Muslims in unemployment and labour force participation are greatly reduced and, in some cases, become statistically insignificant. Based on these findings, Koopmans concluded that, in the absence of more detailed data on Muslims’ sociocultural integration, the assumption that ethnic penalties result from employers’ discrimination is, at the very least, a ‘pre-mature conclusion’ (p. 212).

### *Causal evidence from employers: field experiments on hiring discrimination*

A more direct test of whether ethnic penalties can, indeed, be ascribed to employers’ discrimination comes from the field experimental literature. Field experiments, in their two forms of audit (in-person) or correspondence (resume-based) tests, are widely recognised as an effective method to provide clear and convincing evidence of hiring discrimination (Pager 2007; Pager and Shepard 2008). Fictitious applications that are identical in all respects except for the characteristic that allegedly causes discrimination are sent to employers. Due to the experimental design, any difference in employers’ positive feedback (i.e. callbacks) between members of the majority group and members of the minority group of interest is considered as evidence of discrimination. While originally employed to test ethnic (or name-based) discrimination, field experiments – and correspondence tests in particular, given their relatively lower costs – have been used to study discrimination on many other grounds, including religion.

Correspondence tests, however, are not without problems. Identifying religious discrimination, especially anti-Muslim discrimination, is a challenging task for at least two reasons. First, religious beliefs have to be signalled in the job application in a way that is both recognizable for the employer and externally valid. It is common practice to vary the names and volunteering activities of job applicants, admittedly a rather indirect measurement of religion. Second, the strong correlation between religion and ethnicity, or country of origin, is a concern also in field experiments. Adida, Laitin, and Valfort (2010, 22386) summarise this issue succinctly: ‘the real killer for identifying a Muslim effect is that most Muslim immigrants to each of the major European states come from a single country or world region’, such as Turks in Germany or Pakistani in the UK. Previous correspondence tests relying on North African or Middle Eastern names to signal religion may have sent to employers a double-barrelled signal, confounding religion and country of origin. As a result, it has proven difficult to determine whether immigrants are discriminated against because of their religious beliefs or because of the country they originate from.

A couple of recent correspondence tests have tried to address these methodological challenges. Adida, Laitin, and Valfort (2010) compared Muslim and Catholic Senegalese female immigrants in France, thus leveraging variation in religious closeness while holding the

country of origin constant. *Ceteris paribus*, Muslim Senegalese applicants were 2.5 times less likely to receive a callback than Christian Senegalese applicants, which they interpreted as anti-Muslim discrimination. Valfort (2017) followed the same strategy but focused on Muslim, Jewish and Catholic Lebanese immigrants to France and analysed both genders. Her design also included profiles of non-practicing applicants doing voluntary work in secular associations which, she argued, is necessary to disentangle a 'Muslim by culture but not religious practice' effect (or a geographic region effect) from a 'Muslim by culture and religious practice effect' (or a religious closeness effect). Valfort reported strong evidence of anti-Muslim discrimination, especially towards male applicants, who had to send four times as many applications as their Catholic counterparts to be invited to a job interview. Interestingly, when applicants of Muslim origin presented themselves as non-religious (i.e. they volunteered in a secular scouting association) the difference in callbacks from comparable non-religious applicants of Christian origin was only modest and not statistically significant.

Findings from these two correspondence tests clearly point to anti-Muslim discrimination in the French labour market. However, their main limitation is the lack of variation in the country of origin of applicants. Focusing on male candidates applying for real estate jobs in France, Pierné (2013) varied both origin (i.e. native French vs. North African) and religion (i.e. Catholic vs. Muslim vs. secular) independently and made comparisons *within* each origin and religion group. His findings provide strong evidence of discrimination towards immigrants of North African origin, regardless of religion, as well as discrimination towards applicants signalling closeness to the Muslim religion, regardless of ethnic origin. Yet, while this design has its benefits in terms of identifying anti-Muslim discrimination, Pierné could not compare multiple origin countries against each other. Furthermore, as also noted by Valfort (2017), employers may have perceived native French applicants with a Muslim affiliation as converts, which complicates the interpretation of the findings.

To summarise, these correspondence tests unanimously found significantly lower callback rates for Muslim applicants. However, they were all conducted in France, a country where public displays of religiosity are known to be tolerated poorly, likely as a result of French legal secularism and the deeply-entrenched concept of *laïcité* (Koopmans et al. 2005). Muslim migrants may experience less severe disadvantages in institutional contexts that provide them with more favourable opportunity structures. In addition, the studies focused on one single origin country (e.g. Senegal, Lebanon), culturally very distant from Western Europe and with a much lower human development index than France. To contribute to this debate, we focus on multiple countries of destination and multiple countries of origin at the same time, a double-comparative research design that allows us to examine the strength of anti-Muslim discrimination for different Muslim groups and across different countries of reception.

