Which doctors do we trust? A vignette experiment of how gender and ethnicity influence trust

1. Introduction

Human capital is often hypothesized to protect highly educated minority groups from the worst forms of discrimination (Heath and Cheung, 2006; Oikelome and Healy, 2013). Highly educated professionals seem comparatively well integrated in the labor market. These smaller differences have been attributed to less discriminatory preferences on the employer's side, occupational closure, and factors pertaining to the supply and demand of labor force (Drange, 2013; Drange and Helland, 2018). However, international research shows that the perceived discrimination is higher among immigrants with higher education, reflecting a 'paradox of integration' (Steinmann, 2018).

One question that has received considerably less attention in extant scholarship concerns how highly educated immigrants are perceived by their clients (Diaz and Kumar, 2014; Diaz et al., 2014; Drange, 2013). Moreover, extant research concerning discrimination has primarily focused on various forms of avoidance, such as employers not calling back minority applicants (Bertrand and Mullainathan, 2004; Birkelund et al., 2017). As trust is a fundamental component of any functional professional relationship (Freidson, 2001), it is the focus of this study. Although arguably a milder form of discrimination (Allport, 1954), trust is crucial to the decision to cooperate (Brewer, 1999). It is therefore important to understand whether ascribed characteristics influence the extent to which potential clients perceive professionals as trustworthy. For medical professionals, trust is associated with increased satisfaction and continuity of care (Parsons, 1951; Rolfe et al., 2014). Patients with lower levels of trust in a medical professional may be less inclined to follow their advice or even visit GPs, resulting in potentially worse health (Safran et al., 1998).

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This study contributes to the literature by considering the perceived trustworthiness of general practitioners (GPs) in Norway. Medical professionals are a high-status and high-earning group in Norway (Drange, 2013). They are one of the few professional groups where the potential client can choose the practitioner and with which the entire population can interact. As their income is partly dependent on the number of patients, client discrimination may affect their livelihood (Drange, 2013). In recent years, the composition of the professional groups has changed, both in terms of gender, by becoming a gender-balanced occupation from a male-dominated one (Strømme and Hansen, 2017), and in terms of ethnicity, as minority physicians constitute a significant share of the workforce (Statistics Norway, 2018).

Non-Western minorities have worse outcomes in terms of job attainment and income than natives in Scandinavia (Midtbøen, 2016; Tomaskovic-Devey et al., 2015). The magnitude of these differences varies between occupations and sectors. When the labor force is scarce, or employment is conditional on having a specific education and authorization, such as in the health-care sector, immigrants face less hiring discrimination (Midtbøen, 2016). Licenses and authorizations, which both limit the supply of professionals and may signal quality, mitigate some of the inequality in employment processes and in income (Bol and Van de Werfhorst, 2011; Drange and Helland, 2018). Studies focusing on physicians' in-job earnings show that immigrants receive similar or higher earnings compared to majority co-professionals, yet receive lower returns from job changes (Drange, 2013, 2014).

The literature does not point to any major differences in job entry, or unequal in-job outcomes, such as wages, due to gender in the medical profession. More specifically, although some considerable wage differences exist, once selection, experience and position are adjusted for, the remaining wage differences are relatively small in Norway (Barth et al., 2013; Petersen et al., 2010), however, they are still present (Brekke and Mastekaasa, 2008). An interesting question concerning how the juxtaposition of gender and ethnicity may influence the size of the disadvantage groups face remains (Andersson et al., 2012; Brekke and Mastekaasa, 2008). A primary aim of this study is to investigate whether trust in GPs varies with their ethnicity and gender and discuss whether trust discrimination pertains to medical professionals. The question is

investigated using a survey experiment. Respondents receive a brief resume of a general practitioner where the ethnicity and gender of the physician are randomly varied. Norwegian and Pakistani names signal ethnicity and gender. Pakistani names are used as they represent one of the largest non-Western groups (Statistics Norway, 2017). They are one of the first groups to migrate to Norway, in the 1970s, and one of the largest second-generation immigrant groups (Statistics Norway, 2017). Trust in GPs reflects both the stereotypes Pakistani minorities and women face. Pakistani immigrants in Norway are stereotyped similarly to other immigrant groups. They are considered less trustful (scoring lower on being friendly, sincere, good-natured) and less skillful and capable, compared to Norwegians who score high on all these dimensions (Bye et al., 2014). Men also score higher on dimensions related to competence, but not on those related to being friendly, sincere and good-natured (Bye et al., 2014: 471). Professional trust taps into these dimensions and has thus the potential to further our understanding of racialized and gendered identities.

