Does the size of foreign population in a city affect the level of labour-market discrimination against job applicants of migrant origin?

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Does the size of foreign population in a city affect the level of labour-market discrimination against job applicants of migrant origin?

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Abstract

Based on a correspondence experiment, this article examines if the size of population of foreign background in a city exerts any significant effect on the extent of labour-market discrimination faced by job applicants of migrant origin. The study results find neither any statistically significant relationship between the two, nor do they lend support to the group threat and group contact conceptual frameworks. Rather, they appear to corroborate the pure discrimination model, as discrimination seems to be uniformly spread over all cities and all types of jobs with different characteristics. However, the findings of this study do not exclude the possibility that there could be a threshold value in the share of foreign population after which the picture of discrimination would become richer in nuances and some of the theories would gain more explanatory power.

Résumé

Basé sur une expérience de correspondance, cet article examine si la taille de la population d'origine étrangère dans une ville exerce un effet significatif sur l'ampleur

de la discrimination sur le marché du travail à laquelle sont confrontés les candidats à l'emploi d'origine immigrée. Les résultats de l'étude ne révèlent aucune relation statistiquement significative entre les deux, et ne soutiennent pas non plus les cadres conceptuels de la menace de groupe et du contact de groupe. Ils semblent plutôt corroborer le modèle de discrimination pure, car la discrimination semble être uniformément répandue dans toutes les villes et dans tous les types d'emplois présentant des caractéristiques différentes. Toutefois, les résultats de cette étude n'excluent pas la possibilité qu'il puisse y avoir une valeur seuil dans la part de la population étrangère après laquelle le tableau de la discrimination deviendrait plus riche en nuances et certaines des théories gagneraient en pouvoir explicatif.

INTRODUCTION

Scholarship has consistently highlighted immigrants' labour-market incorporation as one of the most significant indicators of their successful integration into the host society. It is crucial, as a failure to integrate in this domain can significantly obstruct integration in the society as a whole (e.g., Portes and Rumbaut 2001). However, despite the presence and introduction of a wide range of laws prohibiting differential treatment on various grounds, many field experiments have reported that discrimination continues to dampen immigrants' labour-market integration in many Western societies (e.g., Ahmad, 2020a; Andriessen et al., 2012; Baert et al., 2017; Midtbøen, 2015; Thijssen et al., 2021; Weichselbaumer, 2017; Zschirnt, 2019; see also Mullen et al., 2021). Immigrants appear to suffer ethnic penalty across several important dimensions, including occupational mobility, remuneration, permanent or temporary employment contracts, in addition to having low job-satisfaction levels and job commitment (e.g., Triana et al., 2010), and more mental and physical health problems (Paradies et al., 2015). Apart from its ethical and moral dimensions, combating discrimination is especially important for two reasons. First, not only does it discourage immigrants from investing in their human capital and job search, but it may also create conditions for withdrawal from the labour market and, ultimately, from social life itself (Ahmad, 2005; Blank 2005). Secondly, waste of immigrants' skills and resources—especially since they often belong to younger cohorts of the population—lacks foresight in view of the now well-established fact that we are facing severe ageing of the population. The changing age distribution is predicted to create strong labour shortages in the near future in many Western societies where studies have repeatedly revealed the prevalence of ample discrimination.

Although they are not always mutually exclusive and in fact there may exist an overlap among them, different conceptual frameworks attempt to offer different explanations as to why discrimination exists and why it still remains a formidable challenge to deal with despite various legal and legislative interventions. As the aim in this article is to especially explore the association

between the size of foreign-background population in a city and the extent of discrimination faced by applicants of migrant origin in recruitment, it would be germane to concentrate on theoretical approaches that are more relevant to the present discussion.

The group threat theory postulates that the dominant group's hostility and negative sentiment towards an out-group may increase with an increase in its relative size (e.g., Allport, 1958; Blalock, 1967). It is claimed that the in-group wants to protect its privileged access to scarce resources such as jobs, and fears that an increase in the size of the out-group would create greater competition for such resources it has exclusively enjoyed thus far. In other words, from this frame of reference, hostility towards an out-group population can be understood as a defensive mechanism towards perceived emerging threats and challenges presented by members of an out-group to the dominant status of the majority in-group population (Gorodzeisky and Semyonov 2020). Therefore, according to this conceptual framework, higher volumes of an out-group are likely to increase more prejudices, antagonism and discrimination in society and, by extension, in the labour market. A number of studies have shown a positive relationship between the size of the immigrant population and the prevalence of anti-immigrant attitudes (e.g., Gorodzeisky & Semyonov, 2016; Schlueter & Scheepers, 2010). However, some scholarship has also highlighted that rather than the actual size, the perceived size of the out-group in fact may also play a greater role in shaping hostile attitudes towards non-natives (Pottie-Sherman & Wilkes, 2017).

By comparison, the inter-group contact theory alternatively predicts that inter-group contact between the in-group and out-group members under certain conditions, such as equal status among groups, inter-group cooperation, shared goals and institutional support, may mitigate negative sentiment in society (Pettigrew & Tropp, 2006). This framework implies that merely knowledge is not sufficient to cause people to reduce their biases and stereotypes about out-groups members, but, rather, acquaintance with them is expected to bring about a positive change in their preconceived schema of the world (Amichai-Hamburger & McKenna, 2006). It is therefore assumed that the regions that host ethnically diverse populations are likely to induce better inter-ethnic relations encouraging greater mutual understanding. This, in turn, would also lead to more openness towards immigrants in the labour-market domain. According to this model, discrimination can be expected to be higher in regions with fewer immigrant populations. For example, a study by Carlsson and Eriksson (2014) in Sweden showed the presence of more housing discrimination against ethnic minority members outside the metropolitan area where ethnic minorities constituted a smaller proportion of the population. However, although several studies have shown support for the inter-group contact thesis in terms of inter-group contact's potential to mitigate hostility (e.g., Harrington & Miller, 1992; Jackson, 1993), some scholarship has been critical of the assumed likely effects of inter-group contact, suggesting that not all inter-group contact leads to reduced prejudice (Ford, 1986). Rather, the groups under consideration, the nature of the contact setting and the individuals involved can both reduce or promote prejudice and discrimination (e.g., Stephan, 1987). For example, in situations where the participants did not voluntarily choose to have a contact and feel threatened, the inter-group contact can be expected to lead to negative outcomes instead of mutual cooperation (e.g., Pettigrew & Tropp, 2011).

