

Journal of Ethnic and Migration Studies



ISSN: 1369-183X (Print) 1469-9451 (Online) Journal homepage: https://www.tandfonline.com/loi/cjms20

Almost identical but still treated differently: hiring discrimination against foreign-born and domestic-born minorities

Susanne Veit & Lex Thijsen

To cite this article: Susanne Veit & Lex Thijsen (2019): Almost identical but still treated differently: hiring discrimination against foreign-born and domestic-born minorities, Journal of Ethnic and Migration Studies, DOI: <u>10.1080/1369183X.2019.1622825</u>

To link to this article: https://doi.org/10.1080/1369183X.2019.1622825

9	© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 24 Jun 2019.
	Submit your article to this journal 🗷
hh	Article views: 2367
Q	View related articles 🗹
CrossMark	View Crossmark data ☑
2	Citing articles: 1 View citing articles 🗗







Almost identical but still treated differently: hiring discrimination against foreign-born and domestic-born minorities

Susanne Veit^a and Lex Thiisen ^b

^aDepartment of Migration, Integration, Transnationalization, WZB Berlin Social Science Center, Berlin, Germany; ^bDepartment of Sociology, University of Utrecht, Utrecht, Netherlands

ABSTRACT

Focusing on birthplace (foreign vs. domestic) and origin group (European vs. Middle Eastern or African), this article examines the effects of cultural distance signals on discrimination against ethnic minority job applicants. Drawing on a cross-nationally harmonised correspondence test (N = 5780), we investigate how employers in five Western European destination countries (Germany, the Netherlands, Norway, Spain, and the U.K.) respond to job applications from majority and minority group members, with minority job applicants being either very similar (domestic-born and/or European origin) to the majority population or rather different (foreign-born and/or Middle Eastern/African). Our results are generally consistent with taste-based discrimination theory. Employers pay attention to signals of cultural distance, which results in particularly high levels of discrimination against foreignborn minorities and against minorities originating from Middle Eastern and African countries. Although origin group has a stronger effect on employer responses than birthplace, they jointly exert an additive effect. This results in particularly low labour market chances for foreign-born minorities of Middle Eastern and African origin. Separate country analyses, however, reveal important country differences, both with respect to the size of the minority penalty and the joint effect of birthplace and origin group.

KEYWORDS

Correspondence test; tastebased discrimination; birthplace; origin group; cultural distance

Introduction

A large and ever-growing number of field experiments on hiring discrimination (correspondence tests) demonstrate that employers discriminate against minorities; this applies to different countries and ethnic or racial minority groups (for reviews, see Baert 2018; Bertrand and Duflo 2017; Quillian et al. 2017; Riach and Rich 2002; Rich 2014; Zschirnt and Ruedin 2016). When considering likely causes of the unfair treatment of ethnic and racial minorities, classic economic theory refers to either productivity-related concerns (statistical discrimination; Aigner and Cain 1977; Arrow 1973; Phelps 1972) or to dislike (taste-based discrimination; Becker 1957). While both statistical and taste-based discrimination theories provide plausible explanations for discrimination against immigrants, their explanatory power is significantly lower with regard to the children of immigrants. This is especially true for statistical discrimination, since the children of immigrants are born and raised in the host society - making them very similar to majority members in terms of language skills, place of education, and work experiences. Taste-based discrimination, on the other hand, has received little attention in previous research. Only a few empirical studies introduce and test hypotheses deduced from taste-based discrimination theory (but see Carlsson and Rooth [2012]; Rooth [2010]; and Nunley et al. [2015]). Instead, some researchers interpret the existence of ethnic discrimination against the children of immigrants and/or the absence of empirical support for statistical discrimination as evidence for taste-based discrimination (e.g. Busetta, Campolo, and Panarello 2018).

To fill this gap, the present study focuses on taste-based discrimination as an important driver of hiring discrimination against ethnic minorities. According to taste-based discrimination theory, employers dislike certain social groups because of assumed or actual characteristics that are not related to productivity. Taste-based discrimination instead ties in with the idea of social and cultural similarity and distance as drivers of intergroup relations (Byrne 1971; McPherson, Smith-Lovin, and Cook 2001; Stephan and Stephan 2000; Tajfel and Turner 1986; Turner et al. 1987). Employers are assumed to discriminate in particular against ethnic minority job candidates who are perceived as more deviating from the majority population in terms of norms and values.

Drawing on a cross-nationally harmonised field experiment on hiring discrimination (GEMM study; see Lancee 2019) that was simultaneously conducted in five Western European countries (Germany, the Netherlands, Norway, Spain and the U.K.), we test the socio-cultural distance argument by comparing employer responses to applications from majority and minority group members, with the latter being either domestic-born children of immigrant or foreign-born ethnic minorities (who migrated at pre-school age) and having either European roots or roots in the Middle East or Africa. By holding constant minorities' level of human capital (i.e. language skills, educational credentials, and work experience) while varying birthplace and group of origin, we can illuminate how these signals of distance independently and/or interactively affect ethnic discrimination in hiring situations.

This study contributes to the literature on barriers to the labour market integration of ethnic minority members in several ways. Firstly, in contrast to cross-sectional survey research on labour market inequality, we can estimate the unbiased, causal effects of birthplace and group of origin on hiring chances. Applying an experimental design, we are able to test causal relations and we can prevent biases in consequence of correlated predictor variables and unobserved heterogeneity. Moreover, previous experimental studies confounded immigrant generation and human capital characteristics - either because domestic-born and foreign-born minorities differed from one another in relevant aspects (e.g. language skills, place of education, and work experience) or because application documents did not provide sufficient information to disprove potentially assumed differences in human capital between domestic-born and foreign-born minorities. We go beyond earlier experimental studies by varying immigrant generation independently of relevant human capital characteristics.

Secondly, in this study we investigate discrimination towards two broadly defined target groups - minorities of European and of Middle Eastern/African origin - but we base our test for discrimination on the behaviour of employers towards many different ethnic groups belonging to these two broad categories. By doing so, we cover a wide range of ethnic minority groups differing in social, cultural and religious characteristics and we are able to provide more valid and robust evidence on the group of origin as a relevant driver of discrimination. This is particularly important since we investigate hiring chances of ethnic minorities in five different countries, with the size and status of specific minority groups varying across national contexts. Finally, the joint effect of birthplace and group of origin has not been addressed in previous correspondence studies. By varying birthplace and group of origin independently, we can show how different distance signals interactively affect the labour market chances of ethnic minority job candidates.

Almost majority members: the children of immigrants

Migration to Western Europe is not a new phenomenon: in fact it has a long history. In particular after the Second World War, many Western European countries experienced high rates of immigration. This development persisted and immigration further increased in the following decades. For this reason, Western European countries have sizeable populations of immigrants and their descendents. Whereas immigrants possess on average less human capital than the majority population, the children of immigrants have a much better starting point for successful integration into the labour market. Since they are raised and educated in the host society, the children of immigrants are in many respects (e.g. in terms of language skills and places of education) more similar to their majority peers than they are to their immigrant parents. At the same time, however, the children of immigrants are often 'living at the crossroad of cultural worlds' (Giguère, Lalonde, and Lou 2010, 14). At school, work, and in leisure organisations they are socialised into the culture of the host society - but at home they may still be exposed to the cultural norms and values of their parents' heritage culture.