### **Data and method: A double-comparative design for the study of anti-Muslim discrimination**

Between July 2016 and December 2017, we conducted five harmonised correspondence tests in Germany, the Netherlands, Norway, Spain and the UK, as part of the GEMM project (for more details on the design and fieldwork: Lancee et al. 2019a, 2019b). Compared to previous correspondence tests, the design of our study is methodologically innovative for three reasons. First, we include a large number of minorities originating from



geographical regions that vary in their level of cultural distance to the country of destination and are characterised by sizeable Muslim populations (North Africa, Sub-Saharan Africa, the Middle East, Asia and Eastern Europe). Considering the variety of labour market outcomes across Muslim groups found in the ethnic penalties literature (Johnston et al. 2010; Khattab and Hussein 2018), the inclusion of multiple origin groups in the design allows us to examine anti-Muslim discrimination for a more heterogeneous sample of migrants, thus increasing the external validity of the findings. Second, the design is factorial, that is, multiple characteristics, including ethnicity, religious closeness and gender, were varied across applications. Third, the design is cross-nationally harmonised and the fieldwork was conducted at the same time in all five countries (see also Lancee 2021, in this special issue).

### *The five countries of destination*

The five countries of destination – Germany, the Netherlands, Norway, Spain and the UK – represent different immigrant citizenship regimes and are characterised by distinctive structures of church-state relations and legal frameworks for anti-discrimination policies and the granting of cultural and religious rights to minorities (Koopmans et al. 2005).<sup>2</sup> Within Europe, the UK, Germany and the Netherlands are the main countries of settlement for Muslim migrants. In comparative perspective, the UK and the Netherlands have been more open to accommodating Islam as a minority religion. The British state has been relatively in favour of extending rights to new religions and a plurality of religions are recognised in the public sphere. The Dutch model of religious pluralism is based on the non-interference of the state in religious self-governance and Muslims in the Netherlands have seized the opportunity to claim group rights to the same degree as other religious denominations. By contrast, Germany only recognises Christian and Jewish denominations and grants them the favourable formal status of public corporations, a privilege that is not extended to Islam. An ethnic model of nationhood further restricts immigrants' access to citizenship rights. Spain and Norway fall somewhat in between these clearer cut cases. Norway has a civic conception of nationhood, but is quite strict with granting religious rights to minorities. Conversely, Spain is less generous with granting citizenship rights to immigrants but more lenient with regard to religious rights (Koopmans and Michalowski 2017). At the start of the fieldwork, the estimated Muslim population shares in the five destination countries were approximately: 7.1% in the Netherlands, 6.3% in the UK, 6.1% in Germany, 5.7% in Norway and 2.6% in Spain (PEW 2017).

### *The design of a cross-nationally harmonised correspondence test*

The implementation of a cross-nationally harmonised correspondence test is not an easy task. One of the main challenges to harmonising the experimental design and protocols is that job application procedures differ across countries. For example, job applications in Germany always contain a photo of the applicant and a copy of his/her school certificates, while this is never the case in the UK or Norway. The guiding principle we followed in designing the application material was maximum comparability in content, while at the same time accounting for the specificities of each national labour market. We thus designed applications that were in line with national standards and included in the CV

and cover letter identical information applicants' skills, schooling and work experience. As a result, the applications present equally suitable candidates in each of the five countries. In the introduction to this special issue, the comparability of the design is discussed in more detail (more technical details can also be found in the codebook: Lancee et al. 2019b).

Another comparability issue was the choice of which occupations to target. We selected six occupations: cook, payroll clerk, receptionist, sales representative, software developer, and store assistant. Though occupational requirements are to some extent country-specific, these six occupations are highly comparable insofar as in all five countries entry requirements for store assistants, cooks, payroll clerks and receptionists are low to intermediate (secondary education) whereas sales representatives and software developers are graduate occupations requiring a higher education degree. We made sure that all applicants had the formal qualification that was required in each country in order to be considered for the job.<sup>3</sup> Additional selection criteria were the following: First, to ensure that we could send out enough applications by the end of the fieldwork, we selected occupations with a sufficient amount of vacancies per week in each country. Second, we carefully checked the cross-national comparability of entry requirements for each occupation. Third, the six occupations also require different levels of customer contact, which may affect the level of discrimination.

We applied to jobs that were advertised online on popular job portals. We used a crawler to search the websites on a weekly basis and select openings that contained a set of keywords. Unlike the classical paired design typically used in correspondence tests with two or more applications being sent to the same employer, we relied on an unpaired design and sent only one randomly selected application to each job opening (see Valfort 2017 and Weichselbaumer 2015 for a similar approach). While a paired design gives clear evidence of discrimination at the firm level, the risk of detection is higher with this approach and employers may react in a minority-friendly way simply for fear of being tested, leading to an underestimation of the level of discrimination, as recently demonstrated by Weichselbaumer (2015). The other reason why we opted for an unpaired design is that we are interested in testing for multiple treatments and comparing a large number of minority groups: it would have been unfeasible to send all treatment combinations to a single employer. A paired approach is not even necessary, unless the interest is in within-employer effects, which is not our case. With an unpaired design, the random allocation of treatments and controls to experimental units still ensures unbiased estimates, provided that the randomization process is done properly (Vuolo, Uggen, and Lageson 2016).

## Measurements

**Callback.** The dependent variable is the response received from the employer, i.e. the callback. We considered any interest in the applicant – whether expressed through an invitation to attend a job interview, visit the organization for a trial day, complete a test, or simply provide further information – as a positive callback (coded as 1). We assume that employers make the effort to contact candidates only if genuinely interested in their application. After recording employers' responses, we politely rejected any invitation to job interviews or request to provide additional information within one working day. Explicit rejections as well as applications that did not receive any response from the

employer were coded as 0. We then performed the same analysis but with a stricter operationalization and treated as positive callbacks only those responses explicitly mentioning an interest in the applicant, such as invitations to job interviews.