Although they do not consider the ideas discussed by the above two paradigms, pure discrimination and statistical discrimination conceptual frameworks in economics, and ethnic hierarchies and social distance perspective also have relevance for the present discussion. Formulated by Becker (1957), the pure discrimination model suggests that employers, co-workers or consumers belonging to the in-group have biased attitudes towards the recruitment of ethnic minority workers, and they will still discriminate such workers even if they possess all the credentials required for the successful performance of job tasks. By implication, in the context of the present

discussion, it means that if relevant human-capital attributes of jobseekers belonging to an out-group are not appreciated in the labour market, the share of foreign population in a given city is unlikely to lessen the extent of discrimination faced by these workers either. In contrast, the statistical discrimination model developed by Phelps (1972) and Arrow (1973) postulates that it is not the subjective bigotry, but primarily recruiters' imperfect information about job applicants' true productivity that makes them unwilling to hire immigrant or minority jobseekers. It is claimed that employers do not consider applicants' human capital and job history alone, but may also use skin colour, race or socio-demographic membership in deciding who is a suitable candidate.

The literature on ethnic hierarchies and social distance, on the other hand, posits that although all immigrant groups may face discrimination in general, some of them may encounter less or greater social acceptance or rejection from the mainstream society than others. An immigrant's social status in the host society may not only be affected by his/her educational credentials and profession but also by hierarchies based on ethnicity, race and national origin (Leinonen, 2012). As a result of prevailing ethnic hierarchies in society, even skilled and highly educated immigrants may find it difficult to obtain jobs commensurate with their qualifications (Heikkilä, 2005). A number of studies have revealed the presence of ethnic hierarchies in society (see, e.g., Bobo and Zubrinsky 1996; Hagendoorn 1995; Hagendoorn and Hraba 1987; Verkuyten and Kinket 2000). However, there is comparatively less scholarship examining the existence of ethnic hierarchies in the domain of labour markets (Andriessen et al., 2012; Baert et al., 2017; Weichselbaumer, 2017). A recent study by Vernby and Dancygier (2019) provides explicit evidence for such hierarchies in the context of Sweden, clearly demonstrating that although all immigrant groups face discriminatory practices, the chances of getting invited to a job interview significantly decrease as socio-cultural and ethnic distance with the mainstream group increases. In Finland, Koskela (2014) has also discussed the presence of migrant hierarchies through the accounts of highly skilled immigrants and shows that such immigrants also confront barriers to integration similar to low-skilled immigrants. Visible minority immigrants especially feel that such hierarchies affect them negatively and place them at the lower end of the ladder.

The correspondence experiment reported in this article was carried out in Finland, where only a few field experiments investigating labour-market discrimination presently exist (Ahmad, 2002; Larja et al., 2012). This study thus contributes to filling a gap in this area. Finland which had previously largely experienced emigration to various economically advanced countries in search of work in the 1960s and 1970s, has seen a rapid increase in immigration flows since the 1990s. In 2019, the proportion of people with a foreign background in the country constituted approximately 8 percent of the population. In 2015, 10 percent of those immigrated were refugees, asylum seekers or other individuals based on humanitarian grounds (Sutela & Larja, 2015). Significant differences can be observed in the gender structure by country of birth, with immigrants from Great Britain (72 percent) and Turkey (70 percent) showing the highest share of men, whereas those born in Thailand (79 percent) and Russia and the former Soviet Union (61 percent) constituting the highest number of women (Heikkilä, 2017). The largest groups with foreign background originate from the former Soviet Union, Estonia, Iraq, Somalia, the former Yugoslavia, China and Vietnam. Most of the immigrant population is concentrated in the Helsinki Region area and other urban centres, which also offer greater employment opportunities.

Despite the introduction of several labour-market initiatives by the concerned departments, disparities in various important indicators still exist. In 2017, in Helsinki the unemployment rate of persons with a foreign background was 21.6 percent. By comparison, this figure stood at 8.6 percent for native Finns. Although a host of factors have been identified including a lack of locally gained education and work experience, lack of recognition of non-Finnish qualifications, lack of

familiarity with the socio-cultural realms of the host society and lack of ethnically diverse social networks, lower competence in the Finnish language has frequently been referred to as constituting the major cause of their disadvantaged status in the labour market. However, some studies have suggested that better Finnish-language proficiency does not guarantee access to the world of work as such (see, e.g., Ahmad, 2002; Chang & Holm, 2017; Joronen 2005). Immigrants also show a greater job-mismatch compared with the mainstream population and are more frequently employed in short-term and part-time jobs with less favourable conditions (Myrskylä & Pyykkönen, 2014; Saukkonen, 2017). Within the immigrant population, people with African and Middle Eastern backgrounds have been reported to suffer the most discrimination in recruitment. The present study presents a fruitful opportunity to empirically investigate the role of employer prejudice in immigrant recruitment, which has been relatively less explored in previous research in Finland.

Study objectives and hypotheses

The aim in this article is to investigate if there is any significant relationship between the extent of discrimination facing job seekers of migrant background and the size of foreign-origin population in a given city in Finland, by testing some of the assumptions of the conceptual frameworks discussed above by formulating a number of hypotheses.

> *H1a: In line with the expectations of inter-group contact theory, as the mainstream population has more chances to interact with immigrants in cities with a higher concentration of people of foreign background, we can expect labour-market discrimination to be less pronounced in such cities.*
> *H1b: If discrimination appears to be systematically greater in cities with a higher concentration of people of foreign background, it may provide support to the group threat model.*

In addition to investigating the possible impact of foreign-background population on receiving a callback, the article also tests a number of other hypotheses.

> *H2: If discrimination is equally distributed irrespective of the size of foreign population in a given city, hypothesis 2 states that it may lend more support to the pure discrimination model.*
> *H3a: If hypothesis 2 holds true, in line with the literature on ethnic hierarchies and social distance, immigrants less proximate to the mainstream population in terms of colour, culture and religion will face greater employment discrimination than the more proximate out-group.*

According to the statistical discrimination model, employers discriminate against immigrant workers as they do not have sufficient information about their true productivity and credentials. Because of this imperfect information, they may also resort to jobseekers' skin colour or group membership, which they can use as a proxy for their productive potential.