With respect to structural integration, classic assimilation theory (Gordon 1964; but see also Portes and Zhou [1993]) predicts that labour market outcomes experienced by the children of immigrants would improve towards convergence with the majority population. Although some empirical studies indeed confirm that the children of immigrants do better than their parents or achieve parity with their majority peers; there is considerable variation across destination countries, origin groups, and indicators of labour market success (Crul and Vermeulen 2003; Gorodzeisky and Semyonov 2017; Heath and Cheung 2007; Heath, Rothon, and Kilpi 2008). Moreover, as Heath, Rothon, and Kilpi (2008, 211) summarise for the children of immigrants in Western European countries: the 'entry into the labor market is a particular problem for most minorities'.

In order to develop efficient strategies to support the structural integration of immigrants and their descents, we need to identify the obstacles that hinder the entry of ethnic minorities into the labour market. Potential explanations range from differences in socioeconomic background (family resources), human capital (language and education), segregation (neighbourhoods and schools), and own or parental career aspirations to hiring discrimination (Heath, Rothon, and Kilpi 2008) - the topic of the present study.

Explaining hiring discrimination

In classic economic literature on hiring discrimination two theories figure prominently: taste-based and statistical discrimination theories (Guryan and Charles 2013; Pager and Shepherd 2008). According to statistical discrimination theories (Aigner and Cain 1977; Arrow 1973; Phelps 1972), employers discriminate against ethnic minorities because of uncertainties about the true productivity of ethnic minority job seekers. Since employers have always imperfect information about job candidates' true productivity, they rely on productivity-related *group* characteristics when judging individual job candidates. Even though employers usually have little knowledge about the productivity of specific ethnic minorities, they know that ethnic minorities have less favourable productivity characteristics on average than the majority, for example, due to language problems and higher unemployment rates. Consequently, employers prefer majority candidates over minority candidates because they are unwilling to take the risk of hiring a less productive candidate.

The theory of taste-based discrimination (Becker 1957), by contrast, rests on the assumption that employers *dislike* certain social groups. To avoid contact with members of disliked groups, employers are willing to pay a price, for example, by paying higher wages to employees from preferred groups. Central to this argument is that employers are assumed to base their preferences on other characteristics than productivity, for example, on social or cultural (dis)similarity: 'the employer simply feels more comfortable having people on her/his staff that abide by the same social codes as herself/himself, even though these social codes are irrelevant for work performance' (Bursell 2007, 8). Taste-based discrimination theory thus ties in with other approaches that highlight the role of social similarity and cultural distance, such as the similarity attraction paradigm (Byrne 1971, 1997), research on (ethnic) homophily (McPherson, Smith-Lovin, and Cook 2001), social identity approach (Tajfel and Turner 1986; Turner et al. 1987), and integrated threat theory (Stephan and Stephan 2000).

While both theories provide plausible explanations for ethnic discrimination in hiring, it is difficult to provide unambiguous empirical evidence for taste-based discrimination (but see Carlsson and Rooth 2012 and Rooth 2010) and to distinguish taste-based discrimination from statistical discrimination (Nunley et al. 2015). Firstly, it is difficult to identify characteristics that are clearly related to either 'taste' or 'productivity'. Secondly, employers may dislike 'unproductive' groups for reasons unrelated to productivity. That is, productivity concerns and dislike may occur together and jointly reduce the hiring chances of ethnic minorities. Finally, theories of taste-based and statistical discrimination are based on rather strict assumptions; for example, they assume that employers are fully attentive to all available information, that employers are aware of their negative attitudes towards certain social groups, or that employers have detailed knowledge about average productivity-related group characteristics. Questioning these assumptions, researchers have proposed additional explanations, for example, attention discrimination (Bartoš et al. 2016), implicit discrimination (Bertrand, Chugh, and Mullainathan 2005; Rooth 2010), and error discrimination (England 1992).



Measuring ethnic discrimination in hiring

Correspondence tests are the standard method for detecting discrimination in hiring (Gaddis 2018; Pager 2007). Correspondence tests are field experiments that involve sending application documents from fictitious job candidates to real job openings. The fictitious job candidates are comparable to one another in all respects, except for the characteristic of interest (e.g. ethnic background, race, or religion). By revealing whether employers systematically favour members of one group over equally qualified members of another group, such studies can provide causal evidence on discrimination.

In the last decade, a large and ever-growing number of correspondence studies has been published. With very few exceptions, they provide empirical evidence demonstrating hiring discrimination against racial and ethnic minorities – although there is considerable variation in the size of the reported effects across studies (for reviews, see Baert 2018; Bertrand and Duflo 2017; Quillian et al. 2017; Riach and Rich 2002; Rich 2014; Zschirnt and Ruedin 2016).

Differences between immigrants and their children

Although the number of correspondence studies that have been conducted is high, there is scant attention to the effects of immigrant generation and birthplace. In some studies, researchers do not provide any clue on migration status but signal ethnicity or racial group membership solely by means of a typical name (e.g. Bursell 2014). In other studies, ethnicity is signalled by typical names and by making references in the application documents to specific foreign language skills, citizenship, birthplace, or places of education and work experience. As a result, these studies explicitly provide evidence on discrimination either against immigrants or against minorities who did not themselves migrate (e.g. Kaas and Manger 2012; Midtbøen 2016) - or against immigrants and minorities (e.g. Carlsson 2010; Oreopoulos 2011).

Comparing the results of correspondence tests on discrimination against either immigrants or their offspring, Zschirnt and Ruedin (2016) find little evidence on differences in discrimination levels between immigrant generations. The few correspondence studies that incorporate an explicit generation treatment (Busetta, Campolo, and Panarello 2018; Carlsson 2010; Drydakis 2010; Oreopoulos 2011), by contrast, consistently find that discrimination levels are somewhat lower for the children of immigrants than for immigrants. However, their evidence is mixed with respect to the question whether these differences are statistically significant. Moreover, most of these studies do not adequately distinguish between taste-based and statistical discrimination as potential drivers of these observed differences, because they cannot account for correlations between immigrant generation and human capital characteristics, such as language skills (Busetta, Campolo, and Panarello 2018) or the place of education and/or work experience (Carlsson 2010; Drydakis 2010).

In order to isolate the effect of social or cultural distance from the effect of human capital differences, it is necessary to rule out productivity concerns as drivers of discrimination. One way of doing this is to provide explicit and reliable information about relevant skills and qualifications and to experimentally vary minorities' human capital. An alternative way is to compare minority groups who have equivalent language skills and qualifications: that is, domestic-born ethnic minorities and foreign-born minorities who immigrated at pre-school age. If these two minority groups are still treated differently by employers despite the fact that they have virtually identical human capital, taste-based discrimination based on perceived distance would be a more plausible explanation than statistical discrimination. In line with the distance argument of taste-based discrimination theory, we hypothesise: *Employers discriminate more strongly against foreign-born ethnic minorities than they do against domestic-born minorities* (H1).

Differences between origin groups

In most previous correspondence studies, researchers compare response rates between majority candidates and *one* minority group, often the largest or most salient immigrant group in the respective country (e.g. Kaas and Manger 2012; Midtbøen 2014). Such a design is well-suited to demonstrating the existence of ethnic discrimination, but provides little insights into the drivers of discrimination. Experimental designs with multiple minority groups make it possible to examine ethnic hierarchies in discrimination and to separate the effect of ethnicity from correlated characteristics, such as religion (see e.g. Di Stasio et al. 2019). Moreover, the inclusion of several minority groups puts the empirical evidence on ethnic discrimination on a firmer footing, for example, by confirming discrimination against large but also smaller minority groups.