As anticipated above, the applications in our field experiment were identical in all respects, except for a number of characteristics, including the geographic origin of the applicants, their religious closeness and gender.<sup>4</sup>

**Migration status.** We randomly assigned membership to a majority or minority group to the applications. Minority applicants were either born in the receiving society or moved there before the age of six.<sup>5</sup> The opening paragraph of the cover letter mentioned that they had received all relevant education and training in the receiving society. Hence, concerns related to language fluency or the transferability of human capital across borders should not apply.

**Geographic origin.** We randomly assigned 15 origin countries with a sizeable Muslim population to the profiles of minority applicants. Origin countries are signalled in the job application by the applicant's name, the mother tongue listed in the language section of the résumé as well as by a sentence in the cover letter. As shown in [Table 1](#), origin countries can be grouped in four regions: Middle East and North Africa (MENA), Sub-Saharan Africa, Eastern Europe, South and Southeast Asia ([Table A1](#) in the online appendix reports the share of the population that self-identifies as Muslim in each country).

**Religious affiliation.** We followed common practice in the discrimination literature and signalled religious affiliation through volunteering activities. In the CV and cover letter, all applicants described themselves as active members of a local community centre where they engaged in professionally relevant activities (see example below). We randomly assigned a volunteering association with a Muslim connotation and one with a neutral connotation as a reference category. With this design, we can isolate the effect of disclosing one's closeness to Islam from the effect of originating from a country with a substantial share of Muslims in the population.

To give an example, for the occupation of cooks, we signalled religious closeness as follows (the complete application can be found in [Appendix A2](#)):

'I am a passionate cook both in my professional life and in my spare time. This is shown by my active participation in a **Muslim/local** community centre where I help with the preparation of meals for various events like local fairs and open days.' (Cover letter)

'Volunteer at (**Muslim**) Youth Enrichment Project: Assisting with cooking and preparation of meals for various events like open days and local fairs.' (CV)

Compared to other studies, our religion treatment is rather mild. A possible criticism of this design is that we did not explicitly signal religiosity or participation in religious practices but merely omitted or disclosed the religious connotation of the organization where the applicants did voluntary work. We believe this is a reasonable compromise that strikes a balance between signalling closeness to Islam and making the application as realistic as possible: applicants may be wary of mentioning religious practices in a job application but are probably willing to stress additional human capital that has professional relevance for the advertised jobs. As a result, any difference in callbacks due to the disclosure of applicants' religion is likely to be conservative (we come back to this issue in the discussion).

**Table 1.** Distribution of applications across comparison groups and countries of origin

Country of origin	Type of voluntary work		Total N of sent applications
<b>PANEL A.</b>			
<i>Majority groups</i>			
	<i>Secular majority (volunteering in secular associations)</i>		
Germany	361	–	361
Netherlands	492	–	492
Norway	227	–	227
Spain	448	–	448
UK	404	–	404
<b>PANEL B.</b>			
<i>Minority groups</i>			
	<i>Muslim by default (volunteering in secular associations)</i>	<i>Disclosed Muslim (volunteering in Muslim associations)</i>	
<i>Eastern Europe</i>			
Albania	184	66	250
Bulgaria	168	67	235
Russia	102	55	157
<i>Middle East and North Africa (MENA)</i>			
Egypt	124	59	183
Iran	116	112	228
Iraq	141	109	250
Lebanon	218	109	327
Morocco	476	467	943
Turkey	445	401	846
<i>South and Southeast Asia</i>			
Indonesia	105	58	163
India	139	46	185
Pakistan	430	389	819
<i>Sub-Saharan Africa:</i>			
Ethiopia	90	62	155
Nigeria	309	157	466
Uganda	98	47	145
<i>Total N applications</i>	<i>5,077</i>	<i>2,207</i>	<i>7,284</i>

The distribution of applications across comparison groups and countries of origin is shown in Table 1.<sup>6</sup>

### Estimation strategy

To describe the extent of discrimination in each of the five countries, we start with a test of proportions. We then continue with multivariate analysis and estimate linear probability models predicting the chance that applicants receive a positive callback from employers. We show results from pooled models with country fixed effects, as well as separate models by country and by gender. All models include occupation fixed effects and control for migration status (foreign-born or second generation). We used robust standard errors for the estimation. Given the uneven distribution of applications across origin countries, we also repeated the analyses and controlled for the region of origin. Results (available upon request) are not affected.

We proceed in three steps. First, we compare majority members to minority members who volunteer in a secular association. On the one hand, involvement in a secular association may signal integration in the host society. If this is the case, employers may perceive these minority applicants as partial ingroup members with strong assimilation intentions and treat them relatively favourably. On the other hand, it is entirely possible that

employers still assume them to be Muslim for the mere fact of coming from a country where commitment to Islam is strong. Hence, our use of the term *Muslim by default effect* to describe this type of disadvantage. Second, we narrow our focus to ethnic minorities only: half of these applications signalled closeness to Islam while the other half did not. Since the only difference between the two groups is the addition of the word ‘Muslim’ to the name of the volunteering association, we interpret any difference in callbacks as evidence of anti-Muslim discrimination and refer to this type of disadvantage as *Disclosed Muslim effect*. Third, we examine the variation in callback rates across origin groups to test whether origin discrimination and anti-Muslim discrimination are independent, additive sources of disadvantage that may expose members of ethnic minorities to a double burden.