> *H3b: If employers are reluctant to hire applicants of foreign origin because of statistical discrimination, we should expect discrimination to be more prevalent in jobs requiring high-skill level and vocational diploma as well as face-to-face contact with customers, because employers may not consider immigrant applicants equally competent for these jobs. However, if there is pure discrimination prevailing in the labour market, hypothesis 3b predicts that the effect of*

immigrant background will remain significant even after controlling for these independent variables.

Experimental design and research procedure

The data used in this article form part of a larger study carried out between June 2016 and March 2017. In this study, five applicants of Finnish, English, Iraqi, Russian, and Somali origin answered 1000 vacancies in the Finnish labour market by employing the correspondence method. This means a total of 5000 job applications were sent to 1000 enterprises. Correspondence method is an experimental technique where pairs of fictitious job applicants submit equivalent CVs and job letters to the publicly advertised positions. The pairs of candidates are identical across all attributes except for the basis of discrimination, that is, ethnicity. The ethnic origin of the candidates in CVs is indicated through carefully chosen names that effectively signal to the recruiters about an applicant's ethnic background. In the present experiment, the applicants' ethnic identity was also revealed through clearly stating their mother tongue. The correspondence method is considered as one of the best methodological tools by which discrimination can be measured objectively, as it allows the researcher to control all the important variables in CVs (see, e.g., Rich, 2014 for a detailed discussion).

In this experiment, jobs tested were geographically spread all over the major cities in Finland, where the proportion of population of foreign background varied from < 5 percent to 20 percent of the population. For each position, five job applications that were identical in terms of education, work experience and other personal attributes were submitted. Half of the vacancies were applied for with male and half with female names, but the men and women did not submit an application for the same job. Vacancies tested varied from unskilled to medium-skilled and skilled jobs, and included, among others, positions of cook, waiter, head waiter, café worker, shop assistant, shop cashier, office assistant, office secretary, receptionist, accountant and cleaner. The age of the applicants varied between 24 and 28 years, who could be considered to be at the start of their employment career. Table 1 provides a description of characteristics of different firms and jobs tested in this experiment.

The job application consisted of a letter of application and a CV. Five letters that were equivalent in terms of content were constructed for each of the jobs tested. The CVs were randomly created by using a CV generator software, which is quite close in functionality to the one as described by Lahey and Beasley (2009). Each time the CV generator created five stylistically different but equivalent CVs for the five applicants responding to the same vacancy. Thus, the only respect in which the five candidates differed was in their name. The CVs included, among others, such details as age, education, prior work experience, Finnish and English-language proficiency, mother tongue, computer and software skills, hobbies, and names of educational and vocational institutions at which they had obtained their education and diplomas. It was ensured that all the fictitious candidates had suitable and adequate experience relevant to the job opening and their CVs stood out. All the applicants of migrant background were mentioned to have received all their education, vocational diplomas and work experience in Finland. All of them also possessed excellent skills in the Finnish language. Jobs were applied for on the same day on which they were advertised on the website of the Finnish national employment service. The aim behind this was to show a strong interest in the vacancy on the part of the candidate. All the five job applications were submitted within a period of 4 h.

Table 1 Firm-related and job-related descriptive statistics

	N	*%*
Firm-related characteristics		
Firm location		
Helsinki region	575	57.5
Outside Helsinki Region	425	42.5
Firm size		
Micro	582	58.2
Small	278	27.8
Medium	115	11.5
Large	25	2.5
Employer gender		
Male	463	46.3
Female	537	53.7
Job-related characteristics		
Job sector		
Restaurant & catering	591	59.1
Retail trade	215	21.5
Cleaning	127	12.7
Clerical	55	5.5
Customer service	12	1.2
Job duration		
1-3 months	144	14.4
3-6 months	148	14.8
6-12 months	65	6.5
Job type		
Part-time	368	36.8
Full-time	632	63.2
Number of positions advertised		368
1-5	980	98.0
6-10	13	1.3
Over 10	7	0.7
Required advertised experience		
<1 year	171	17.1
1-5 years	446	44.6
Not mentioned	179	17.9
Not mentioned but required	100	10.0
Not required but plus	104	10.4
Job skill level		
Low	271	27.1
Medium	431	43.1
High	298	29.8

(Continues)

Table 1 (Continued)

	N	*%*
Job requires		
Vocational diploma	366	36.4
No vocational diploma	634	63.4
Job involves		
Visual contact with customers	436	43.6
No visual contact with customers	564	56.4
Job requires		
Fluent Finnish	639	63.9
No fluent Finnish	361	36.1

Although all the five job letters and the accompanied CVs submitted for any vacancy were similar in terms of content, small stylistic differences were kept in font type, font size, layout and the order in which the various sections followed. It was done so to minimise the risk of detection. Similarly, applicants also had small differences in age varying between 5 months to one-and-a-half years when they answered the same vacancy to avoid any chance of suspicion. The order of sending application to an advertised position was changed each time the applicants applied for a post. The objective behind this strategy was to prevent any possibility where some candidate received preferential treatment in the screening process because of the firm having received his/her application earlier than the others. To avoid risk of disclosure, only one job per firm was applied for, in case several positions were advertised by the same enterprise during the period of data collection. In order to examine if slight variations in age, the style of the job application letter, the style of CV and the job application sending order had any effect on receiving a callback from the employer, cross tabulations and the chi square tests of independence were conducted. As reported elsewhere (Ahmad, 2020b), these variations did not exert any statistically significant effect on the chances of getting invited to an interview.

All the jobs tested in this study were applied for via email, which is a common practice in Finland. The employers could contact the applicants by email or telephone. The coding of employer responses was done as follows: a response was considered as positive when the employer invited the applicant for an interview. Conversely, a response was classified as negative when the candidate was rejected or received no response from the employer at all.

