When considering hiring discrimination, scientific research typically considers 1 applicant characteristic at a time (such as the applicant’s gender or ethnicity), despite that applicants belong to various social groups (e.g., being a woman and belonging to an ethnic minority group). Moreover, the type of job one is applying for might further activate/inhibit stereotypical ideas about an applicant’s ‘fit’ into that job position. The overall goal of this study was to investigate “double jeopardy” against Maghreb/Arab minority female applicants when they applied for a high-cognitive demanding job. Maghreb/Arabs are one of the largest ethnic minority groups in Belgium (where this study was conducted), who also suffer low labor market outcomes compared with other ethnic minorities and their native/Belgian counterparts. An experimental study was designed where 214 native/Belgian human resources (HR) professionals evaluated resumés of native/Belgian and equally qualified Maghreb/Arab applicants (female/male), who applied for either a high-cognitive demanding job (manager) or a low-cognitive demanding job (clerk). Our study shows indeed a double jeopardy problem regarding Maghreb/Arab female applicants when they applied for the high-cognitive demanding job but not so when they applied for the low-cognitive demanding job. Given that all applicants were equally qualified for the job positions studied, HR professionals’ job suitability perceptions seemed to be affected by job-irrelevant factors, namely applicants’ multiple group status. Yet, the type of job one was applying for seemed to trigger this. In sum, our study findings highlight the need for considering gender discrimination from a much more complex perspective, thereby taking into account other minority characteristics (like ethnicity) and job characteristics (like cognitive demands). This might better mirror reality and deepen our understanding of hiring discrimination in order to avert it.

Studies on hiring discrimination typically consider 1 diversity dimension at a time. Building on a multiple categorization and cognitive matching perspective, this study investigated how applicants’ gender intersects with other status characteristics (ethnicity) and cognitive job demands for a better understanding of gender discrimination in resumé screening. An experimental study among 214 Belgian human resources professionals showed that a Maghreb/Arab female applicant received lower job suitability ratings compared with equally qualified native/Belgian female and Maghreb/Arab male applicants when they applied for a high-cognitive demanding job. No differences were found when they applied for a low-cognitive demanding job. Study findings point to the complexity of gender discrimination in hiring (i.e., resumé screening) as double jeopardy of ethnic minority women (i.e., Maghreb/Arab) may also depend on the type of job (i.e., cognitive demanding or not) one is applying for. We conclude with a critical reflection on findings, future research opportunities and implications for practice, like anonymous resumé screening.

Keywords: gender discrimination, ethnic discrimination, multiple categorization, personnel selection

Supplemental materials: http://dx.doi.org/10.1037/arc0000061.supp

Data repository: http://dx.doi.org/10.3886/ICPSR37286.v1
While there is a great deal of research in the area of hiring discrimination toward applicant characteristics, studies typically consider one applicant characteristic at a time, like gender. Applicants, however, have multiple social identities as they belong to multiple social groups and recruiters do not consider social group information in isolation. Although many researchers have called for a reconsideration of models that treat members of a single social group (Else-Quest & Hyde, 2016a; Sawyer, 2010; Sawyer, Salter, & Thoroughgood, 2013), there has been relatively little research on multiple category membership effects, particularly in hiring contexts (Derous, Ryan, & Serlie, 2015; Kulik, Roberson, & Perry, 2007). The first goal of the present study, therefore, was to investigate intersectional effects of applicants’ gender with ethnicity information on hiring discrimination.

Social categorization effects, however, do not prevail in a vacuum and might be affected by contextual factors, like the particular job one is applying for (i.e., cognitive matching; Koch, D’Mello, & Sackett, 2015; Kulik et al., 2007; Perry, 1994). Typically, studies that investigated cognitive matching (i.e., person-in-job matches) also focused on one personal characteristic at a time (like gender or ethnicity). Moreover, whether job characteristics activate or inhibit multiple category membership effects has been largely ignored in the hiring discrimination literature. Hence, as a second goal, we provide a test of whether and how social group characteristics (i.e., cues referring to applicants’ gender and ethnicity) interact with job characteristics in affecting hiring decisions, thereby addressing earlier calls to study the influence of context on multiple categorization effects in hiring (Kulik et al., 2007). We particularly focus on cognitive job demands, that is, the degree a job calls for a greater expenditure of cognitive resources as well as for training/education. This is a relevant job characteristic for gender/ethnic discrimination that has however not been extensively investigated till today (Derous et al., 2015).