A secondary aim is to investigate whether there is an interaction between the GPs' and respondents' gender and ethnicity. It is important to both theorize and examine empirically interactions between different social statuses, thus, I focus on the co-constitution of different categories of social differentiation and how they may either mitigate or heighten existing bias. In doing so, this study contributes to the existing literature by discussing the relevance of stereotypes, intersectionality (Correll, 2004; Ridgeway and Kricheli-Katz, 2013) and occupational closure theory (Weber, 1978) for explaining variations in trust towards GPs. The results of this study contribute to further our understanding of discriminatory preferences that follow practitioners after navigating the hurdles of employment.

Organization of general practitioners

GPs are part of the primary health care (PHC) system, which is the first link where health complaints are resolved (Kringos et al., 2013). All legal residents, including migrants eligible to stay for six months or more in Norway, are entitled to PHC and are

assigned to a GP. Only around 0.4% of the population do not have a GP (Helsedirektoratet, 2015). This arrangement implies that the GPs' incomes are partly dependent on their reputation and the number of clients, nevertheless a substantial part of their income is a composite of National Insurance reimbursements and copay.

Municipalities are responsible for having enough GPs to cover the needs of the population. People have the right to choose between GPs who have not reached their allowed number of patients or choose to be on a waiting list for a GP who has reached their limit. Individuals can easily change their GP online – up to twice a year – and around 7% of registered individuals do so (Helsedirektoratet, 2015: 10). Around 3% of these changes happen for other reasons than internal moving or because the physician ended their practice – this share is higher than the change rates in England and Denmark (Iversen and Lurås, 2011). The official register contains information on the name, age, address, whether the GP has a special competence and the number of open places on their list. The name, thus, informs the potential patients of the gender and ethnicity of the physician.

Around 20% of all GPs in Norway have an immigrant background (Diaz et al., 2014; Statistics Norway, 2018), and the largest groups are from Asia (including Turkey). In 2015, 35.9% of all immigrant physicians came from either Asia, Africa or Latin America (Statistics Norway, 2018). GPs with a minority background have more open places on their lists, and minority patients tend to be overrepresented on their lists (Diaz et al., 2014). Minority GPs tend to work alone, are younger, and more often have their practices located in rural areas (Diaz et al., 2014). In terms of the type of services provided, there are no notable differences between Norwegian and minority GPs (Sandvik et al., 2012). The share of female GPs has increased from 28.8% in 2001 to 40.9% in 2015 (Helsedirektoratet, 2015). From 2011 to 2015, the proportion of immigrant female GPs from Asia, Africa and Latin America has also increased from 20% to around 26% (Statistics Norway, 2018).

Theoretical perspectives

A growing body of research shows that various types of discrimination are still present in Western Europe (Andersson et al., 2012; McPherson et al., 2001; Midtbøen, 2016). The extant findings indicate that non-Western minorities fare worse than natives (Birkelund et al., 2017; Støren and Wiers-Jenssen, 2010). When accounting for differences in human capital and experience, the most common explanations for these differences are employer discrimination, either due to a lack of information, or stereotyping (Birkelund et al., 2017; Midtbøen, 2016). However, the size of the disadvantages non-Western minorities face varies. Either because their occupation protects them (Drange and Helland, 2018), or differential recognition of credentials may give added benefits to those most resembling the dominant group – white, male (Carter, 2003; Correll, 2004). Although the findings on the topic are mixed (Zschirnt and Ruedin, 2016), some studies do find differences in terms of ethnicity, gender and occupation. When comparing the income trajectories of ethnic minorities to Norwegians, for master's degree graduates of Norwegian universities (including medicine), Brekke and Mastekaasa (2008) find an income gap for men, but not for women. Other factors such as the demand and supply of labor force and occupational closure also influence the disadvantage minorities face (Drange and Helland, 2018; Midtbøen, 2016).