## Results

We start the presentation of results by inspecting the share of positive callbacks received by our three groups of interest – majority members, Muslims by default and disclosed Muslims (columns 1–3 in Table 2). A first observation is that callback rates, in general, differ a great deal across countries, possibly reflecting domestic labour market circumstances or differences in the quality of the application material. Our main interest is in differences across countries in the Muslim by default effect (column 4) and disclosed Muslim effect (column 5). As expected, majority members receive the highest callback rates, a pattern that we find in all countries except for Spain. Compared to majority members, applicants from ethnic minorities who volunteer in secular associations are treated less favourably, and this is particularly the case in Norway, the UK and, to a lesser extent, the Netherlands. The Muslim by default effect is statistically significant (one-tailed test of proportions) in all countries except for Spain. This effect may correspond to a mere country-of-origin effect (ethnic discrimination) or partly capture a religiosity effect, to the extent that employers simply assume that applicants coming from a country with a substantial Muslim population are Muslim by default, regardless of actual religious practice.

The fifth column of Table 2 shows the ratio between columns two and three. As origin countries are held constant in this comparison, we can rule out a mere country-of-origin

**Table 2.** Callbacks by country.

	Callback rates			Callback ratios	
	(1)	(2)	(3)	(4)	(5)
Country of destination	Majority members	Muslims by default	Disclosed Muslims	Majority/Muslims by default	Muslims by default/Disclosed Muslims
Germany	50.57	44.34	40.59	1.14*	1.09
Netherlands	53.43	40.79	35.33	1.31***	1.15
Norway	32.16	16.61	10.92	1.94***	1.52*
Spain	17.19	19.19	16.28	0.90	1.18
UK	24.15	13.89	12.38	1.74***	1.12
Germany	37.50	30.37	29.46	1.23*	1.03
Netherlands	43.87	31.70	26.01	1.38***	1.22*
Norway	22.47	13.36	7.86	1.68**	1.70*
Spain	16.29	18.87	15.83	0.86	1.19
UK	12.86	9.08	6.75	1.42*	1.34~

Note: Test of proportions, one-tailed. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

effect and interpret any difference in callbacks as religious discrimination. Results point to religious discrimination only in Norway. When looking at the stricter callback indicator, religious discrimination also occurs in the Netherlands and the UK (though the difference is only marginally significant in the UK). In Spain and Germany, the difference in callbacks is minimal and statistically indistinguishable from zero. We come back to this issue in the discussion.

While Table 2 is informative, it does not account for the different distribution of applications across occupations, which may drive cross-national differences in callbacks if, for example, occupations that were overrepresented in a given country are also the ones where employers are more biased. In Table 3, we present a series of multivariate linear probability models that include occupation fixed effects and also control for the migration status of the applicants. To ease interpretation, applicants from Muslim countries who volunteer in secular associations ('Muslims by default') are the reference category. In the pooled models with country fixed effects, the coefficient for the majority group is positive and statistically significant, and has substantially the same size for both genders (models 2 and 3). When looking at each country separately, in the UK, Norway and the Netherlands, Muslims by default are more than 10 percentage points less likely than majority members to receive a callback. In other words, in spite of visible signals of civic engagement as well as valuable, job-relevant human capital (we reiterate that volunteer work was always related to the advertised job), members of ethnic minorities face severe discrimination in three of the five countries. Differences are not statistically significant at conventional levels in Germany, while in Spain the point estimate has the opposite sign than expected. In a pooled model, the interaction effect between the comparison groups of interest and the country dummies indicates that the Muslim by default disadvantage is significantly smaller in Spain than in the other countries, with Germany occupying an intermediary position and Norway and the Netherlands being the least accommodating

**Table 3.** Probability to receive a positive callback from the employer (Linear probability model).

	(1) Pooled model	(2) Pooled Men only	(3) Pooled Women only	(4) UK	(5) Spain	(6) Germany	(7) Norway	(8) Netherlands
<i>Ref. Muslim by default</i>								
Secular Majority	0.066*** (0.014)	0.052** (0.019)	0.083*** (0.020)	0.108*** (0.027)	-0.032 (0.026)	0.056~ (0.034)	0.131** (0.041)	0.098*** (0.029)
Disclosed Muslim	-0.037** (0.011)	-0.031* (0.015)	-0.036* (0.017)	-0.014 (0.019)	-0.032 (0.023)	-0.047 (0.029)	-0.060* (0.030)	-0.034 (0.025)
Country fixed effects	Yes	Yes	Yes					
Occupation fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.294*** (0.017)	0.300*** (0.023)	0.287*** (0.025)	0.217*** (0.033)	0.241*** (0.024)	0.623*** (0.038)	0.193*** (0.045)	0.631*** (0.029)
<i>N applications</i>	7152	3756	3396	1641	1504	1410	733	1864
<i>R</i> <sup>2</sup>	0.163	0.175	0.156	0.042	0.059	0.165	0.103	0.184

Notes: Robust standard errors in parentheses, two-tailed. ~ $p < .1$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All models control for migration status (foreign-born/second generation). Dependent variable: any interest from the employer.

contexts (not shown but available upon request).<sup>7</sup> In additional analyses, we re-ran the models after excluding origin countries that may not be as readily associated with Islam, for which the ‘Muslim by default’ argument may not apply (we did this by only considering countries of origin where at least 75% of the population is Muslim, according to Table A1 in the appendix): results did not change.