This study also contributes to the hiring discrimination literature in several other ways. First, when studying intersectional effects of gender with ethnicity, we particularly focus on Maghreb/Arab applicants in a Western European country (i.e., Belgium), an ethnic minority group that remains relatively absent in the international literature on hiring discrimination when compared with other ethnic minority groups. Second, this study focuses on initial applicant assessment at the resumé-screening stage, the latter being much less investigated than the adverse impact of several other assessment tools in personnel selection (like cognitive ability testing; personality tests; see Derous & Ryan, 2018). Finally, our study also differs from many other studies on hiring discrimination that used student raters by involving a sample of actual professional recruiters.

In the following text, we first illustrate why resumé screening is vulnerable to ethnic and gender discrimination. We subsequently consider how indicators of applicants’ social group membership (i.e., gender, ethnicity) on resumés might intersect with cognitive job demands, thereby integrating theoretical work on double jeopardy and cognitive matching.

**Discrimination in Resumé Screening**

Resumés are worldwide seen as one of the most frequently used tools to initially screen applicants’ abilities, skills, and personality (Burns, Christiansen, Morris, Periard, & Coaster, 2014), but recruiters may also infer status characteristics (like gender and ethnicity) in both direct and indirect ways from resumé items like applicants’ names and affiliations. Models of impression formation (Fiske, Lin, & Neuberg, 1999) suggest resumé screening to be vulnerable to categorization because of the limited amount of personalized information that is exchanged on the basis of a one- or two-page resumé. Moreover, when limited individualized information is available, category-based information processing may occur automatically and be particularly strong, hence making resumé screening highly vulnerable to hiring biases (Derous & Ryan, 2018).

Gender and ethnicity are two different status characteristics (Berger, 1977) whose respective states (female vs. male; ethnic minority vs. ethnic majority) may trigger different work-related expectations and may induce biased decision making in hiring. A recently conducted meta-analysis on ethnic discrimination in resumé screening showed that on average ethnic minority applicants had to write around 50% more applications to be invited for a job interview when compared with their ethnic majority counterparts (Zschirnt & Ruedin, 2016). This meta-analysis summarized findings of 738 correspondence audits (42 separate studies) conducted in between 1990 and 2015 in 18 different OECD (Organisation for Economic Co-operation and Development) countries around the world, looking at over 20 different ethnic minority groups. On the other hand, occupational segregation seems to be larger between men and women than between ethnic minorities and majorities and gender discrimination has been put forward as one potential explanation (Riach & Rich, 2006). Yet, whereas much consensus exists about ethnic discrimination in hiring and resumé screening in particular, effects of applicants’ gender on hiring discrimination are less clear, with some meta-analyses, systematic literature reviews, and correspondence audit studies favoring men over women (e.g., Azmat & Petrongolo, 2014; Koch et al., 2015; Riach & Rich, 2006), others showing no gender discrimination at all (e.g., Carlsson, 2011), or even positive effects favoring women over men (e.g., Blommaert, Coenders, & van Tubergen, 2014; Booth & Leigh, 2010; Sidanius & Veniegas, 2000). Hence, empirical evidence seems more unequivocal for ethnic discrimination than for gender discrimination if status characteristics are considered in isolation (i.e., only gender or ethnicity effects; Blommaert et al., 2014). Applicants, however, belong to multiple social categories and their status characteristics may intersect in affecting hiring discrimination, as we discuss next.

**Intersectional Effects of Gender With Ethnicity**

Although information processing based on social category information has been well documented in resumé screening, studies typically do not consider multiple dimensions in conjunction (Kulik et al., 2007). Many studies on gender discrimination in resumé screening, for instance, investigated isolated effects of gender (e.g., Azmat & Petrongolo, 2014; Blommaert et al., 2014), hence ignoring potential intersectional effects with other social dimensions, like applicants’ ethnicity. The notion of intersectionality refers to individuals’ multiple categorization and specifically assumes that individuals are characterized simultaneously by multiple social categories that (1) are interconnected, (2) embed a dimension of inequality and/or power, and (3) are as much a property of the individual as the individual’s social context he or she inhabits (Else-Quest & Hyde, 2016a).