So far, however, correspondence studies that look at more than one minority group provide rather inconsistent results. Whereas some studies point to ethnic or racial hierarchies and origin effects in hiring discrimination (Booth, Leigh, and Varganova 2012; Busetta, Campolo, and Panarello 2018; Weichselbaumer 2017), other studies suggest that minorities' ethnic origin hardly matters (Andriessen et al. 2012; Drydakis 2017; Jacquemet and Yannelis 2012; McGinnity and Lunn 2011; Oreopoulos 2011).

As outlined before, taste-based discrimination theory ties in with other theoretical approaches highlighting the role of social and cultural distance. Cultural distance is a broad umbrella term for cross-country differences in traditions, norms, and values (Hofstede 2001; Schwartz 2006; Welzel 2013). According to the cultural map of the world that was introduced by Inglehart and Welzel (see the website of the world value survey¹ or Welzel 2013), Europeans are on average very similar to one another with respect to secular-rational (vs. traditional) and self-expression (vs. survival) values. People from Middle Eastern and African countries are likewise relatively similar to one another in terms of their values, but they differ considerably from Europeans because they hold more traditional (vs. secular-rational) and survival-focused (vs. self-expression) values. Assuming that value distance matters, we predict that (European) *employers discriminate more strongly against ethnic minorities of Middle Eastern and African origin than they do against European minorities* (H2).

The joint effect of birthplace and origin group

Application documents provide much more information on job candidates than their ethnic background alone. Employers have to screen a lot of information in application documents. An important question is therefore how job candidates' different

characteristics jointly affect employers' decisions, and in particular how different signals of social or cultural distance affect employers' decisions.

There are a substantial number of studies investigating the consequences of being a member of multiple subordinate groups. With respect to gender and minority status, for example, there are studies on the double jeopardy hypothesis (Berdahl and Moore 2006), on the subordinate male target hypothesis (Sidanius and Pratto 1999), or on the intersectional-invisibility hypothesis (Purdie-Vaughns and Eibach 2008). Focusing on hiring discrimination, a recent study by Pedulla (2018) investigates the joint effect of race and unemployment. Testing for additive (i.e. independent effects), amplified (i.e. a higher unemployment penalty for racial minorities), and muted effects (i.e. a weaker unemployment penalty for racial minorities), Pedulla finds support for the 'muted congruency' hypothesis. Consistent with the argument that additional stereotype-consistent negative information is redundant for attitudes towards strongly stigmatised minority groups, Pedulla finds that unemployment has limited additional negative effects on African American job candidates' hiring chances. The latter finding is also in line with the idea of 'attention discrimination' (Bartoš et al. 2016, 1439), suggesting that in 'cherry picking' markets (i.e. in markets where many job candidates compete for few jobs) employers allocate their scarce attention to the applications from candidates who belong to more positively rated groups. As a consequence, employers punish (or reward) in particular the job candidates they are interested in, but dismiss the very same information for members of other groups; this makes employers 'blind' towards the specific educational credentials of the second generation (Midtbøen 2014).

Applying similar arguments to the conjoint effect of two cultural characteristics (e.g. Pierné 2013), we propose three competing hypotheses. First, birthplace and group of origin may have an additive effect, suggesting that the birthplace effect is as strong for Middle Eastern and African minorities as it is for European minorities (H3a). Alternatively, it is plausible to assume that any signal of distance further increases the salience of other signals of distance (amplified effect). A foreign birthplace, for example, may further increase the perceived distance from ethnic minorities originating in culturally more distant countries (and the other way around), suggesting that the birthplace effect is stronger for Middle Eastern and African minorities than it is for European minorities (H3b). Drawing on the 'muted congruency' hypothesis and on attention discrimination (Bartoš et al. 2016), we may finally expect that the birthplace effect is stronger for European minorities than it is for Middle Eastern and African minorities (H3c) - either because employers fail to recognise the birthplace of minorities originating in culturally more distant countries or because additional 'negative' information has only a marginal impact on the rating of these minorities.

Method

Experimental design

This study draws on a unique data set from an international project on hiring discrimination (GEMM data, see Lancee 2019; Lancee et al. 2019a, 2019b). Between summer 2016 and spring 2018, an international team of researchers conducted correspondence tests on ethnic discrimination in hiring simultaneously in five European countries (Germany, the Netherlands, Norway, Spain, and the U.K.). The researchers sent applications from fictitious job candidates to real, publicly advertised vacancies on online job markets and registered employers' responses. By experimentally varying some characteristics of the applicants while keeping other characteristics constant, this design makes it possible to identify the causal effects of ethnic background and birthplace on hiring

In contrast to the majority of previous correspondence tests, the GEMM study used an unpaired design to accommodate a large number of experimental treatments and treatment conditions (for a similar design see Weichselbaumer 2016). Most importantly, the total sample includes 53 different ethnic groups applying for vacancies in 10 professions. Most of these treatments were randomly assigned and fully orthogonal. Religion and phenotype, however, were not fully randomly assigned and orthogonal. Based on the results of a pre-test and on country statistics about the prevalence of religious groups in different countries, implausible combinations of ethnicity, phenotype, and religion (e.g. Japanese origin but Muslim faith and black phenotype) were excluded. Moreover, while all national research teams used a similar design and pursued a common experimental protocol, they adapted the experimental material and assignment quotas to national specifics (for detailed information see Lancee 2019; Lancee et al. 2019a, 2019b).

Sample

chances.

The present study analyses a subsample (n < 6000) of the GEMM data (N > 19,000). To maximise the comparability of results across study countries and minority groups, we excluded all cases where the application documents contained a reference to a particular religious affiliation (i.e. a religiously connoted social organisation or a résumé photo showing a woman with headscarf). In addition, we restricted our sample to ethnic minorities originating either in the European Union (Bulgaria, France, Greece, Italy, Poland, and Romania; also Germany, Netherlands, Norway, Spain, and the U.K.) or in a Middle Eastern or African country (Egypt, Ethiopia, Lebanon, Morocco, Nigeria, Turkey, and Uganda) and to members of the respective national majority.

Our final sample includes 5954 applications, with equal shares of male and female job candidates (49% and 51%, respectively). Table 1 shows how the sample is distributed across host countries (n = 5) and ethnic groups (n = 20). More than one-third of all job candidates are majority group members or ethnic minorities with roots in Middle Eastern or African countries (37% and 38%, respectively) and one-quarter are ethnic minorities of European origin (25%).

Measures

Positive response: The dependent measure in our analyses is positive response, a dichotomous variable indicating whether an employer signalled interest in the application that he or she received (0 'no', 1 'yes'). We interpret explicit rejections and non-responses as signs of an absence of interest (negative response). All remaining responses are coded as positive response; this includes requests for the candidate to provide additional information or to call the employer back and invitations to work on a trial basis or for a job interview.



Table 1. Number of applications by study country and country of origin.