We now shift our focus to applicants who volunteered at a *Muslim* community centre. The pooled models indicate that simply adding the word ‘Muslim’ in the application further decreases the likelihood that ethnic minorities receive a callback by about four percentage points, a difference that is statistically significant and, again, substantially the same for both men and women (results are nearly the same when using the stricter callback indicator in Table 4). In the by-country regressions, the effect is statistically significant only for Norway, where the point estimate also shows a larger Muslim stigma (−0.06 at  $p < .05$ ). The results for Germany and the Netherlands are substantially in line with the pooled models, suggesting that power issues may have prevented us from finding statistically significant effects. The coefficient for the disclosed Muslim effect in the Netherlands is marginally significant at  $p < .1$  when considering only explicitly positive responses in Table 4. In Spain and the UK, we find no evidence of religious discrimination.

Finally, we zoom in more closely on the minority groups (Table 5). As the models show, the religious discrimination effect is comparable in size for men and women, and it is robust to the inclusion of controls for the geographical area (and also for origin countries – models not shown). It is interesting to observe that applicants from MENA or African countries experience a double burden: independent of the stigma they face for signalling their closeness to a Muslim association, they are also penalised for the geographic region they originate from (callbacks of ethnic minorities are shown in Table A.3 in the online appendix, separately by region of origin). On the basis of our data, we can only speculate on the mechanism underlying this effect (an effect that is consistent with the analysis presented by Veit and Thijssen in this special issue 2021). This further disadvantage is

**Table 4.** Probability to receive an invitation from the employer (Linear probability model).

	(1) Pooled model	(2) Pooled Men only	(3) Pooled Women only	(4) UK	(5) Spain	(6) Germany	(7) Norway	(8) Netherlands
<i>Ref. Muslim by default</i>								
Secular Majority	0.048*** (0.013)	0.046** (0.018)	0.051** (0.019)	0.040~ (0.022)	−0.036 (0.026)	0.063~ (0.033)	0.075* (0.037)	0.102*** (0.028)
Disclosed Muslim	−0.035*** (0.011)	−0.026~ (0.014)	−0.041** (0.016)	−0.023 (0.015)	−0.033 (0.023)	−0.017 (0.028)	−0.060* (0.026)	−0.043~ (0.023)
Country fixed effects	Yes	Yes	Yes					
Occupation fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.227*** (0.016)	0.245*** (0.022)	0.205*** (0.023)	0.147*** (0.028)	0.238*** (0.024)	0.479*** (0.039)	0.171*** (0.043)	0.538*** (0.029)
<i>N applications</i>	7152	3756	3396	1641	1504	1410	733	1864
<i>R</i> <sup>2</sup>	0.119	0.130	0.113	0.018	0.046	0.109	0.095	0.160

Note: Robust standard errors in parentheses, two-tailed. ~ $p < .1$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

All models control for migration status (foreign-born/second generation).

Dependent variable: explicit interest from the employer (e.g. invitation to a job interview or notification of being shortlisted).

**Table 5.** Probability to receive a positive callback from the employer. Analysis conducted on a subsample of applicants that only included ethnic minorities (Linear probability model).

	(1) Pooled	(3) Pooled – Men only	(4) Pooled – Women only	(5) Pooled	(6) Pooled – Men only	(7) Pooled – Women only
	DV: Any interest			DV: Invitation/Shortlist		
<i>Ref. Muslim by default</i>						
Disclosed Muslim	–0.034** (0.011)	–0.030* (0.015)	–0.030~ (0.017)	–0.033** (0.011)	–0.024~ (0.014)	–0.039* (0.016)
<i>Muslim group (ref. Eastern Europe):</i>						
MENA	–0.058** (0.019)	–0.061* (0.025)	–0.055~ (0.028)	–0.043* (0.018)	–0.058* (0.025)	–0.024 (0.026)
Sub-Saharan Africa	–0.069** (0.022)	–0.098*** (0.030)	–0.036 (0.033)	–0.044* (0.021)	–0.079** (0.028)	–0.005 (0.031)
South and Southeast Asia	–0.040~ (0.021)	–0.050~ (0.028)	–0.026 (0.032)	–0.027 (0.020)	–0.048~ (0.027)	0.001 (0.029)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Occupation fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.302*** (0.025)	0.318*** (0.034)	0.281*** (0.037)	0.243*** (0.023)	0.289*** (0.032)	0.185*** (0.034)
<i>N applications</i>	5263	2801	2462	5263	2801	2462
<i>R</i> <sup>2</sup>	0.155	0.168	0.147	0.107	0.116	0.104

Note: Robust standard errors in parentheses, two-tailed. ~ $p < .1$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All models control for migration status (foreign-born/second generation).

especially strong for African men and may point to skin colour discrimination (i.e. African migrants being more visible minorities may suffer from the double penalty of being Muslim and black). Another interpretation is that employers have particular ‘Muslim’ associations with some origin regions, and not others (for example, Asian countries compared to MENA countries). This would be consistent with previous studies showing that Muslims from former Yugoslavia reported lower levels of religiosity than other Muslim groups, while Pakistanis reported much higher levels (e.g. Torrekens and Jacobs 2015). However, the interaction term between the Muslim treatment and the geographic region dummies was not statistically significant.