Work is still segregated along both gender and ethnicity lines, but debate exists as to whether and how gender intersects with ethnicity in explaining work-related outcomes (Cleveland, Vescio, & Barnes-Farrell, 2005). According to the ethnic prominence model (Levin, Sinclair, Veniegas, & Taylor, 2002), ethnicity would be the most influential factor in explaining work-related outcomes like recruiters’ hiring decisions. However, the ethnic prominence model has been

\footnote{Note that Koch et al. (2015) conducted a meta-analysis on gender bias in experimental simulations (N = 111 studies) of different types of employment decisions that were not restricted to hiring.}
challenged by models that posit that other status characteristics, such as one’s gender, may play moderating roles. One such well-known model, is the double jeopardy model (Browne & Misra, 2003; Nelson & Probst, 2004). According to this model, ethnic minority women may have more of an overall hardship compared with ethnic minority men and majority men/women when applying for jobs (Bendick, Jackson, & Reinoso, 1994; Browne & Misra, 2003). For instance, the ENAR’s 2012/2013 shadow report on racism and employment discrimination in Europe showed that for migrants from countries that are not part of the European Union (EU), and particularly so for women with a minority or migrant background, discrimination is a major obstacle when looking for a job (Lamberts, Ode, & Witkamp, 2014).

Because the present study is conducted in the context of the Belgian labor market, we focus here on Maghreb/Arab minorities, who are currently the largest ethnic minority group in Belgium that experience the highest unemployment rates as compared with native/Belgian minorities and ethnic minorities from other EU-countries (Pina, Corluy, & Verbiest, 2015; StatBel, 2017). Particularly Maghreb/Arab women seem to suffer lower labor market outcomes with only 30% having a job compared with 70% of native/Belgian women (Federale Overheidsdienst Werkgelegenheid, 2017). Maghreb/Arab women’s labor market participation seems also to be lower than that of Maghreb/Arab men (Baert, Heiland, & Korenman, 2016; Corluy, Haemels, Marx, & Verbiest, 2015; StatBel, 2017). Human capital factors such as lower educational attainments, language proficiency and cultural differences in attitudes toward employment and careers (Baert & Cockx, 2013) have been put forward as explanations for Maghreb/Arab women’s overall weaker labor market position.

Whereas human capital is one important indicator of one’s labor market position, hiring discrimination has also been suggested to explain marked differences in labor market outcomes between minorities and majorities. For instance, international studies (e.g., Ghuman & Jackson, 2010) have shown that Maghreb/Arab women who wear (or are expected to wear) ethnic attire may experience more negative interpersonal reactions from recruiters/potential employers, and this has also been evidenced in the Belgian labor market (Belgium 2016 Human Rights Report; Bureau of Democracy Human Rights and Labor, 2017; Easat-Daas, 2017). Despite European/Belgian antidiscrimination legislation, Belgian employers seem in general reluctant to hire Maghreb/Arab women because of explicit signals of their ethnic group membership, like headscarves (Easat-Daas, 2017). Cues of stigmatized group membership may attract raters’ attention and dominate perceptions, which in turn may trigger and lead to prejudiced reactions in decision makers (e.g., King & Ahmad, 2010). Based on these findings and because of their double outgroup status on the Belgian labor market, we expected Maghreb/Arab women applicants to be vulnerable to double jeopardy.

Hypothesis 1: Gender and ethnicity intersect such that Maghreb/Arab female applicants receive lower job suitability ratings than equally qualified Maghreb/Arab male and native/Belgian (female/male) applicants.

Cognitive Job Demands

Perceptions of human capital factors in combination with explicit signals of ethnic group membership (such as ethnic attire) may negatively impact Maghreb/Arab women’s employment chances (Gloireux & Laurijssen, 2009). This may be particularly the case early in hiring procedures (like résumé screening) when only limited personalized information about a candidate is available, thereby triggering social categorization. Moreover, as suggested by Kulik et al. (2007), the particular job context might further activate/inhibit stereotypical ideas about candidates and aggravate social categorization effects. The well-known theory on cognitive matching (Perry, 1994) has been applied to explain moderating effects of job characteristics on employment discrimination (like hiring discrimination). Cognitive matching specifically suggests that raters may represent information about jobs and job incumbents in person-in-job prototypes: Members of certain social groups who (are perceived to) fit the prototypical job incumbent are evaluated more favorably than those who do not (are perceived to not) fit the prototypical job incumbent (Heilman, 1983; Perry, Davis-Blake, & Kulik, 1994). Hence, hiring discrimination may depend on the degree applicant stereotypes are perceived to be congruent with occupational stereotypes.

Job characteristics often investigated in the context of cognitive matching relate to the gendered nature of jobs (or whether a job is perceived as female-typed or male-typed; e.g., Davison & Burke, 2000), with a pro-female bias in female-dominated positions and a pro-male bias in male-dominated positions. However, such symmetric person-in-job matching effects seem not to be unequivocal. Albert, Escot, and Fernández-Cornejo (2011), for instance, showed similar callbacks of male and female applicants in both male-dominated and gender-neutral occupations, which they explained by the overall lower job demands that were requested and a similar finding has also been reported by Deroue et al. (2015). Cognitive job demands refer to the degree a job calls for greater expenditure of job holders’ mental energy and resources that require cognitive ability as well as skills and training on the part of the job incumbent (Gottfredson, 2002).