	Study country							
	Germany	Netherlands	Norway	Spain	U.K.	Total		
Origin group	n	n	n	n	n	Ν		
Natives	374	557	347	573	389	2240		
European Union	223	483	199	322	230	1457		
Bulgaria	27	117 ^a	20	34	16	214		
France	24	31	18	41	27	141		
Germany	_	22	18	18	24	82		
Greece	26	27	20	40	26	139		
Italy	28	29	24	23	15	119		
Netherlands	25	_	18	38	29	110		
Norway	Norway 19 Poland 23		_	36	19	105		
Poland			28	28	21	235		
Romania	19	29	20	32	27	127		
Spain	16	31	19	_	26	92		
Ú.K.	16	31	14	32	_	93		
Middle East + Africa	546	662	138	532	379	2257		
Egypt	19	39	20	35	26	139		
Ethiopia	23	25	14	23	19	104		
Iran .	21	43	15	38	26	143		
Iraq	26	33	23	48	37	167		
Lebanon	169 ^a	17	8	17	16	227		
Morocco 32		228 ^a	3	273 ^a	25	561		
Nigeria 50		24	23	30	191 ^a	318		
Turkey	186 ^a	219 ^a	20	40	20	485		
Uganda	20	34	12	28	19	113		
Total N	1143	1702	684	1427	998	5954		

^aThese minority groups were oversampled in the respective study countries to make possible more detailed analyses for immigrant groups that are particularly relevant in the national context (see Lancee et al. 2019a, 2019b).

Place of birth: Birthplace is one of the two central independent variables in our study and differentiates between majority group members (0 'majority'), domestic-born children of immigrants (1 'domestic-born'), and foreign-born ethnic minorities (2 'foreign-born'). We signalled job candidates' place of birth in the cover letter.

All fictitious job candidates indicated that they live and work in a larger city in the country in question but originated in the region where the job was being offered. They justified their application for a job outside their current city of residence with the desire for moving back to the region where they grew up and went to school. While majority and domestic-born minority job candidates both added that they were *born* in the region of the job offer, domestic-born minorities in addition mentioned their country of origin: 'My family is originally from [country of origin], but I was born in [region of company] and all my education and training has been in [host country]'. Foreign-born minorities, by contrast, add that they were *born abroad* but migrated to this region at age six: 'I was born in [country of origin], but moved to [region of company] at the age of 6 and all my relevant education and training has been in [host country]'. In Germany and the Netherlands, we repeated this signal in the CV by providing information about job candidates' place of birth (majority and domestic-born minority candidates: a domestic city; foreign-born minority candidates: a foreign capital).

To keep job candidates' level of human capital constant, all candidates stated they had attended domestic schools and job training institutions and referred to the respective national language as first language or mother tongue. Minority candidates in addition specified the language of their origin country as their (second) first language.

Origin group: Origin group is the second central independent variable in our study and differentiates between majority group members (0 'majority'), minority group members of European origin (1 'Europe'), and minority group members of Middle Eastern or African origin (2 'Middle East/Africa'). Table 1 provides an overview about the corresponding countries of origin.

Job candidates' country of origin was signalled in three ways. Firstly, all applicants had names that are typical for residents of their countries of origin (see Lancee et al. 2019a, 2019b). However, since names are imprecise signals of ethnic origin, we specified the country of origin in the cover letter (see the sentences quoted in the place-of-birth section). Third and finally, in the résumé all minority candidates listed the language of their country of origin together with the national language as their first language.

Control variables: We constructed a categorical variable indicating the country where the study was conducted: 0 'Germany', 1 'the Netherlands', 2 'Norway', 3 'Spain', and 4 'U.K.'. As control variables in our multivariate analyses, we include job candidates' gender (0 'male', 1 'female'), occupation (n = 10, from cook to plumber, see Table 2), and – to account for unobserved differences over time – the date of application (month, year).

Results

We first present general results by reporting response rates and discrimination ratios (i.e. the ratio of the share of positive responses for majority group members and the share of positive responses for minorities) for the full sample and separately for each study country. Thereafter, we report the results of multivariate probit regression models investigating how the probability of receiving a positive response varies according to minority group members' place of birth and origin group when controlling for gender, country, occupation, and date of application.

Response rates and discrimination ratios

Out of the 5,954 applications that we sent to employers, 34% received a positive response. The share of positive responses, however, varied strongly between countries, with high

Table 2. Distribution of applications across occupations	Tal	ble 2.	 Distribution 	of	applicati	ions across	occupations
---	-----	--------	----------------------------------	----	-----------	-------------	-------------

Study country								
Germany	Netherlands	Norway	Spain	U.K. n	Total <i>N</i>			
n	n	n	n					
166	309	76	449	121	1121			
184	260	108	216	267	1035			
177	176	18	139	122	632			
183	256	152	72	174	837			
178	251	109	68	141	747			
176	190	62	237	160	825			
79	68	32	246	_	425			
_	63	60	_	_	123			
_	82	36	_	10	128			
_	47	31	_	3	81			
1143	1702	684	1427	998	5954			
	n 166 184 177 183 178 176 79 -	n n 166 309 184 260 177 176 183 256 178 251 176 190 79 68 - 63 - 82 - 47	Germany Netherlands Norway n n n 166 309 76 184 260 108 177 176 18 183 256 152 178 251 109 176 190 62 79 68 32 - 63 60 - 82 36 - 47 31	Germany Netherlands Norway Spain n n n n 166 309 76 449 184 260 108 216 177 176 18 139 183 256 152 72 178 251 109 68 176 190 62 237 79 68 32 246 - 63 60 - - 82 36 - - 47 31 -	Germany Netherlands Norway Spain U.K. n n n n 166 309 76 449 121 184 260 108 216 267 177 176 18 139 122 183 256 152 72 174 178 251 109 68 141 176 190 62 237 160 79 68 32 246 - - 63 60 - - - 82 36 - 10 - 47 31 - 3			

^aThese four occupations were not tested in all five study countries. They were added to the study later on in order to increase the number of vacancies to apply for in countries with difficulties to find enough vacancies per week (see Lancee et al. 2019a, 2019b).

shares of positive responses in Germany (49%) and the Netherlands (47%), a medium share in Norway (33%), and relatively low shares in the U.K. (19%) and Spain (13%).

In addition, the likelihood of receiving a positive response differed considerably for minority and majority group members. In line with previous correspondence studies on ethnic discrimination in hiring, we found that employers respond more often positively to applications of majority members (37%) than to applications of minority members (31%). As Figure 1 shows, this trend was confirmed for all five study countries but the level of discrimination varied between countries.

The overall discrimination ratio equals 1.2 and suggests that minority candidates have to write about 1.2 times as many applications as majority candidates to receive a positive response. As for the different countries, the discrimination ratios range from 1.6 in the U.K. and 1.5 in Norway to 1.3 in the Netherlands. The ratios in Germany and Spain equal 1.1 and 1.0, respectively, suggesting that employers hardly make a difference between majority and minority job candidates.

The share of positive responses, however, also varied between minority groups. For example, whereas 34% of all European minorities received a positive response, this share was only 29% for minorities of Middle Eastern and African origin (discrimination ratios: 1.1 and 1.3, respectively). In a similar vein, whereas 32% of all domestic-born minorities received a positive response, this share was below 30% for foreign-born minorities (discrimination ratios: 1.2 and 1.3, respectively).