Based on the presented data we cannot rule out the possibility that employers, instead of discriminating against Muslims, are simply expressing a reluctance to hire applicants that openly disclose their religion – any religion – when applying for a job. We were able to test this argument in a robustness check. We narrowed our focus to minorities originating from countries with both a substantial Christian and a substantial Muslim population (Albania, Bulgaria, Egypt, Ethiopia, Indonesia, Lebanon, Nigeria, Russia, and Uganda). We considered applicants who mentioned in the application their voluntary work at a Christian community centre (these additional observations were dropped in the main analyses presented so far) and compared them to applicants who volunteered at a Muslim community centre. We found that signalling closeness to Islam in the application significantly reduces callback rates, whereas signalling closeness to Christianity does not (Table A.4 in the online appendix). This result holds even when adding origin country fixed effects, which we interpret as compelling evidence of anti-Muslim discrimination.



## Discussion and conclusion

In this study, we relied on a cross-nationally harmonised correspondence test conducted in Germany, the Netherlands, Norway, Spain and the UK to examine discrimination against Muslim job applicants at point of hire. With our design, we were able to distinguish between the effect of originating from a country with a sizeable Muslim population (a mere ‘country of origin’ or ‘Muslim by default’ effect) and the additional stigma that applicants face when signalling their closeness to Islam in their job application (a ‘disclosed Muslim’ effect). We contributed to an extensive literature in both sociology and economics that has made use of the correspondence testing methodology to identify ethnic discrimination in the labour market. So far, however, the lack of comparative studies has prevented researchers from *directly* comparing rates of anti-Muslim discrimination across national contexts. The double-comparative design of our field experiment allowed us to compare callbacks across destination countries as well as national origin groups.

Findings revealed substantial gaps in callbacks between majority members and members of minority groups in three of the five countries, a sobering reminder that the integration of ethnic minorities in European labour markets is still an unfinished project. Considering that human capital was held constant and that minorities’ civic engagement in a volunteer association had clear professional relevance, it is disheartening to find differences in callbacks of such magnitude in Norway, the Netherlands and the UK. Interestingly, the level of discrimination we found in Norway is much higher than that documented in prior studies (e.g. Midtbøen 2016). Our choice to exclusively focus on the private sector might explain this difference, given that previous Norwegian studies also included the public sector, where discrimination was shown to be much lower.

Another surprising result is that ‘Muslims by default’ in Spain are treated no differently than the majority population. Given the high level of unemployment recorded in Spain at the time of our fieldwork and the argument that employers are more likely to discriminate if faced with an excess of supply (e.g. Baert et al. 2015), this finding is puzzling. More generally, the cross-national variation in the size of the callback gap between groups defies any institutional explanation based on differences in citizenship regimes. Muslims by default are heavily discriminated in the Netherlands and the UK, countries that are relatively open with regard to the accommodation of Islam as a minority religion. The climate of open hostility towards Muslims fostered by far-right parties in both countries may provide a more fitting explanation for the high levels of discrimination we documented. Conversely, the Muslim by default effect was not much pronounced in Germany, a country with a long tradition of rather restrictive citizenship laws and naturalization policies. In Germany, the more extensive documentation required from job candidates provides employers with more information than in other national contexts, possibly mitigating their biases at point of hire (see Thijssen et al. in this special issue 2021).

Besides a ‘country-of-origin’ effect, we also found evidence of an additional disadvantage for minority applicants volunteering in an organization with a Muslim connotation, which we interpret as a ‘religious closeness’ effect. In our study, the signal of religious closeness was indirect and should be interpreted with caution. Still, the percentage point difference in callback rates registered in Norway and the Netherlands is similar in magnitude to that found in France in the study by Pierné (2013). Although with five countries it is not possible to formally test for institutional effects, it is interesting to note that the

religious closeness effect is strongest in Norway, a country that is very restrictive with regard to the accommodation of religious minority rights, and less pronounced in Spain and the UK, which are both more generous with granting religious rights to Muslims.

In light of these findings, applicants of Muslim faith could strategically conceal their closeness to Islam in the job application to avoid being discriminated on religious grounds. This technique of ‘resume whitening’, however, may result in psychological costs and identity struggles (Kang et al. 2016). Future qualitative research could help to uncover whether explicitly signalling closeness to Islam in job applications is perceived by employers as evidence of religious extremism or strong in-group bonding and lack of integration. It is also important to note that our findings do not necessarily rule out the ‘religion as a bridge’ argument (Foner and Alba 2008). It is still possible that the involvement of migrants in religious communities gives them access to resources and contacts that are useful for their job search. In other words, the resources and contacts provided by religious organizations may still affect migrants’ decision to apply for a job in the first place, a type of self-selection that we did not examine in this study.