Before proceeding to the study results, it is pertinent to discuss here one methodological issue. Since the data comprise responses to the five applications sent out for each job, it can be argued that each employer has a slightly different response pattern compared with other employers, which could produce intra-employer correlations that would contradict the basic assumption of regression analysis; that is, the independence of cases in the data. Also known as a clustering phenomenon, this might affect the standard error estimates of the parameters, and thus the tests of significance. In order to prevent this, a modified version of the logistic regression model fitting was used in the SPSS software. For this purpose, a complex sample design was utilised, where a complex analysis plan needed to be defined, in which each case was given a weight of 1, and a clustering variable was given. In this analysis, clustering was determined by the variable identifying responses by each employer as a cluster, that is, job number. After this, the software will analyse the weighted data by taking into account any clustering effect.

Table 2 Callback rates by ethnicity and share of foreign population in the city where a job was located

Applicant ethnicity		Size of population of foreign background in the city			Total
		<5%	5 to < 15%	15 to < 20%	
Somali	Callback received	8.9	9.9	10.5	9.9
	No callback	91.1	90.1	89.5	90.1
	Total	100	100	100	100
	N	225	355	420	1000
	Chi-Square (likelihood ratio) = 0.420, df = 2, p = 0.180				
Iraqi	Callback received	11.6	13.0	14.8	13.4
	No callback	88.4	87.0	85.2	86.6
	Total	100	100	100	100
	N	225	355	420	1000
	Chi-Square (likelihood ratio) = 1.401, df = 2, p = 0.496				
Russian	Callback received	21.3	20.3	25.7	22.8
	No callback	78.7	79.7	74.3	77.2
	Total	100	100	100	100
	N	225	355	420	1000
	Chi-Square (likelihood ratio) = 3.564, df = 2, p = 0.168				
English	Callback received	26.7	25.9	27.9	26.9
	No callback	73.3	74.1	72.1	73.1
	Total	100	100	100	100
	N	225	355	420	1000
	Chi-Square (likelihood ratio) = 0.377, df = 2, p = 0.282				
Finnish	Callback received	41.8	36.9	39.3	39.0
	No callback	58.2	63.1	60.7	61.0
	Total	100	100	100	100
	N	225	355	420	1000
	Chi-Square (likelihood ratio) = 1.400, df = 2, p = 0.497				
Total	Callback received	22.0	21.2	23.6	22.4
	No callback	78.0	78.8	76.4	77.6
	Total	100	100	100	100
	N	1125	1775	2100	5000
	Chi-Square (likelihood ratio) = 3.387, df = 2, p = 0.184				

RESULTS

Before proceeding to test the study hypotheses, Table 2 first summarises the callbacks received by the five equally qualified candidates differentiated by size of population of foreign origin in the city where a certain job opening was located. Applicants of migrant background were not aggregated into a single category, as it may run the risk of masking the possible confounding effects of different immigrant groups, Chi-square tests were conducted to determine if the differences in the distributions of callbacks were statistically significant. The null hypothesis in each test of independence assumed that the share of callbacks of all applicants is the same, irrespective of

the share of population of foreign origin in the city where a job was advertised. The results of the chi-square tests are given in the table, indicating that in none of the five applicant groups can the null hypothesis be rejected.

We first look at the overall success rate of different groups under consideration. Discrimination as an act of denying equal treatment to individuals on the basis of their group membership (Allport, 1958) is readily apparent from Table 2. As we can see, while the Finnish applicants are the most preferable choice for the employers with a callback rate of 39 percent, candidates of Somali, Iraqi, Russian and English origin lag noticeably behind their Finnish counterparts, with figures of 9.9 percent, 13.4 percent, 22.8 percent, and 26.9 percent, respectively. The chi-square tests between the adjacent ethnic groups are all significant (Somali vs. Iraqi, $\chi^2 = 4.420$, df. $= 1$, $p = 0.04$; Iraqi vs. Russian, $\chi^2 = 10.272$, df. $= 1$, $p = 0.00$; Russian vs. English, $\chi^2 = 4.096$, df. $= 1$, $p = 0.04$; English vs. Finnish, $\chi^2 = 11.339$, df. $= 1$, $p = 0.00$).

These findings thus highlight the precarious situation of immigrants, especially Somalis, in the Finnish labour market, even if they possess the required qualifications for the job advertised. In Finland, unemployment has been reported to be the highest among Iraqis and Somalis, most of whom have arrived in Finland as refugees (Heikkilä, 2017). Therefore, their weak labour-market performance has often been, implicitly or explicitly, related to their refugee status. The above observations, however, strongly point to the role employer preferences may also exercise in excluding these jobseekers from consideration for employment. Separate analyses were also conducted to investigate the effect of gender on callback rates, which were reported elsewhere (Ahmad, 2020a). Although the odds of receiving a callback for female applicants were found to be higher than for male applicants across all groups, differences by gender were not found to be different by ethnicity.

As Table 2 further elucidates, while the differences between the Finnish and four immigrant groups are quite apparent in terms of callback rates, the differences by the different levels of the share of foreign population seem relatively small, however. For example, in cities with 15 percent to < 20 percent population of foreign origin, while the callback rate for the Finnish applicants stands at 39.3 percent, it is 10.5 percent, 14.8 percent, 25.7 percent, and 27.9 percent for the applicants of Somali, Iraqi, Russian and English background respectively. The corresponding percentage point differences are thus 28.8(39.3 percent–10.5 percent), 24.5, 13.6, and 11.4. In cities with a proportion of foreign population less than 5 percent, the corresponding percentage point differences are 32.9, 30.2, 20.5, and 15.1. In other words, the size of population of foreign origin in a city as such does not appear to have much effect on the callback rates of different immigrant groups under study. In order to further examine whether the size of foreign population has any statistically significant relationship with the discrimination revealed by the differences in callback rates and to test the study hypotheses, a logistic regression model is fitted in Table 3.