Following-up on these findings, we aimed at investigating cognitive job demands, which is a job characteristic that remained somewhat underresearched but might be particularly relevant when investigating intersectional effects of gender with ethnic background. Specifically, in the country where this study was conducted (i.e., Belgium), ethnic minorities with a non-Western origin (like immigrants from the Maghreb countries), are still more often either unemployed or employed in less cognitive demanding job positions, like domestic, service-related occupations, and this particularly pertains to women (European Union, 2017).

According to contemporary models of discrimination (Dovidio & Gaertner, 2000), hiring discrimination will particularly be revealed in situations where applicants are perceived to only moderately fit the job position for which they apply. A correspondence audit study of Arai, Bursell, and Nekby (2016), indeed showed that double jeopardy against Arab female applicants diminished when their CVs were enhanced with more relevant work experience. In Belgium, Maghreb/Arab applicants (especially women) are generally lower educated than their ethnic majority counterparts (Schoonvaere, 2014) and more women than men are still employed at lower hierarchical levels than are their equally qualified male counterparts (European Union, 2017). Hence, stereotypical perceptions of Maghreb/Arab women competencies might steer-up perceptions of person-in-job mismatches in case they apply for high-cognitive demanding job positions but might lead to perceptions of person-in-job matches in case they apply for low-cognitive demanding jobs. Specifically, because high-cognitive de-

2 Note that there is an ongoing discussion in the literature about whether hiring discrimination is stronger for ethnic minority women than for their male counterparts. Several correspondence audit studies, for instance, show more evidence for the subordinate male target hypothesis, stating that ethnic minority men instead of women suffer most hiring discrimination (Sidanius & Pratto, 1999). However, because of evidence for double jeopardy against Maghreb/Arab women in the Belgian context, we proceeded formulating this hypothesis. This is not to say that Maghreb/Arab men are not discriminated against in Belgium.
manding jobs require high ability/educational efforts, any negative stereotypes/performance expectations about the Maghreb/Arab female applicant’s educational background may be strengthened in such jobs, leading to lower job suitability ratings compared with equally qualified male and native/Belgian counterparts. However, because low-cognitive demanding jobs do not require high ability/educational efforts, low demanding jobs may alleviate any negative effect on Maghreb/Arab women’s perceived job suitability when they apply for low-cognitive demanding positions in organizations. Hence based on predictions from cognitive matching models, we expected double jeopardy for Maghreb/Arab women on the Belgian labor market in such a way that:

Hypothesis 2: Job suitability ratings of female, Maghreb/Arab minority applicants will be lower than those of Maghreb/Arab male and native/Belgian (female/male) applicants when they apply for a high-cognitive demanding job position (Hypothesis 2a) but will be equal to those of Maghreb/Arab male and native/Belgian (female/male) applicants when they apply for a low-cognitive demanding job position (Hypothesis 2b).

Method

Participants

Participants were human resources (HR) professionals who were identified via member lists of several Belgian/Flemish HR organizations, via organizations that provide internships in HRM and researchers’ own professional networks, and who all required professional experience in recruiting applicants to be eligible to participate in this study.3 Proceeding in this way, a total of 1,550 HR professionals were emailed an invitation to participate in a study on the development of an in-basket for HR professionals (cover story). The response rate was 15.48% (N = 240). After having excluded 10 participants who did not indicate their recruiting experiences and 16 non-native participants, the final sample consisted of 214 HR professionals (100% native). Participants’ mean age was 37.69 years (SD = 9.25), with 59.6% female participants, and 9.37 years (SD = 7.23) of professional recruiting experience. Power calculations (G*Power v3.1.9.2; Faul, Erdfelder, Lang, & Buchner, 2007), targeting median effect sizes with a statistical power of .95 and a p-level of .05, indicated that about 210 participants were needed for the within-subjects/within–between-subjects effects. Given that we were interested in intersectional effects of status with job characteristics, the sample size of 214 was considered adequate.