Self-selection and supply-side search behaviour more generally may also explain the discrepancy between our findings and Koopmans’s (2016) conclusion that the employment disadvantage of Muslims is mostly due to sociocultural variables. Studies based on survey data can show, as Koopmans did, that the lower human capital of Muslim minorities and their more limited access to bridging social capital can largely explain why Muslims are underrepresented in the labour market. Correspondence tests like ours show that, *ceteris paribus*, Muslim applicants with similar levels of human and social capital to the majority group are less likely to be hired, a clear evidence of double standards. The crucial issue to keep in mind is that, as also mentioned by Koopmans (2016, 214), the *ceteris paribus* condition more often than not does not apply in the real world (see also Pager 2007 for a discussion of how to reconcile evidence from survey data and field experiments). It is plausible that members of ethnic or religious minorities anticipate discrimination and adapt their job search strategies accordingly, searching more intensely and across a broader set of occupations, often at the cost of coherent career trajectories (Pager and Pedulla 2015). This self-selection behaviour cannot be captured in field experiments and may lead to a disadvantage that remains invisible in Koopman’s study too, which does not control for search intensity, occupational type or sector. The next challenge for scholars, interested in the integration of minorities in the labour market, is to devise novel research designs that can identify the share of the variance in employment that is explained by discrimination relative to other factors.

To conclude, our study is an important contribution to the scientific literature on religious and ethnic discrimination. We showed that employers discriminate against applicants originating from countries with a substantial Muslim population, even against those who show signs of civic engagement through their voluntary work. We also demonstrated that country-of-origin effects in combination with anti-Muslim discrimination produce severe double penalties for minority applicants, especially for male applicants from Africa and the Middle East. To the extent that migrants decide to apply, they are penalised for the mere fact of signalling their closeness to Islam in the job application, a religious penalty that is more severe in some countries (Norway) than others (Spain).

## Notes

1. In the UK, the large majority of the sampled job openings were based in England.
2. It is worth stressing that we do not intend to give any causal interpretation to specific institutional effects, as we are well-aware that other factors are co-varying with the institutional differences in church-state relations and citizenship regimes that informed our country selection (e.g. state of the labour market; application requirements).
3. For example, in the German sample all applicants to low- or mid-skilled occupations had completed a dual apprenticeship.
4. We also varied the amount of information on applicants' past performance and social skills that was included in the application as well as applicants' grades in school. These treatments are not discussed any further as they are not directly relevant for our analysis. Note that they were all orthogonal to the treatments of direct interest for us (ethnic origin and religious closeness), meaning that leaving them out of the analysis leaves our results unbiased. A more detailed description of the experimental design can be found in Lancee et al. (2019a, 2019b).
5. See Veit and Thijssen in this special issue (2021).
6. Applications are not evenly distributed across origin countries. This is because in each destination country we oversampled those groups that, for historical or other reasons, are particularly relevant (e.g. Turks in Germany and the Netherlands, or Pakistani in Norway and the UK). This enabled us to directly compare their outcomes across countries (e.g. see Larsen and Di Stasio 2021).
7. In Spain, we used Castilian names to signal the majority group. However, more detailed analyses for the Spanish sample show that applicants with Castilian names receive significantly lower call-back rates in Catalonia compared to other Spanish regions. To address the possible concern that the use of Castilian names in Catalonia may drive discrimination estimates downward (Catalan vacancies account for roughly 30 percent of the Spanish sample), we re-ran all models after excluding observations from Catalonia. Results remain stable.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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## Appendices

### Appendix A1. Muslim population in the countries of origin

Countries	Share of population that is Muslim (%)
<i>Eastern Europe</i>	
Albania	79.9
Bulgaria	12.2
Russia	11.7
<i>Middle East and North Africa (MENA)</i>	
Egypt	94.6
Iran	99.4
Iraq	99~
Lebanon	59.3
Morocco	99~
Turkey	98~
<i>South and Southeast Asia</i>	
Indonesia	88.2
India	13.4
Pakistan	96.3
<i>Sub-Saharan Africa:</i>	
Ethiopia	33.9
Nigeria	50.4
Uganda	12.1

Source: <http://www.pewforum.org/chart/interactive-data-table-world-muslim-population-by-country/>.

## **Appendix A2. An example of a CV and cover letter used in the study to apply for a job as cook**

Dear Sir or Madam,

I would like to apply for the position of [*job title*] which I have seen advertised on [*online job platform*]. I have worked for four years as a cook in kitchens and dining facilities. I like my current job but I am seeking new challenges in a role that would allow me to reach my full potential. I would be happy to relocate.

As a chef de partie at [*name of current employer*] I prepare, cook and serve meals to the highest standards required. Over the years I have improved my cooking skills with a la carte menu and also gained experience in buffets and catering. I understand the importance of health and safety regulations and basic food hygiene procedures. I always make sure that food is stored and chilled properly and that the kitchen and the equipment are kept clean.