The table shows the effects of a number of factors that could be expected to be potentially relevant in recruitment outcomes on the odds of receiving a callback from the employer, including job-skill level and whether a job requires a vocational diploma and face-to-face contact with customers. The main effects and interactions relevant to the hypotheses are presented. In the table, applicants of Somali and Iraqi origin have been combined into the non-European immigrant group, and candidates of English and Russian background into the European immigrant group respectively. Combining these groups is important because otherwise the data would have been insufficient to get reliable results if the four immigrant groups were kept separate. Also, combining the immigrant groups into two categories can be defended by observing that the cultural-distance dimension remains powerful and interpretable. In addition, as we observed in Table 2, there is a hierarchy between the groups when numbers of callbacks are considered. Measured by the number of callbacks received, within the combined groups, the difference between the Iraqi and Somali

Table 3 Employer responses by applicant origin and other job characteristics, a logistic regression model adjusted for clustering

Parameter	B	t-value	df	Sig.	Exp(B)
Intercept	-0.587	-3.041	4000.000	0.002	0.556
Applicant origin					
Non-European immigrant	-1.396	-4.773	4000.000	0.000	0.248
European immigrant	-0.673	-2.617	4000.000	0.009	0.510
Finnish (ref.)					
Size of foreign population in the city					
<5%	0.149	0.870	4000.000	0.384	1.161
5 to < 15%	-0.074	-0.492	4000.000	0.623	0.928
15 to < 20% (ref.)					
Job-skill level					
Low	0.048	0.187	4000.000	0.851	1.049
Medium	0.381	1.566	4000.000	0.117	1.464
High (ref.)					
Does job require customer contact?					
No	0.227	1.306	4000.000	0.192	1.255
Yes (ref.)					
Does job require vocational diploma?					
No	-0.238	-1.178	4000.000	0.239	0.788
Yes (ref.)					
Non-European immigrant* < 5% foreign population	-0.321	-1.261	4000.000	0.208	0.725
Non-European immigrant*5 to < 15% foreign population	-0.010	-0.043	4000.000	0.966	0.990
Non-European immigrant*15 to < 20% foreign population (ref.)					
European immigrant* < 5% foreign population	-0.269	-1.157	4000.000	0.247	0.764
European immigrant*5 to < 15% foreign population	-0.119	-0.580	4000.000	0.562	0.888
European immigrant*15 to < 20% foreign population (ref.)					
Finnish* < 5% foreign population (ref.)					
Finnish*5 to < 15% foreign population (ref.)					
Finnish*15 to < 20% foreign population (ref.)					
Non-European immigrant*Low-skill level	0.645	1.678	4000.000	0.093	1.906
Non-European immigrant*Medium-skill level	0.179	0.500	4000.000	0.617	1.197
Non-European immigrant*High-skill level (ref.)					
European immigrant*Low-skill level	0.394	1.138	4000.000	0.255	1.484
European immigrant*Medium-skill level	0.166	0.517	4000.000	0.606	1.181
European immigrant*High-skill level (ref.)					
Finnish*Low-skill level (ref.)					
Finnish*Medium-skill level (ref.)					
Finnish*High-skill level (ref.)					
Non-European immigrant*No customer contact	-0.135	-0.530	4000.000	0.596	0.873
Non-European immigrant*Customer contact required (ref.)					
European immigrant*No customer contact	0.097	0.426	4000.000	0.670	1.102

(Continues)

Table 3 (Continued)

Parameter	B	*t*-value	df	Sig.	Exp(B)
European immigrant*Customer contact required (ref.)					
Finnish*No customer contact (ref.)					
Finnish*Customer contact required (ref.)					
Non-European immigrant*No diploma required	-0.523	-1.771	4000.000	0.077	0.593
Non-European immigrant*Diploma required (ref.)					
European immigrant*No diploma required	-0.180	-0.663	4000.000	0.507	0.835
European immigrant*Diploma required (ref.)					
Finnish*No diploma required (ref.)					
Finnish*Diploma required (ref.)					

Note: Dependent variable: callback received = 0, no callback = 1 (ref.); The model was corrected for clustering effect that could have been caused by the different response patterns of individual employers. The complex samples procedure of the SPSS was used.

applicants is 3.5 percentage points, between the English and Russian applicants, the difference stands at 4.1 points, while if we compare the European – non-European groups, the difference between Russian and Iraqi candidates is 9.4 percentage points.

Even if there are differences between the Somali and the Iraqi applicants as well as between the Russian and the English applicants, the distance from the Finnish group and the European – non-European dimension remains quite evident after merging them. As we can see in the model of Table 3, immigrant applicants of both non-European (exponential parameter 0.25) and European (exponential parameter 0.51) background receive less callbacks than the Finnish applicant. The odds are higher for applicants seeking employment in low or medium-skill level jobs in comparison with high-skill level jobs, but there is no significant difference in the effect of job-skill level between the different applicants. On the other hand, the odds are higher if the job does not necessitate contact with customers or if it requires a vocational diploma, but the effect is, again, the same across all groups.

Table 3 further tests hypotheses 1a and 1b. As is clearly evident, the size of foreign population in the city where a vacancy is advertised does not have any substantial effect on the odds of getting invited to a job interview. The exponential coefficients are 1.16 and 0.93 for cities with < 5 percent and 5 to < 15 percent of foreign population respectively. The interaction between ethnicity and the share of foreign population is not significant. Accordingly, neither hypothesis 1a nor 1b is supported by the data. Rather, the results lend more support to hypothesis 2 namely to the assumptions of the pure discrimination model, according to which certain employers, co-workers, or consumers belonging to the majority group have a 'taste' for discrimination and they will pay a premium to avoid members of some out-group in order to cater to their prejudices, even if out-group workers possess comparable qualifications and skills as the in-group workers.

Hypothesis 3a stated that in the event of pure discrimination, we will find greater discrimination against Iraqi and Somali applicants, who are less proximate to the majority population in terms of colour, culture and religion than English and Russian candidates. The data support this assumption: as indicated by the test from Table 2, the callback rates are significantly lower for non-European than European immigrants. In this regard, the findings are consistent with the literature on ethnic hierarchies and social distance, which suggests that some immigrant and minority groups may encounter greater rejection from the in-group than others because of prevailing ethnic hierarchies in society. In Finland, surveys conducted by Jaakkola (2005, 2009) have

reported that the more different some immigrant group is perceived culturally and the lesser the economic level of the country of its origin, the more prejudiced Finns are towards this group. In these surveys, immigrants from Western countries were located at the top and those from Somalia and Iraq and other developing countries at the bottom of the ethnic hierarchy. The findings of the present study offer empirical evidence of that ethnic hierarchies existing in society can also be translated into the domain of labour markets, dampening job opportunities for immigrant groups perceived as less desirable by the mainstream population. They also give support to Heikkilä's earlier observations (2005) that there appears to be a hierarchisation in occupational integration on the basis of immigrants' national origin in Finland and that perceived cultural proximity exerts a considerable impact on immigrants' chances of finding employment in the Finnish labour market.