Multivariate analyses: place of birth and origin group

To test our hypotheses, we ran multivariate probit regression models with migration status and origin group as independent variables while controlling for gender, occupation, date of application, and country. Figure 2 provides the corresponding coefficients plot. As the

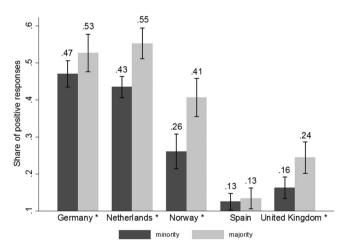


Figure 1. Share of positive responses to job applications from minority and majority group members across countries.

Notes: The bars show the relative share of positive responses (with 90% confidence intervals) to applications from minority candidates (dark grey bars) in comparison to majority candidates (light grey bars) separately for the five study countries (without control variables). In countries with stars next to the country name (*) the share of positive responses differed significantly between majority and minority job candidates (one-tailed, p < .05).

plot shows, foreign-born and domestic-born minorities both received significantly fewer positive responses from employers than majority members ($b_{dom} = -.30$ and $b_{for} = -.22$, p < .001, respectively; see the triangles in Figure 2). In addition, response rates differed significantly between the two minority groups: $b_{for} = -.09$, p < .05 (not shown, with domesticborn as reference category).

Response rates varied also significantly between origin groups ($b_{EU} = -.16$ and $b_{MEA} =$ -.33, p < .001, respectively; see the circles in Figure 2) and between the two minority groups, with minorities of Middle Eastern and African origin having a much lower likelihood of receiving a positive response than European minorities: $b_{MEA} = -.17$, p < .001(not shown, European minorities as reference category). Hypotheses H1 and H2 are thus supported.

When combining the two minority group characteristics, that is, place of birth and origin group, we find that employers treated all four resulting minority groups more negatively than majority candidates (see the squares in Figure 2). Moreover, the pattern of results indicates a clear hierarchy. The probability of receiving a positive response steadily decreases: majority members have the highest probability, followed by domestic-born European minorities ($b_{domEU} = -.11$, p < .05), foreign-born European minorities (b_{forEU} = -.21, p < .001), domestic-born minorities of Middle Eastern and African origin $(b_{domMEA} = -.29, p < .001)$, and foreign-born minorities of the same origin $(b_{forMEA} =$ -.37, p < .001). In addition, our results suggest that a foreign place of birth has virtually the same effect for European minorities as it has for Middle Eastern and African minorities (and the other way around). An interaction analyses for minority candidates confirmed this trend: the coefficient of the interaction between origin group and birthplace was not statistically significant (not shown, $b_{INT} = -.02$, ns). In line with hypothesis H3a, our results suggest an additive effect.

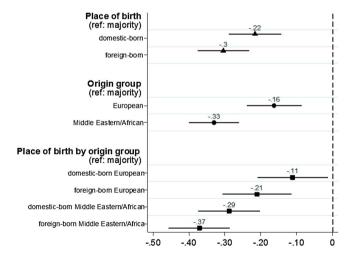


Figure 2. Birthplace and origin-group effects.

Notes: This coefficients plot displays the coefficients for birthplace (triangles), origin group (circles), and birthplace by origin group (squares) of separate probit regression models (dependent variable: positive response; all control variables included). Horizontal lines provide the corresponding 90% confidence intervals. Horizontal lines that do not overlap with the dashes vertical line point to significant differences in comparison to the respective reference group.

Country differences

Separate probit regressions by country (again, all control variables included) revealed important country differences (see Figure 3). In Germany and Spain, only foreign-born minority candidates received significantly less often a positive response than majority candidates (Germany: $b_{for} = -.17$, p < .05; Spain: $b_{for} = -.26$, p < .05, respectively), whereas domestic-born minority candidates received a positive response almost as often as majority candidates (see the triangles in the first and fourth column of Figure 3). In the Netherlands and in Norway, by contrast, the results are in line with our expectations, because foreign-born (Netherlands: $b_{for} = -.41$, p < .001; Norway: $b_{for} = -.47$, p < .001) and domestic-born (Netherlands: $b_{dom} = -.26$, p < .001; Norway: $b_{dom} = -.40$, p < .01) minorities received significantly fewer positive responses than majority candidates (see the triangles in the second and third column of Figure 3). In the U.K., too, both differences were statistically significant, but against our expectations the penalty was larger for domestic-born minorities ($b_{dom} = -.40$, p < .001) than it was for foreign-born minority candidates ($b_{for} = -.23$, p < .05). As for the differences between minority groups, foreign-born minorities received significantly fewer positive responses than domestic-born minorities in the Netherlands and in Spain (not shown, $b_{for} = -.15$, p < .05 and $b_{for} = -.28$, p < .01, respectively, domestic-born minorities as reference). In the remaining countries, response rates did not significantly differ between domestic- and foreign-born minorities.

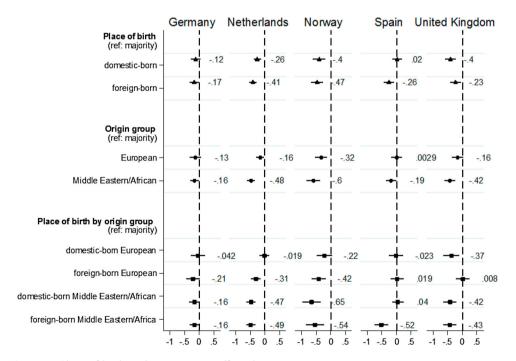


Figure 3. Place-of-birth and origin-group effects by country.

Notes: These coefficients plots display the estimates for birthplace (triangle), origin group (circles), and birthplace by origin group (squares) of separate probit regression models by study country (dependent variable: positive response; all control variables included). Horizontal lines provide the corresponding 90% confidence intervals. Horizontal lines that do not overlap with the dashes vertical line point to significant differences in comparison to the respective reference group.

The difference in positive responses to applications from majority candidates and European minorities (see the circles in Figure 3) was statistically significant only in the Netherlands ($b_{EU} = -.16$, p < .05) and in Norway ($b_{EU} = -.32$, p < .01), whereas the differences between majority candidates and minority candidates of Middle Eastern and African origin was statistically significant in all countries: Germany ($b_{MEA} = -.16$, p < .05), the Netherlands ($b_{MEA} = -.48$, p < .001), Norway ($b_{MEA} = -.60$, p < .001), Spain ($b_{MEA} = -.60$) -.19, p < .05), and the U.K. ($b_{MEA} = -.42$, p < .001). However, the difference between minorities of European and Middle Eastern/African origin was significant in all countries except for Germany and Spain (not shown, European minorities as reference category): Netherlands ($b_{MEA} = -.32$, p < .001), Norway ($b_{MEA} = -.27$, p < .05), and U.K. ($b_{MEA} =$ -.27, p < .05).

Finally, there are substantial differences between countries with respect to the birthplace effect by origin group (see the squares in Figure 3). In the Netherlands, Norway, and Germany, the birthplace effect was slightly stronger for European minorities than for Middle Eastern and African minorities. In addition, in all three countries all minority groups except for domestic-born Europeans had a (marginally) significantly lower likelihood of receiving a positive response than majority group members (Germany: p < .10, respectively, one-tailed). The pattern of results is supportive of hypothesis H3c on a muted effect. However, even though the coefficients of the interaction terms between birthplace and origin group had indeed positive signs, they were not statistically significant (not shown; Germany: $b_{INT} = .16$, Netherlands: $b_{INT} = .28$, and Norway: $b_{INT} = .32$, ns, respectively; one-tailed, reference category: domestic-born European minorities).