[Additional information on past performance: *My experience in a busy restaurant has prepared me well to work under pressure. While taking on a wide variety of tasks and duties I have been able to show my ability to rise to challenges. I am a fast learner and I am always eager to develop new skills. My present employer has been very satisfied with my work and has passed more responsibilities on to me. For example, since last year I have been training the new kitchen assistants. I am confident that I can bring the same level of high performance to your team.*]

I am very flexible and I am happy to work outside of regular working hours or at weekends. I can work well on my own but I also enjoy being in a team.

[Additional information on social skills: *My colleagues and friends think I am a pleasant, trustworthy and warm person who gets along with people from all walks of life. I am a team player who values a positive work environment and that is why I am always friendly and attentive to other people's needs.*]

I am a passionate cook both in my professional life and in my spare time. This is shown by my participation in a [*Muslim/local*] community centre, where I help prepare meals for various events like local fairs and open days.

Thank you for taking the time to consider my application. I am keen to discuss my experience and skills with you in more detail. Note that although I have a Pakistani background all my education and training has been in Britain [only for foreign born: *since the age of 6*] and I have the right to work in the UK.

I look forward to hearing from you.

Yours faithfully,

[Minority/Majority treatment: *Name and last name*]

**Tariq Anwar**

Address, London

**Mobile:** [mobile number] | **Email:** [email address]**Personal statement**

A qualified cook with over four years of experience, now looking for opportunities to further develop in the hospitality sector. A self-starter, able to work on own initiative and as part of a team.

*[A hard-working person, consistently meeting the targets of the kitchen and responsible for training the new kitchen assistants.]*

*[A friendly and outgoing person who gets on well with a wide range of people. A team player who values a good work environment.]*

**Work Experience**

July 2014 – present

**Chef de Partie, Hotel Ibis, London**

- Assisting the head chef in the day-to-day running of the kitchen
- Preparing and cooking meals
- Following recipes to meet restaurant's standards
- Strictly complying with food quality and temperature regulations
- Overseeing kitchen administration and stock management
- [• *Always providing a high quality service from fresh ingredients and on time*]
- [• *Responsible for training new kitchen assistants*]

September 2012 – June 2014

**Commis Chef, Ealing Hospital, London**

- Washed, peeled and trimmed food for cold buffets and side dishes
- Ensured that all food served was arranged properly and met quality standards
- Checked and ordered stock from suppliers, unloaded deliveries and organised the storeroom
- Checked the temperature of the fridge and followed safety and hygiene protocols

**Education**

2010–2012

*College of North West London***Level 2 Diploma in Professional Cookery (City & Guilds) 2005–2010***Greenford High School, Southall, London*

[Grade treatment: 4 GCSEs, including Math]

**Skills****Computer skills:** Microsoft Office, Outlook**Training:** Essential Food Hygiene certificate, COSHH training**Language skills:** Bilingual English and Urdu | French (basic)**Driving:** Full, clean UK driving licence; in possession of own car**Volunteer work**

January 2014–present

**Volunteer at [Muslim] Youth Enrichment Project**

Assisting with cooking and preparation of meals for various events like open days and local fairs.

**References**

Available on request.

**Appendix A3. Callbacks by geographic origin of minority groups**

Country	(1) Eastern Europe	(2) Middle East and North Africa	(3) Sub Saharan Africans	(4) South and Southeast Asia
<i>PANEL A: Any interest from the employer</i>				
Germany	57.14	41.61	44.72	37.84
Netherlands	45.13	37.81	29.13	39.69
Norway	21.82	13.45	11.48	13.28
Spain	20.57	17.24	13.46	22.46
UK	11.86	13.57	12.47	13.97
<i>PANEL B: Shortlisting or invitation to a job interview</i>				
Germany	39.56	29.33	32.52	26.13
Netherlands	33.19	28.39	24.27	33.59
Norway	18.18	12.61	11.48	8.49
Spain	20.57	16.64	13.46	22.46
UK	6.78	8.57	7.48	8.58

**Appendix A4. Probability to receive a positive callback from the employer. (Linear probability model)**

	(1) Pooled model – Any interest		(2) Pooled model – Only invitation/shortlist	
<i>Ref. Muslim by default</i>				
Secular Majority	0.056** (0.017)	0.090* (0.035)	0.035* (0.016)	0.047 (0.030)
Disclosed Muslim	-0.053** (0.019)	-0.049* (0.019)	-0.040* (0.018)	-0.037* (0.017)
Disclosed Christian	0.004 (0.019)	0.003 (0.019)	0.005 (0.018)	0.003 (0.018)
Country fixed effects	Yes	Yes	Yes	Yes
Occupation fixed effects	Yes	Yes	Yes	Yes
Origin country fixed effects		Yes		Yes
Constant	0.277*** (0.022)	0.269*** (0.031)	0.203*** (0.021)	0.191*** (0.029)
<i>N applications</i>	4656	4656	4656	4656
<i>R</i> <sup>2</sup>	0.166	0.174	0.124	0.130

Note: Robust standard errors in parentheses, two-tailed.  $\sim p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

All models control for migration status (foreign-born/second generation). Analysis conducted on a sub-sample that only included the majority group and minorities from countries with both a substantial Muslim and a substantial Christian population (Albania, Bulgaria, Egypt, Ethiopia, Indonesia, Lebanon, Nigeria, Russia, and Uganda).