The study results also substantiate hypothesis 3b. As Table 3 reveals, none of the interactions between the share of foreign population and job skill level, required customer contact and required vocational diploma are significant. It was expected that any significant variation in these independent variables would have helped us understand some of the employers' considerations in recruiting immigrants and may have shown the existence of statistical discrimination. However, the relative uniformity in patterns of callbacks with respect to these variables points more in the direction of the assumptions of the pure discrimination model as well as literature on ethnic hierarchies and social distance, as none of the interactions gained any significance.

CONCLUSIONS

This article has examined if the size of the population of foreign origin in a city exerts any statistically significant effect on the extent of discrimination encountered by immigrant job applicants in the Finnish labour market with attendant hypotheses. With a few exceptions (e.g., Booth et al., 2012; McGinnity & Lunn, 2011), many of the previous studies using the correspondence technique have concentrated on non-Western groups that may not be favourably perceived by the host society. Thus, in a departure from earlier scholarship, the experimental test reported in this article considers both Western and non-Western groups. As the results reveal, it is important to include both these groups, since attitudes towards the employment of immigrants, among others, may significantly vary with respect to their country of origin. The empirical observations of this study clearly indicate that while human capital constitutes indispensable conditions for the successful incorporation of immigrants into the labour market, deficiency in this capital does not offer a sufficient explanation for the lower level of employment opportunities in the new society. As we have noted earlier, despite possessing equivalent human-capital credentials, immigrant applicants face substantial discrimination compared with their Finnish counterparts, with the non-Western immigrants facing the brunt of employer reluctance. These findings become a further cause of concern when considering the fact that many job opportunities do not reach the employment office, as contact networks already mediate them through word-of-mouth mechanisms. For example, in Finland, some research has suggested that almost half of the employment opportunities are not publicly advertised (Tuomaala, 2010). Immigrants are often at a disadvantage in terms of tapping these opportunities as they have limited access to mainstream social networks (Ahmad, 2005). In brief, if there is widespread discrimination in the labour market where already only a partial number of vacancies are advertised, this may render disadvantaged groups even further disadvantaged when they compete for limited resources. It is, therefore, imperative that initiatives aimed at promoting immigrants' labour-market integration must be accompanied by equally effective measures to eradicate discriminatory practices in the world of work.

Discrimination has been suggested as an attempt by the dominant group to protect and maintain its privileged access to scarce resources such as jobs by excluding members of the subordinate groups. Through strategic and self-interested actions, the members of the dominant group are said to strive to sustain a system of inequality in order to preserve their exclusive privileges. In this frame of reference, the size of the subordinate group can be understood as a structural feature of the social system, and therefore as a proxy of competition at the structural level (Gorodzeisky and Semyonov 2020). In this context, the article strived to examine some of the assumptions of the group threat and inter-group contact theories. However, while discrimination towards various groups under focus differ substantially, the level of discrimination itself does not vary with respect to the size of population of foreign origin in a given city. Rather, discrimination seems to be equally pervasive throughout the various cities in which the field experiment was conducted. Therefore, at present, any effect of the size of foreign-origin population—if any such effect exists—as an explanation of the willingness to recruit immigrants in Finland is not strong enough to be statistically significant. Either this effect, as a factor of changing the general attitudes or the cultural atmosphere in cities where the immigrant applicants received the interview offer, is too weak to have any impact at the interview stage, or the reasons for the lower callback rates among the immigrant groups must be sought elsewhere. Thus, the hypotheses related to the group contact (H1a) and group threat (H1b) theories did not receive any support from the data.

Rather, the findings give more support to the pure discrimination model confirming hypothesis H2, as discrimination seems to be equally spread through different cities hosting populations of varying sizes as well as among different types of jobs with different characteristics. The findings also clearly suggest the existence of an ethnic hierarchy in the Finnish labour market, thus providing support for hypothesis 3a: the immigrant applicants of non-European background suffered a greater ethnic penalty than their European counterparts, as observed in Table 2. In this respect, the study results corroborate the literature on ethnic hierarchies and social distance, substantiating the argument that immigrants who are more distinct from the mainstream group across multiple dimensions may face greater labour-market discrimination. Hypothesis 3b does not find any support in the results, as required job skill level or face-to-face contact with customers do not obtain significant parameters in Table 3. As reported elsewhere (Ahmad, 2020b, 2020c), other relevant variables such as work experience required for the job and required Finnish-language proficiency were also tested in attempts to place the phenomenon of discrimination in the social structure and to make understandable the mechanisms producing it. They did not, however, explain variation in discrimination in models where the ethnic background of applicants was included. Even in cases where applicants of migrant origin possessed a 2-year additional experience more than the Finnish applicants, it did not provide them a significant edge over the majority candidates (Ahmad, 2020b).

The scope of the study conclusions is, however, limited by the choice of occupational groups included in the research. Also, this study does not exclude the possibility that there could be a threshold value in the share of foreign population after which the picture of discrimination would become richer in nuances and some of the theories would gain more explanatory power. In this study the effect of the size of foreign population is mediated through the decisions of the firms' recruiting personnel. An alternative design would include variables that could measure the experienced threat and contact in the cities under investigation. Also, the pace of change in the size of foreign population might be relevant, as perceptions of threat might be driven more by rapid changes in the size of the foreign population, rather than the size itself. This study does not measure the change in population size and does not exclude the possibility that a rapid increase would first lead to increased experienced threat, and then, when the presence of foreign population

becomes more established, the hypotheses of contact theory may become more significant. In addition, it cannot be excluded either that both threat and contact mechanisms can be in action simultaneously and thus cancelling out each other's influence. To get a valid picture of these possibilities would require a more complex quantitative design with variables obtained also from outside of the recruiting enterprises. Also, a qualitative approach getting data both from the enterprises and the surrounding society, might be considered as a possibility of answering the questions raised by the current study.