In Spain, by contrast, a foreign place of birth had negative consequences for minorities of Middle Eastern and African origin, but had no consequence for European minorities. Moreover, Spanish employers discriminated exclusively against foreign-born minorities of Middle Eastern and African origin ($b_{forMEA} = -.52$, p < .001). The coefficient of the interaction term between birthplace and origin group was negative and statistically significant (not shown, $b_{INT} = -.60$, p < .05, one-tailed, reference category: domestic-born European minorities), confirming for Spain hypothesis H3b on an amplified effect.

Finally, British employers discriminated against all minorities except for foreign-born Europeans ($b_{domEU} = -.37$, p < .05; $b_{domMEA} = -.42$ and $b_{forMEA} = -.43$, p < .01, respectively). Moreover, the effect of birthplace was significant for European minorities in the U.K., but pointed in the 'wrong' direction. Employers preferred foreign-born minorities of European origin over domestic-born minorities of European origin. The coefficient of the interaction between birthplace and origin groups had a negative sign but was not significant (not shown, $b_{INT} = -.39$, ns, one-tailed, reference category: domestic-born European minorities).

Taken together, the joint effect of place of birth and origin group varies between countries. Separate country analyses do not provide any support for hypothesis H3c on a muted effect while the Spanish results are supportive of hypothesis H3b on an amplified effect. At the same time, however, employers in all five countries discriminate against foreign-born minorities of Middle Eastern and African origin. In combination with the finding that there is no significant interaction between place of birth and origin group in all countries expect for Spain, the pattern of results is by far and large compatible with hypothesis H3a on an additive effect.



Robustness check

During our data collection, the regional government in Catalonia (Spain) held an independence referendum. Since this may have had consequences for the Spanish results (since 'majority' members in Spain were born in Madrid and had Castilian names), we repeated all analyses without Catalonian cases (n = 5451). The results remain virtually unchanged.

Summary and conclusion

In this study, we investigated the interplay between place of birth and country of origin in hiring discrimination against ethnic minorities in five European countries. Drawing on taste-based discrimination theory, we expected to find higher levels of discrimination against foreign-born minorities compared to equally qualified domestic-born minorities. Moreover, we predicted that the level of discrimination would be higher against minorities from culturally more distant origin groups (Middle Eastern and African countries) than against minorities from culturally more similar ones (European countries). Finally, we formulated three competing hypotheses on the conjoint effect of birthplace and origin group.

In line with previous studies, we find robust evidence for discrimination against ethnic minority job candidates. According to our results, minority candidates have to send on average about 1.2 times as many applications as equally qualified majority candidates to receive a positive response. The size of the observed minority penalty, however, varies considerably between countries, with discrimination ratios ranging from 1.0 in Spain to 1.6 in the U.K.

Moreover, our hypothesis on a birthplace effect receives empirical support. The likelihood of receiving a positive response is lower for foreign-born minorities than for domestic-born minorities. This difference is statistically significant - but very small in size: being foreign-born (vs. domestic-born) decreases the probability of a positive response by two percentage points. Moreover, in separate country analyses the birthplace effect is significant only in the Netherlands and Spain. In Norway and Germany this difference is not significant and in the U.K. the effect is even reversed. We find much stronger empirical support for the origin-group hypothesis. Discrimination increases for minorities from origin countries that are culturally more distant (Middle Eastern/African vs. European origin). This effect is highly significant and much larger than the birthplace effect: a Middle Eastern or African (vs. European) background decrease the probability of a positive response by five percentage points.

Finally, the analysis of the conjoint effect of birthplace and origin group yields mixed results. In the full sample, the pattern of results suggests an additive effect: the likelihood of receiving a positive response decreases steadily from majority members to domesticborn European minorities and foreign-born European minorities and further down for domestic-born minorities of Middle Eastern and African origin. Foreign-born minorities of Middle Eastern and African origin are at the bottom of this hierarchy. Separate country analyses, however, point to some cross-national variation in the joint effect of place of birth and country of origin. While the results for Spain are supportive of an amplified effect by confirming a significantly higher birthplace penalty for Middle Eastern/African

minorities, the pattern of results in Germany, the Netherlands and Norway is by far and large compatible with an additive effect. How employers evaluate signals of 'otherness' apparently depends on the national context, for example on the national immigration history, the state of economy, and anti-discrimination legislation. We hope to encourage future research to explore why these signals of social distance interact differently in different countries.

This study adds to the large and ever-growing body of literature on ethnic discrimination in hiring by providing empirical evidence in support of taste-based discrimination theory. To the best of our knowledge, this is the first study to provide causal evidence for a negative impact of a foreign birthplace on the hiring chances of ethnic minorities when holding constant job candidates' level of human capital. The observed birthplace penalty is very small in size. However, previous studies on the role of immigrant generation likewise found only rather small differences between immigrants and their offspring, despite the fact that in these studies immigrant generation was correlated with human capital characteristics. Against this background, our results are clearly supportive of taste-based discrimination as a driver of hiring discrimination. The strong impact of origin group on employer responses is also in line with taste-based discrimination theory, although we can not rule out that the observed origin-group effects ultimately result from differences in productivity-related characteristics between culturally very similar and rather distant origin groups. Taken together, however, our results suggest that employers are attentive to signals of otherness. They discriminate against minorities in general but against minorities with whom they have little in common in particular: that is, against foreign-born minorities and minorities originating from culturally very distant countries.

There are of course some limitations to this study. First and foremost, since the labour market situation and the standards of application procedures differ between countries, we had to adapt the experimental protocol to national circumstances, which limits the crossnational comparability of our results. Not adapting the experimental procedures and materials, however, would have resulted in non-standard applications, with serious consequences for the validity of our results. There is no perfect solution to this problem, but there is a trade-off. Without compromises, cross-nationally harmonised field experiments are virtually impossible.

Second, in the U.K. the wording of the birthplace treatment failed to clearly signal the birthplace of domestic-born job candidates (see Note 1). This deviation in wording is a misfortunate weakness of the study design. Domestic-born minorities in the U.K. stressed their foreign origin and that they have the right to work in the U.K. instead of highlighting their domestic birthplace. This combination of signals may have backfired by stressing distance rather than similarity. Most likely, this combination of signals caused the surprising results for the U.K., according to which British employers prefer foreign-born over domestic-born minorities. Moreover, this aspect is related to a more general limitation of the GEMM study. It might be unusual to stress any kind of ethnicity information in application documents. A recent study by Kang and colleagues (Kang et al. 2016), for example, suggests that racial minorities in the U.S. try to conceal their minority group membership by 'whitening' their résumés.

Third, we compare response rates for domestic-born and foreign-born minorities who migrated at age six. We do so to isolate the effect of foreign birthplace and early socialisation in a foreign country from differences in human capital. However, as a downside of this design, we focus on a group of foreign-born minorities that is in reality quite small.