Design and Measures

The design consisted of a 2 (gender: women vs. men) × 2 (ethnicity: native/Belgian vs. Maghreb/Arab) × 2 (cognitive job demands: high vs. low) mixed-factor design.4 Gender and ethnicity were measured within-subjects. Applicants’ ethnicity was manipulated through names. Gender (female vs. male) was explicitly mentioned on the resumé and age of the applicants was constant (32 to 33 years old). Cognitive job demands were measured between-subjects and manipulated through the type of job presented (see the Development of Experimental Materials and Pilot Studies section). All other resumé information was kept equal/constant: Applicants were equally qualified for the job positions. The dependent variable was job suitability, which was measured with a three-item Likert-type scale, adapted from Derous, Nguyen, and Ryan (2009). The three items are as follows: “Given all information you read about this applicant, how suitable do you believe this applicant is for this job?” (1 = not suitable at all, 7 = very suitable), “How likely is it that you would invite this applicant for a job interview?” (1 = very unlikely, 7 = very likely), “What is your general impression about the applicant’s job suitability?” (1 = very negative, 7 = very positive). Given the sensitive nature of our study topic (i.e., hiring discrimination), we also administered 16 items of the Social Desirability Scale–17 (SDS-17; Stöber, 2001) to check for potential relations between participants’ social desirable responding and job suitability ratings. Note that we excluded one item from the original 17-items measure, following suggestions from Stöber (2001). Because the SDS-17 captures impression management and is sensitivity to social-desirability provoking instructions (also in the context of job applications; see Stöber, 2001), a significant relation between this measure and the job suitability ratings might indicate that respondents noticed the study goals and responded in a social desirable way, which would jeopardize results. A sample item of the SDS-17 is “I always stay friendly and courteous with other people, even when I am stressed out.” (1 = disagree, 2 = agree). (Note: For the final analyses, we recoded the scale into 0 = disagree and 1 = agree and calculated a sum score per participant, as done in the original article of Stöber, 2001). Manipulation checks of cognitive job demands consisted of two items (e.g., “How cognitive demanding is this job?” 1 = not at all, 9 = very much), whereas manipulation checks of applicants’ gender (female vs. male) and ethnicity (native/Belgian vs. Maghreb/Arab) were evaluated using single items. We finally asked for HR professionals’ gender, age, ethnicity, and professional recruiting experience.

Development of Experimental Materials and Pilot Studies

We conducted several pilots to develop and test our study materials: We developed and tested occupations on several job characteristics (cognitive job demands, external client contact, gender-nature of jobs; Pilot 1), we checked perceived ethnicity of first/last names of men and women (native/Belgian vs. Maghreb/Arab; Pilot 2), we investigated age as subsumed from birthdates (Pilot 3), we assessed the attractiveness/equivalence of the layout of resumés (Pilot 4), we checked the relevance/equivalence of educational qualifications and work experiences, and the equivalence of extracurricular activities (Pilot 5). From the pilot test results (N = 85), we selected two equivalent clerical and two equivalent managerial jobs with high amounts of external client contact, two native/Belgian last names (i.e., Vermeulen and Smets), two native/Belgian, male forenames (i.e., Wout and Maarten) and female forenames (i.e., Femke and Fien). We did the same for Maghreb/Arab last names (i.e., El Bouch and Yachou), female forenames (i.e., Fatiha and Aisha), and male forenames (i.e., Anouar and Nabil). See the online supplemental material for a more detailed overview of the pilot studies.

Procedure

Participants received an e-mail in which we explained the procedure and voluntary nature of the study. We provided participants a context to make the focus on discrimination less obvious. Specifically,

3 The research ethics committee declares this type of study exempt.

4 This study is part of a larger data collection project in which we also considered applicants’ age effects to study multiple categorization effects of gender with ethnicity and age. Upon the suggestion of reviewers to simplify our design, we revised the article to report only about intersectional effects of gender with ethnicity and cognitive job demands. However, interested readers can contact the first author to get more information about the study results that also considered age effects (young vs. old).
we asked participants to help us develop an in-basket for future HR professionals (cover story). Participants were not compensated for their participation to the study. After participants gave their informed consent, we explained that one of the in-basket exercises consisted of screening job applicants’ résumés for a job vacancy and we asked them to participate in a pilot version of this exercise. Particularly, participants were randomly presented with a job advertisement and four résumés for a high-cognitive demanding position (manager in a financial bank) or a low-cognitive demanding position (counter clerk in a financial bank). Participants read and rated the job vacancies (manipulation check). Subsequently, they reviewed and rated the applicants’ résumés on job suitability. We thereafter administered manipulation checks (résumés) and measured social desirability and biographic data of participants. Finally, participants could write down any remarks on this study.