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REFERENCES

Ahmad, A (2020a) When the name matters: an experimental investigation of ethnic discrimination in the Finnish labor market. *Sociological Inquiry*, 90(3), 468–496.

Ahmad, A (2020b) Does additional work experience moderate ethnic discrimination in the labour market? *Economic and Industrial Democracy*, 43(3), 1119–1142. https://doi.org/10.1177/0143831/20969828

Ahmad, A (2020c) Do equal qualifications yield equal rewards for immigrants in the labour market? *Work, Employment and Society*, 34(5), 826–843.

Ahmad, A (2005) *Getting a job in Finland: the social networks of immigrants from the Indian subcontinent in the Helsinki metropolitan labour market*. Helsinki: University of Helsinki, Department of Sociology.

Ahmad, A (2002) Yhteisten työmarkkinoiden erottelemia? maahanmuuttajien työllistymismahdollisuudet suomalaisilla työmarkkinoilla [Divided by a common job market: immigrants' employment opportunities in the Finnish labour market]. *Sosiologia*, 3, 227–241.

Allport, GW (1958) *The nature of prejudice*. New York, Doubleday Anchor Press.

Amichai-Hamburger, Y & McKenna, KYA (2006) The contact hypothesis reconsidered: interacting via the Internet. *Journal of Computer Mediated Communication*, 11, 825–843.

Andriessen, I, Nievers, E, Dagevos, J & Faulk, L (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, KJ (1973) The theory of discrimination. In: O. Ashonfelter & A. Rees (Eds.), *Discrimination in labor markets*. Princeton: Princeton University Press, pp. 3–33.

Baert, S, Albanese, A, du Gardein, S, Ovaere, J & Stappers, J (2017) Does work experience mitigate discrimination? *Economics Letters*, 155, 35–38.

Becker, GS (1957) *The economics of discrimination*. Chicago, IL: University of Chicago Press.

Bendick, M, Jackson, CW, Reinoso, VA & Hodges, LE (1991) Discrimination against Latino job applicants: a controlled experiment. *Human Resource Management*, 30, 469–484.

Berdahl, JL & Moore, C (2006) Workplace harassment: double jeopardy for minority women. *Journal of Applied Psychology*, 91, 426–436.

Blalock, HM Jr., (1967) *Toward a theory of minority-group relations*. New York: John Wiley and Sons.

Blank, R (2005) Tracing the economic impact of cumulative discrimination. American Economic Review, 95(2): 99–103.

Bobo, L & Zubrinsky, CL (1996) Attitudes on residential integration: perceived status differences, mere in-group preference, or racial prejudice? Social Forces, 74(3), 883–909.

Booth, AL, Leigh, A & Varganova, E (2012) Does ethnic discrimination vary across minority groups? Evidence from a field experiment. *Oxford Bulletin of Economics and Statistics*, 74(4), 547–573.

Carlsson, M & Eriksson, S (2014) Discrimination in the rental market for apartments. *Journal of Housing Economics*, 23, 41–54.

Chang, C-C & Holm, G (2017) Perceived challenges and barriers to employment: the experiences of university educated Taiwanese women in Finland. In: E. Heikkilä (Ed.), *Immigrants and the labour markets: experiences from abroad and Finland*. Turku: Migration Institute of Finland, pp. 161–176.

Fiske, ST, Lin, M & Neuberg, SL (1999) The continuum model: ten years later. In: S. Chaiken and Y. Trope (Eds.). *Dual process theories in social psychology*. New York: Guilford Press, pp. 231–254.

Fiske, ST (1998) Stereotyping, prejudice and discrimination. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 357–411). New York: McGraw-Hill.

Ford, WS (1986) Favorable intergroup contact may not reduce prejudice: inconclusive journal evidence, 1960–1984. *Sociology and Social Research*, 70, 256–258

Gorodzeisky, A & Semyonov, M (2016) Not only competitive threat but also racial prejudice: sources of anti-immigrant attitudes in European societies. *International Journal of Public Opinion Research*, 28, 331–354.

Gorodzeisky, A, & Semyonov, M (2020) Perceptions and misperceptions: actual size, perceived size and opposition to immigration in European societies. Journal of Ethnic and Migration Studies, 46(3), 612–630.

Greenwald, AG & Pettigrew, TF (2014) With malice toward none and charity for some: ingroup favoritism enables discrimination. *The American Psychologist*, 69(7), 669–684.

Hagendoom, L & Hraba, J (1987) Social distance toward Holland's minorities: discrimination against and among ethnic outgroups. Ethnic and Racial Studies, 10(3), 317–333.

Hagendoorn, L (1995) Intergroup biases in multiple group systems: the perception of ethnic hierarchies. European Review of Social Psychology, 6(1), 199–228.

Harrington, HJ & Miller, N (1992) Research and theory in intergroup relations: issues of consensus and controversy. In J. Lynch, C. Modgil & S. Modgil (Eds.), *Cultural diversity and the schools*. London: Falmer, (pp. 159–178).

Heikkilä, E (2017) Immigrants in the Finnish labour market and future needs in an ageing society. In: E. Heikkilä (Ed.), *Immigrants and the labour markets: experiences from abroad and Finland*. Turku: Migration Institute of Finland, 131–160.

Heikkilä, E (2005) Mobile vulnerabilities: perspectives on the vulnerabilities of immigrants in the Finnish labour market. *Population. Space and Place*, 11(6), 486–497.

Jaakkola, M (2009) *Maahanmuuttajat suomalaisten näkökulmasta: Asennemuutokset 1987–2007 [Immigrants from Finns' perspective: changes in attitudes 1987-2007])*. Helsinki: Helsingin kaupungin tietokeskus.

Jaakkola, M (2005) *Suomalaisten suhtautuminen maahanmuuttajiin vuosina 1987–2003 [Attitudes of Finns towards immigrants in 1987-2003]. Työpoliittinen tutkimus 286*. Helsinki: Työministeriö.

Jackson, JW (1993) Contact theory of intergroup hostility: a review and evaluation of the theoretical and empirical literature. *International Journal of Group Tensions*, 23, 43–65.