Fourth and finally, while we kept differences in human capital between domestic-born and foreign-born minorities constant, we cannot rule out the possibility that the observed differences between European and Middle Eastern/African minorities actually result from (real or assumed) differences in productivity-related group characteristics, such as mean level of education or average unemployment rates of different origin groups (see e.g. Koopmans, Veit, and Yemane 2018). We hope that future studies will develop research designs and/or analytical strategies that make it possible to better disentangle between statistical discrimination and taste-based discrimination as causes of the particular severe discrimination against minorities from Middle Eastern and African countries.

To sum up, this study is the first to provide a cross-national empirical test of hiring discrimination against foreign-born and domestic-born job candidates of European and Middle Eastern/African origin. We confirm an ethnic penalty for foreign-born and domestic-born minorities of European and Middle Eastern/African origin - despite résumés with explicit and strong signals of high levels of human capital. Our findings imply that employers are attentive to all kinds of 'otherness' signals. Moreover, the consequences of these signals tend to be additive (for a similar finding see Di Stasio et al. 2019), resulting in particularly high penalties for minority job candidate who are born in a culturally more distant, foreign country. Since the fictitious job candidates in this study were almost identical, our results suggest that 'almost' is unfortunately not enough. All kinds of originrelated differences appear to be signals of otherness that receive much more attention than they deserve.

Notes

- 1. http://www.worldvaluessurvey.org/WVSContents.jsp.
- 2. In the U.K., the wording was slightly different: 'Note that although I have a [...] background all my education and training has been in Britain since the age of six and I have the right to work in the UK' (foreign-born minorities) and 'Note that although I have a [...] background all my education and training has been in Britain and I have the right to work in the UK' (domestic-born minorities). Unfortunately, this wording provides an ambiguous signal for 'domestic-born' job candidates, because their birthplace is actually not mentioned. Therefore, the birthplace effect in the U.K. experiment needs to be interpreted with caution. We discuss potential consequences of this deviation from the common experimental protocol in the 'conclusions' section.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Lex Thijsen http://orcid.org/0000-0002-4108-4779



References

- Aigner, Dennis J., and Glen G. Cain. 1977. "Statistical Theories of Discrimination in Labor Markets." Industrial and Labor Relations Review 30 (2): 175-187.
- Andriessen, Iris, Eline Nievers, Jacob Dagevos, and Laila Faulk. 2012. "Ethnic Discrimination in the Dutch Labor Market: Its Relationship With Job Characteristics and Multiple Group Membership." Work and Occupations 39 (3): 237-269.
- Arrow, Kenneth Joseph. 1973. "The Theory of Discrimination." In Discrimination in Labor Markets, edited by Orley Ashenfelter and Albert Rees, 3-33. Princeton, NJ: Princeton University Press.
- Baert, Stijn. 2018. "Hiring Discrimination: An Overview of (Almost) All Correspondence Experiments Since 2005." In Audit Studies: Behind the Scenes With Theory, Method, and Nuance, edited by Michael S. Gaddis, S63-S77. Cham: Springer .
- Bartoš, Vojtěch, Michal Bauer, Julie Chytilová, and Filip Matějka. 2016. "Attention Discrimination: Theory and Field Experiments With Monitoring Information Acquisition." American Economic Review 106 (6): 1437-1475.
- Becker, Gary S. 1957. The Economics of Discrimination. Chicago, IL: University of Chicago Press. Berdahl, Jeniffer L., and Celia Moore. 2006. "Workplace Harassment: Double Jeopardy for Minority Women." Journal of Applied Psychology 91 (2): 426-436.
- Bertrand, Marianne, Dolly Chugh, and Sendhil Mullainathan. 2005. "Implicit Discrimination." American Economic Review 95 (2): 94-98.
- Bertrand, Marianne, and Esther Duflo. 2017. "Field Experiments on Discrimination." In Handbook of Economic Field Experiments. Vol. 1., edited by Esther Duflo and Abhijit Banerjee, 309-393. Amsterdam: North-Holland (Elsevier).
- Booth, Alison L., Andrew Leigh, and Elena Varganova. 2012. "Does Ethnic Discrimination Vary Across Minority Groups? Evidence From a Field Experiment." Oxford Bulletin of Economics and Statistics 74 (4): 547-573.
- Bursell, Moa. 2007. What's in a Name? A Field Experiment Test for the Existence of Ethnic Discrimination in the Hiring Process. Working Paper 7. Stockholm: The Stockholm University Linnaeus Center for Integration Studies (SULCIS).
- Bursell, Moa. 2014. "The Multiple Burdens of Foreign-Named Men-Evidence From a Field Experiment on Gendered Ethnic Hiring Discrimination in Sweden." European Sociological Review 30 (3): 399-409. doi:10.1093/esr/jcu047.
- Busetta, Giovanni, Maria Gabriella Campolo, and Demetrio Panarello. 2018. "Immigrants and Italian Labor Market: Statistical or Taste-Based Discrimination?" Genus 74 (4): 1-20. doi:10. 1186/s41118-018-0030-1. Published online.
- Byrne, Donn E. 1971. The Attraction Paradigm. New York: Academic Press.
- Byrne, Donn E. 1997. "An Overview (and Underview) of Research and Theory Within the Attraction Paradigm." Journal of Social and Personal Relationships 14 (3): 417-431.
- Carlsson, Magnus. 2010. "Experimental Evidence of Discrimination in the Hiring of First- and Second-Generation Immigrants." Labour 24 (3): 263-278.
- Carlsson, Magnus, and Dan-Olof Rooth. 2012. "Revealing Taste-Based Discrimination in Hiring: A Correspondence Testing Experiment with Geographic Variation." Applied Economics Letters 19 (18): 1861–1864.
- Crul, Maurice, and Hans Vermeulen. 2003. "The Second Generation in Europe." International Migration Review 37 (4): 965-986.
- Di Stasio, V., B. Lancee, S. Veit, and R. Yemane. 2019. "Muslim by Default or Religious Discrimination? Results From a Cross-National Field Experiment on Hiring Discrimination." Journal of Ethnic and Migration Studies. doi:10.1080/1369183X.2019.1622826.
- Drydakis, Nick. 2010. "Religious Affiliation and Employment Bias in the Labor Market." Journal for the Scientific Study of Religion 49 (3): 477–493.
- Drydakis, Nick. 2017. "Measuring Labour Differences Between Natives, non-Natives, and Natives with an Ethnic-Minority Background." Economics Letters 161: 27–30.
- England, Paula. 1992. Comparable Worth: Theories and Evidence. New York: Transaction.