Results

Preliminary Analyses

Before testing the hypotheses, data and correlations were inspected, and a series of randomization checks of participants’ demographies and manipulation checks of résumés (status characteristics) and job vacancies (cognitive job demands) were conducted. First, probability plots, skewness, and kurtosis showed that distributions were approximately normal for each of the résumés (the assumption of sphericity is met in cases where variables only have two levels, as in the present study). Second, randomization checks showed that conditions were equivalent in terms of the gender, $\chi^2(1) = .04, p = .85$; recruitment experience, $F(1, 212) = 1.12, p = .29$; age, $F(1, 211) = .94, p = .33$, and social desirability, $F(1, 212) = 1.56, p = .29$. Third, all participants perceived the applicants’ gender and ethnicity, as intended (as evidence by a series of chi-squared analyses) and they also perceived cognitive job demands as intended ($M_{\text{clerk}} = 4.17, SD_{\text{clerk}} = 1.20; M_{\text{manager}} = 5.91, SD_{\text{manager}} = 1.11$). $F(1, 212) = 112.66, p < .001$. Finally, inspection of the correlation table showed that job suitability ratings did not relate significantly to social desirability ratings, participants’ recruiting experience, age, and gender (see Table 1).

Hypotheses

A series of mixed analyses of variance (ANOVAs) and planned comparisons were conducted to test the hypotheses: Table 2 presents means per experimental condition and Table 3 presents the ANOVA results. Hypothesis 1 expected lower job suitability ratings for the Maghreb/Arab women compared with the native/Belgian women, $t(213) = -2.43, p = .016$, but not so when compared with native/Belgian men, $t(213) = 1.03, p = .30$, and native/Belgian men, $t(213) = .77, p = .44$. Hypothesis 1, therefore, was not supported.

Hypothesis 2 further expected lower job suitability ratings when Maghreb/Arab women applied for a high-cognitive demanding job (Hypothesis 2a) compared with Maghreb/Arab men and native/Belgian applicants but less so when they applied for a low-demanding job (Hypothesis 2b). The three-way interaction of gender and ethnicity and cognitive job demands was significant, $F(1, 212) = 31.62, p = .00$. For the high-cognitive demanding job position, a priori contrasts using pairwise $t$ tests (with $\alpha = .0167$ to control for family wise error) showed that the Maghreb/Arab female applicant received significantly lower job suitability ratings than the native/Belgian female applicant, $t(83) = 3.03, p = .003$, and the Maghreb/Arab male applicant, $t(84) = 2.99, p = .004$, but not compared with the native/Belgian male applicant, $t(84) = .30, p = .76$. Therefore, Hypothesis 2a was partially supported. For the low-cognitive demanding job position, a priori contrasts showed no significant differences between the Maghreb/Arab female applicants and the Maghreb/Arab male applicant, $t(128) = -.368, p = .71$, the native/Belgian female applicant, $t(128) = -1.95, p = .05$, and the native/Belgian male applicant, $t(128) = .93, p = .35$ (see Figure 1), thereby supporting Hypothesis 2b.

Discussion

Although multiple categorization has received considerable attention in the psychological literature (e.g., Cole, 2009; Rosenthal, 2016), it has neither been extensively applied in organizational psychology research (Jackson, Joshi, & Erhardt, 2003) nor in personnel selection studies in particular (Kulik et al., 2007). Furthermore, the moderating role of job contextual characteristics has also largely been overlooked. Therefore, and building on predictions from both double jeopardy and cognitive matching, this study aimed to explore intersectional effects of applicants’ gender with ethnicity and cognitive job demands. In doing so, we particularly focused on hiring discrimination at the résumé-screening stage.

In line with the double jeopardy hypothesis (Berdahl & Moore, 2006), we expected most hiring discrimination against Maghreb/Arab women on the Belgian labor market. Although Maghreb/Arab women were rated lower than Maghreb/Arab men, no significant differences were found with ethnic majority men and women, hence no support was found for the double jeopardy hypothesis when job characteristics were not considered. The intersectional effect of gender with ethnicity, however, did differ for the low versus high-cognitive demanding job conditions. First, in the high-cognitive demanding job condition (managers), Maghreb/Arab female applicants received together with native/Belgian male applicants the lowest job suitability scores of all four applicant profiles. Maghreb/Arab women may have been perceived to only moderately fit the high-cognitive demanding position due to stereotypical ideas about their overall lower labor market participation and type of low-cognitive demanding, domestic jobs they are typically employed in if being active on the labor market (European Union, 2017). Yet, the service-related aspect of the high-cognitive demanding job could also have played a role and have strengthened perceptions of the Maghreb/Arab female applicant’s “person-in-job match” due to stereotypical ideas about Maghreb/Arab women’s more compliant and service-related orienta-

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Descriptives, Intercorrelations, and Internal Consistencies Among Study Variables</th>
</tr>
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<tbody>
<tr>
<td>Variable</td>
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<td>1. Job suitability</td>
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<tr>
<td>2. Social desirability</td>
<td>6.55</td>
</tr>
<tr>
<td>3. Recruiting experience</td>
<td>9.33</td>
</tr>
<tr>
<td>4. Age of respondent</td>
<td>37.69</td>
</tr>
<tr>
<td>5. Gender$^*$ of respondent</td>
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</tr>
</tbody>
</table>

$^*$ Spearman correlations. Gender of the respondent: 1 = male, 2 = female. ** $p < .05$, *** $p < .01$. 