Joronen, T (2005) Työ on kahden kauppa – maahanmuuttajien työmarkkina-aseman ongelmia. [Work is a two-way street – the problems of immigrants' labor-market integration] In S. Paananen (Ed.), Maahanmuuttajien elämää Suomessa [Immigrants' life in Finland]. Helsinki: Tilastokeskus.

Koskela, K (2014) Boundaries of belonging: highly skilled migrants and the migrant hierarchy in Finland. *Journal of Finnish Studies*, 17(1-2), 19–41.

Lahey, JN & Beasley, RA (2009) Computerizing audit studies. *Journal of Economic Behavior and Organization*, 70(3), 508–514.

Larja, L, Warius, J, Sundbäck, L, Liebkind, K, Kandolin, I & Jasinskaja-Lahti, I (2012) *Discrimination in the Finnish labor market: an overview and a field experiment on recruitment*. Helsinki: The Ministry of Employment and the Economy.

Leinonen, J (2012) Money is not everything and that's the bottom line: family ties in transatlantic elite migrations. *Social Science History*, 36(2), 243–268.

McGinnity, F & Lunn, PD (2011) Measuring discrimination facing ethnic minority job applicants: an Irish experiment. *Work, Employment and Society*, 25(4), 693–708.

Midtbøen, AH (2015) The context of employment discrimination: interpreting the findings of a field experiment. *The British Journal of Sociology*, 66(1), 193–214.

Mullen, AL, Baker, J, Menard, M & Walker, B (2021) Does alma mater matter? An audit study of labour market outcomes of Canadian Bachelor's Degree recipients. *Canadian Review of Sociology*, 58(4), 456–475.

Myrskylä, P & Pyykkönen, T (2014) *Suomeen muuttaneiden naisten ja miesten työmarkkinatilanne, koulutus ja poliittinen osallistuminen [Labor-market situation, education and political participation of women and men who have migrated to Finland]*. Helsinki: Tilastokeskus (Working Papers 2/2014)

Paradies, Y, Ben, J, Denson, N, Elias, A & Priest, N (2015) Racism as a determinant of health: a systematic review and meta-analysis. *Plos One*, 10, e0138511.

Pettigrew, TF & Tropp, LR (2011) *When groups meet: the dynamics of intergroup contact*. Philadelphia, PA: Psychology Press.

Pettigrew, TF & Tropp, LR (2006) A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783.

Phelps, ES (1972) The statistical theory of racism and sexism. *American Economic Review*, 62, 659–661.

Portes, A & Rumbaut, R (2001) Legacies: The Story of the Immigrant Second Generation. Berkeley: University of California Press.

Pottie-Sherman, Y & Wilkes, R (2017) Does size really matter? On the relationship between immigrant group size and anti-immigrant prejudice. *International Migration Review*, 51, 218–250.

Rich, J (2014) What do field experiments of discrimination in markets tell us? A meta analysis of studies conducted since 2000. IZA DP No. 8584.

Sampson, WA (2008) Discrimination. In: R.T. Schaefer (Ed.), *Encyclopedia of race, ethnicity and society*. London: Sage, pp. 726–729.

Saukkonen, P (2017) Immigrants and employment in Helsinki. *Kvartti*, 1, 44–59.

Schlueter, E & Scheepers, P (2010) The relationship between outgroup size and anti-outgroup attitudes: a theoretical synthesis and empirical test of group threat- and intergroup contact theory. *Social Science Research*, 39, 285–295.

Sidanius, J & Veniegas, RC (2000) Gender and race discrimination: the interactive nature of disadvantage. In: S. Oskamp & N. J. Mahwah (Eds.), *Reducing prejudice and discrimination*. Mahwah, NJ: Erlbaum, pp. 47–69.

Stephan, WG (1987) The contact hypothesis in intergroup relations. In: C. Hendrick (Ed.), *Review of personality and social psychology: group processes and intergroup relations*. Newbury Park, CA: Sage, pp. 13–40.

Sutela, H & Larja, L (2015) Maahanmuuton syyt: Yli puolet Suomen ulkomaalaistaustaisista muuttanut maahan perhesyistä [Reasons for immigration: more than half of Finland's people with a foreign background have moved to the country for family reasons]. T. Nieminen, H. Sutela & U. Hannula (Eds.), *Ulkomaista syntyperaa olevien tyo ja hyvinvointi Suomessa 2014 [Work and well-being of people of foreign origin in Finland in 2014]*. Helsinki: Tilastokeskus, Terveyden ja hyvinvoinnin laitos ja Työterveyslaitos, pp. 15–26.

Thijssen, L, Coenders, M & Lancee, B (2021) Is there evidence for statistical discrimination against ethnic minorities in hiring? Evidence from a cross-national field experiment. *Social Science Research*, 93, 102482.

Triana, M, García, MF & Colella, A (2010) Managing diversity: how organizational efforts to support diversity moderate the effects of perceived racial discrimination on affective commitment. *Personnel Psychology*, 63, 817–843.

Tuomaala, M (2010) *Työvoiman hankinta toimipaikoissa vuonna* 2009. *TEM-analyyseja 22/2010 [Procurement of labour at sites in 2009. Ministry of Employment and the Economy analyses 22/2010]. Työ- ja elinkeinoministeriö*. Accessed 9.4.2021. Available: https://julkaisut.valtioneuvosto.fi/handle/10024/162726

Verkuyten, M & Kinket, B (2000) Social distances in a multi ethnic society: the ethnic hierarchy among Dutch preadolescents. Social Psychology Quarterly, 63(1), 75–85.

Vernby, K & Dancygier, R (2019) Can immigrants counteract employer discrimination? A factorial field experiment reveals the immutability of ethnic hierarchies. *Plos One*, 14(7), e0218044.

Weichselbaumer, D (2017) Discrimination against migrant job applicants in Austria: an experimental study. *German Economic Review*, 18(2), 237–265.

Zschirnt, E (2019) Evidence of hiring discrimination against the second generation: results from a correspondence test in the Swiss labour market. *Journal of International Migration and Integration*, 21, 563–585 https://doi.org/10.1007/s12134-019-00664-1.