- Gaddis, S. Michael. 2018. Audit Studies: Behind the Scenes With Theory, Method, and Nuance. Cham: Springer.
- Giguère, Benjamin, Richard Lalonde, and Evelina Lou. 2010. "Living at the Crossroads of Cultural Worlds: The Experience of Normative Conflicts by Second Generation Immigrant Youth." Social and Personality Psychology Compass 4 (1): 14-29.
- Gordon, Milton M. 1964. Assimilation in American Life: The Role of Race, Religion, and National Origins. New York, USA: Oxford University Press.
- Gorodzeisky, Anastasia, and Moshe Semyonov. 2017. "Labor Force Participation, Unemployment and Occupational Attainment among Immigrants in West European Countries." PloS One 12 (5): e0176856.
- Guryan, Jonathan, and Kerwin Kofi Charles. 2013. "Taste-Based or Statistical Discrimination: The Economics of Discrimination Returns to its Roots." The Economic Journal 123 (572): F417-F432.
- Heath, Anthony F., and Sin Yi Cheung. 2007. Unequal Chances: Ethnic Minorities in Western Labour Markets. Oxford: Oxford University Press.
- Heath, Anthony F., Catherine Rothon, and Elina Kilpi. 2008. "The Second Generation in Western Europe: Education, Unemployment, and Occupational Attainment." Annual Review of Sociology 34 (1): 211-235.
- Hofstede, Geert. 2001. Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations. Thousand Oaks, CA: Sage.
- Jacquemet, Nicolas, and Constantine Yannelis. 2012. "Indiscriminate Discrimination: A Correspondence Test for Ethnic Homophily in the Chicago Labor Market." Labour Economics 19 (6): 824-832.
- Kaas, Leo, and Christian Manger. 2012. "Ethnic Discrimination in Germany's Labour Market: A Field Experiment." German Economic Review 13 (1): 1-20.
- Kang, Sonia K., Katherine A. DeCelles, András Tilcsik, and Sora Jun. 2016. "Whitened Resumes: Race and Self-Presentation in the Labor Market." Administrative Science Quarterly 61 (3): 469-502.
- Koopmans, R., S. Veit, and R. Yemane. 2018. "Andere Werte, weniger Chancen: Kulturelle Distanz erklärt Diskriminierung auf dem Arbeitsmarkt." WZB-Mitteilungen 160: 10-13.
- Lancee, B. 2019. "Ethnic Discrimination in Hiring: Comparing Groups Across Contexts. Results From a Cross-National Field Experiment." Journal of Ethnic and Migration Studies. doi:10. 1080/1369183X.2019.1622744.
- Lancee, B., G. Birkelund, M. Coenders, V. Di Stasio, M. Fernández Reino, A. Heath, R. Koopmans, et al. 2019a. "The GEMM Study: A Cross-National Harmonized Field Experiment on Labour Market Discrimination: Technical Report." http://gemm2020.eu/wp-content/uploads/2019/02/ GEMM-WP3-technical-report.pdf.
- Lancee, B., G. Birkelund, M. Coenders, V. Di Stasio, M. Fernández Reino, A. Heath, R. Koopmans, et al. 2019b. "The GEMM Study: A Cross-National Harmonized Field Experiment on Labour Market Discrimination - Codebook." http://gemm2020.eu/wp-content/uploads/2019/02/ GEMM-WP3-codebook.pdf.
- McGinnity, Frances, and Peter D. Lunn. 2011. "Measuring Discrimination Facing Ethnic Minority Job Applicants: An Irish Experiment." Work, Employment and Society 25 (4): 693-708.
- McPherson, Miller, Lynn Smith-Lovin, and James M. Cook. 2001. "Birds of a Feather: Homophily in Social Networks." Annual Review of Sociology 27: 415-444.
- Midtbøen, Arnfinn H. 2014. "The Invisible Second Generation? Statistical Discrimination and Immigrant Stereotypes in Employment Processes in Norway." Journal of Ethnic and Migration Studies 40 (10): 1657-1675.
- Midtbøen, Arnfinn H. 2016. "Discrimination of the Second Generation: Evidence From a Field Experiment in Norway." Journal of International Migration and Integration 17 (1): 253–272.
- Nunley, John M., Adam Pugh, Nicholas Romero, and R. Alan Seals. 2015. "Racial Discrimination in the Labor Market for Recent College Graduates: Evidence From a Field Experiment." The B.E. Journal of Economic Analysis & Policy 15 (3): 1093-1125.
- Oreopoulos, Philip. 2011. "Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes." American Economic Journal: Economic Policy 3 (4): 148-171.



- Pager, Devah. 2007. "The Use of Field Experiments for Studies of Employment Discrimination: Contributions, Critiques, and Directions for the Future." The Annals of the American Academy of Political and Social Science 609 (1): 104-133.
- Pager, Devah, and Hana Shepherd. 2008. "The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets." Annual Review of Sociology 34 (1): 181 - 209.
- Pedulla, David S. 2018. "How Race and Unemployment Shape Labor Market Opportunities: Additive, Amplified, or Muted Effects?" Social Forces 96 (4): 1477–1506.
- Phelps, Edmund S. 1972. "The Statistical Theory of Racism and Sexism." The American Economic Review 62 (4): 659-661.
- Pierné, Guillaume. 2013. "Hiring Discrimination Based on National Origin and Religious Closeness: Results From a Field Experiment in the Paris Area." IZA Journal of Labor Economics 2 (1): 1-15.
- Portes, Alejandro, and Min Zhou. 1993. "The New Second Generation: Segmented Assimilation and Its Variants." The Annals of the American Academy of Political and Social Science 530 (1):
- Purdie-Vaughns, Valerie, and Richard P. Eibach. 2008. "Intersectional Invisibility: The Distinctive Advantages and Disadvantages of Multiple Subordinate-Group Identities." Sex Roles 59 (5-6):
- Quillian, Lincoln, Devah Pager, Ole Hexel, and Arnfinn H. Midtbøen. 2017. "Meta-Analysis of Field Experiments Shows No Change in Racial Discrimination in Hiring Over Time." Proceedings of the National Academy of Sciences 114 (41): 10870-10875.
- Riach, Peter A., and Judith Rich. 2002. "Field Experiments of Discrimination in the Market Place." The Economic Journal 112 (483): F480-F518.
- Rich, Judith. 2014. "What Do Field Experiments of Discrimination in Markets Tell Us? A Meta Analysis of Studies Conducted since 2000." Institute for the Study of Labor (IZA), no. 8584.
- Rooth, Dan-Olof. 2010. "Automatic Associations and Discrimination in Hiring: Real World Evidence." Labour Economics 17 (3): 523-534.
- Schwartz, Shalom H. 2006. "A Theory of Cultural Value Orientations: Explication and Applications." Comparative Sociology 5 (2): 137–182.
- Sidanius, Jim, and Felicitas Pratto. 1999. Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression. New York: Cambridge University Press.
- Stephan, Walter G., and Cookie White Stephan. 2000. "An Integrated Threat Theory of Prejudice." In Reducing Prejudice and Discrimination, edited by Stuart Oskamp, 23–45. London: Psychology Press.
- Tajfel, Henri, and J. C. Turner. 1986. "The Social Identity Theory of Intergroup Behavior." In Psychology of Intergroup Relations, edited by Stephen Worchel and William G. Austin, 7-24. Chicago, IL: Nelson-Hall.
- Turner, John C., Michael A. Hogg, Penelope J. Oakes, Stephen D. Reicher, and Margaret S. Wetherell. 1987. Rediscovering the Social Group: A Self-Categorization Theory. Cambridge, MA: Basil Blackwell.
- Weichselbaumer, Doris. 2016. "Discrimination Against Female Migrants Wearing Headscarves." Institute for the Study of Labor (IZA), No. 10217.
- Weichselbaumer, Doris. 2017. "Discrimination Against Migrant Job Applicants in Austria: An Experimental Study." German Economic Review 18 (2): 237–265.
- Welzel, Christian. 2013. Freedom Rising. New York: Cambridge University Press.
- Zschirnt, Eva, and Didier Ruedin. 2016. "Ethnic Discrimination in Hiring Decisions: A Meta-Analysis of Correspondence Tests 1990-2015." Journal of Ethnic and Migration Studies 42 (7): 1115–1134.