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Note. Figures on the diagonal refer to the respective Cronbach alpha coefficients.
Results of Mixed Analyses of Variance for Job Suitability (Hypotheses 1 and 2)

Table 3

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
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<tbody>
<tr>
<td>Between subjects</td>
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<td></td>
</tr>
<tr>
<td>Cognitive job demands (A)</td>
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<td>.00</td>
<td>.07</td>
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<tr>
<td>Error (A)</td>
<td>212</td>
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<td></td>
<td></td>
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<tr>
<td>Within subjects</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Gender (B)</td>
<td>1</td>
<td>2.33</td>
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<td>.01</td>
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<td>Demands (A) × Gender (B)</td>
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<tr>
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<tr>
<td>Ethnicity (C)</td>
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<td>.00</td>
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<tr>
<td>Error (B × C)</td>
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</table>

Note. Values in parentheses represent mean square errors.
*** p < .01.
search is needed to investigate raters’ ‘job-in-person’ stereotypes and attribution processes when multiple categorization and job characteristics are considered for a better understanding of underlying explanatory mechanisms.

In sum, our findings suggest that job demands can shed a different light on intersectional effects of applicants’ status characteristics (gender and ethnicity) on hiring discrimination. Yet, different factors might trigger particular ‘person-in-job matching’ expectations and could have covaried with job cognitive complexity in a subtle way. More specifically, other job characteristics than cognitive demands (like external client contact, gender segregation, power hierarchy), other types of industries than finance (like lower status industries), and various organizational policies (like the implementation of diversity initiatives), were not empirically explored here and might inspire further research. This brings us to the following section in which we discuss contributions, limitations, and further research opportunities.

Contributions, Limitations, and Further Research

As with any study, there are several strengths as well as limitations to be mentioned. First, multiple categorization is a topic that remains relatively underresearched in the hiring discrimination literature and those that considered this, looked at the intersection of two status characteristics at most, like gender and ethnicity. Even less is known about interactions with applicants’ age, let alone gender by ethnicity by age interactions (i.e., the so-called ‘big three of diversity’). We suggest further research to explore how different status characteristics jointly operate in a resumé-screening context. Stereotyping, however, is not always manifested as discrimination because of a variety of factors, among which recruiter characteristics. Whereas no effects of evaluators’ social desirability and demographics (gender, age) were found in this study (which is in line with other studies; Davison & Burke, 2000), research could explore other individual difference factors, such as HR professionals’ prejudiced attitudes, openness to diversity, and stereotype endorsement on person-in-job matching. This might be another important step in unraveling underlying mechanisms of intersectionality and cognitive matching (Kulik et al., 2007).

Second, incorporating an intersectional approach might deepen and enrich our understanding of hiring discrimination. In doing so, we employed an experimental (quantitative) analysis of intersectionality, which is a legitimate method (Shields, 2008) but also limited in that status characteristics are considered as independent from each other. Whereas independence is warranted from a methodological point of view, some (e.g., Shields, 2008) argued that qualitative methods might be more compatible with intersectional approaches than quantitative methods to address the complex, intertwined nature of status characteristics. Although experimental approaches remain useful and are advocated in studies on intersectionality (Else-Quest & Hyde, 2016b), further research could complement quantitative studies with more qualitative-oriented research methodologies.

Third, many studies on resumé screening are conducted in the lab among undergraduates. A strength of our study is that we recruited real HR professionals, who all had relevant recruiting experiences. Yet, as is typically done in psychological studies on hiring discrimination, we employed convenience sampling which might limit the representativeness of our findings. Research in psychology might strive toward the use of stratified samples to address this issue (Else-Quest & Hyde, 2016b).

Further, the within-subjects nature of our experimental design as regards applicants’ status characteristics is realistic (mirroring real-world hiring) but has been criticized to inflate hiring discrimination (Landy, 2008). Given that we counterbalanced the presentation of resumés and since we also noticed nonsignificant findings, we believe inflation of hiring discrimination was rather unlikely. Note that whereas the power of our study was sufficient, effect sizes of study findings were overall small but comparable to previous studies in which no or small effect sizes were found when ethnicity was crossed with gender and job characteristics (i.e., with amount of client contact in a low vs. high demanding job position, respectively, see Derous et al., 2015). Yet, any significant effect, whether large or small, might signal unethical and unlawful hiring practices that may have large consequences for both individuals and organizations (Martell, Lane, & Emrich, 1996). However, as it might be difficult to find reliable effects in multifactorial designs with limited sample sizes, future research might replicate and extend our study findings.

Finally, when investigating intersectional effects in hiring discrimination, we considered Maghreb/Arab applicants, which is still an underinvestigated group when compared with other ethnic minority groups (like Blacks, Hispanics, Asians) that have been the subject of international research (Colella, Hebl, & King, 2017). At the same time, this points to a study limitation, as study findings are restricted to one (though highly relevant) ethnic minority group in the context of one Western European country. More research is needed to determine how generalizable study findings are to other (ethnic) minority groups, occupations, labor markets, and societies. We specifically suggest further research to unravel factors that might cause double jeopardy against ethnic minority men versus women as evidence for both has been documented in the literature and there seems to be a kind of ‘competition’ between both hypotheses. For instance, Arau et al. (2016) (see also Sidanius & Pratto, 1999) showed that overall net discrimination might be higher for Arab men than women in the Swedish labor market as Arab men were still experiencing hiring discrimination with enhanced resumés (i.e., including more relevant work experiences). These authors concluded that Arab men/women might suffer different stereotypes that may play out differently when recruiters judge their resumés (see also Browne & Misra, 2003). It can be concluded that many factors could point into one versus the other direction, which might be interesting to further explore in order to set-up and implement interventions to avert discrimination in the resumé-screening stage in a more effective way (Derous & Ryan, 2018).

Practical Implications

As societies are becoming increasingly diverse and some majority group members might feel threatened by this, organizational initiatives should be installed to counter hiring discrimination. A multiple categorization perspective emphasizes the importance of considering applicants’ complex identity within a social, structured context. Making more information available about an individual and considering multiple criteria, might reduce hiring biases (Fiske et al., 1999), also at the resumé screening stage.

One practical way to accomplish this, might be through training recruiters in generating alternative ways to recategorize and evaluate applicants (Devine, Forscher, Austin, & Cox, 2012). The use of structured and competency-based resumé screening might be another way to reduce social category salience. That is, perceptions of individuals’ competence may alleviate categorization effects if one stresses work-related achievements and educational attainments that are relevant for the job opening. Competition-based screening has already been proven to reduce judgmental biases in personnel selection, for instance, in the context of the job interview and the assessment/development center (Woodruff, 2011). Although individualization is expected to reduce categorization (and hence, biasing) effects in resumé screening, some have proposed anonymous resumé screening to avert hiring discrimination (Furtmueller, Wilderom, & Muller, 2010). Anonymous resumé screening aims to combat hiring discrimination by concealing personal identifiers that are considered not to be job relevant (like the applicant’s gender and ethnic-sounding name).
Although this tool is promoted by several Belgian policymakers, its effectiveness is still much debated: Some studies found promising (debiasing) effects (Kang, DeCelles, Tilcsik, & Jun, 2016), whereas others showed no or even negative effects (Hiscox et al., 2017). Even if explicit markers of applicants’ social group membership (like ethnic-sounding names) are blotted, recruiters may still infer applicants’ social group membership via implicit, subtle markers (like affiliations; Derous & Decoster, 2017). Moreover, our study results also show that hiring discrimination (e.g., double jeopardy) might depend on the particular job context that might facilitate or inhibit biasing effects (Kulik et al., 2007). For instance, highest job suitability ratings were found for Maghreb/Arab male applicants who applied for a high-cognitive demanding job position. This raises the question how far one should go in blotting résumé information to avert hiring discrimination at the résumé-screening stage. Interestingly, by advocating anonymous résumé-screening, practitioners tend to move toward less instead of more individualization, which might lead to more instead of less intergroup biases according to impression formation models (Fiske et al., 1999).

Conclusion

According to the Belgium 2016 Human Rights Report (Bureau of Democracy Human Rights and Labor, 2017), employment discrimination against women is still one of the major human rights problems in Belgium, despite several governmental initiatives aimed to avert discrimination. Paying attention to the adverse impact of the first selection hurdles (like résumé screening) is important as this determines both the quantity and quality of the applicant pool as well as the quality of subsequent assessments. Whereas Belgian governmental bodies continue to promote gender equality, our study findings highlight the need for considering gender discrimination from a more complex and subtle multiple categorization perspective, thereby accounting for job characteristics. Going beyond a main effects approach might better mirror reality and deepen our understanding of hiring discrimination.

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