GP is a licensed occupation in Norway requiring a completed medical education, clinical practice under supervision, and good conduct. Additional requirements apply to individuals who have completed their medical education outside Norway. By issuing licenses, which have a signaling value, the authorities guarantee that the professional has the necessary qualifications and competence. Licenses can substitute or null other signals, such as having a minority background (Drange and Helland, 2018). The strong selection into medical education may reinforce a license's signaling value. Admission into medicine is grade based, and only top-tier students are admitted (Strømme and Hansen, 2017). The profession can control the supply of professionals, thus restrict the employers and clients' freedom of choice, which could function as a mechanism with the potential to counteract discrimination (Freidson, 2001). The institutional framework, but also the characteristics of the professionals, give good reasons to expect

small or insignificant differences in trust towards these professionals. The protective benefits of occupational closure may not extend to all members, nor is it implied that members benefit equally from this protection (Weeden, 2002). In-group favoritism and stereotyping may influence how effective the signaling effect of occupational closure is. In-group favoritism entails that individuals value more those belonging to the same group as themselves (McPherson et al., 2001; Pettigrew et al., 2011). A relevant mechanism for in-group favoritism is the development of social norms that lead to favoring in-group members' welfare over that of out-groups' (Everett et al., 2015). This may also lead to expectations of norm fulfillment in the in-group and higher costs of breaching such norms (Fehr and Fischbacher, 2004). In-group favoritism also implies that people tend to be more comfortable, have a more positive view and with, and have more trust in, members of their own group (Grimm et al., 2017; Reskin, 2000). In contrast to occupational closure arguments, in-group favoritism leads to an expectation of differences in trust towards GPs based on in- and out-group identification.

However, both the level of group identification and the perception of groups may mitigate tendencies of in-group favoritism. The majority population might feel itself less of a homogeneous group compared with ethnic minorities (Rogstad, 2000). Visible minorities may feel a stronger need for group association compared to the majority (Midtbøen, 2016; Rogstad, 2006). Minorities could have either faced discrimination, or fear that the majority may engage in discriminatory behavior (Halbert et al., 2006; Williams and Mohammed, 2009). Lower status individuals, understood as minorities and women, tend to have less control over their environment and more likely to enter situations where they might be discriminated against, while this occurs seldom for the majority (Ridgeway and Kricheli-Katz, 2013). Thus, minorities may both be more likely to identify as a group (Giddens, 1990: 245) and to avoid discrimination have more trust in GPs with a similar background to themselves.

It is also important to focus on how multiple systems of inequality work together (Dill and Zinn, 2016; Ridgeway and Kricheli-Katz, 2013). Intersectionality draws attention to how a system of inequality, such as social status, race, or gender, may reinforce or obscure another (Crenshaw, 2018; Ridgeway, 1997; Ridgeway and Kricheli-Katz, 2013). The intersectionality perspective allows the exploration both of

various types of discrimination, and of how the intersection of high-status dimensions interpolates with low-status dimensions. While the intersectional perspective assumes a certain degree of in-group favoritism, it offers somewhat different empirical expectations. It suggests that some groups may be shielded from negative stereotypes, either because they also belong to another group and do not conform to the initial stereotype, or because their status reduces the initial bias (Ridgeway and Kricheli-Katz, 2013; Webster Jr and Driskell Jr, 1978).

Although intersectionality theory was developed in the US, it has applicability in the Norwegian context, as its core implications are general in nature. Resembling the hegemonic ethnic and gender group (Norwegian, male) leads to an expectation of gendered and ethnic stereotypical behavior. However, not all individuals fit well in this category when combining ethnic and gendered stereotypes. This 'off-diagonal' state, may create either advantages or disadvantages depending on the content of the different gender or ethnic stereotypes (Ridgeway and Kricheli-Katz, 2013). Applied to the present study, Pakistani immigrants are associated with Islam, authoritarianism and seen as less sincere or trustworthy (Bye et al., 2014; Lundby et al., 2017). However, ethnic stereotypes are mainly stereotypes of men (Eagly and Kite, 1987). Therefore, female Pakistani may be 'off-diagonal' at times, as there may be some dissonance between the ethnic stereotypes they face, and universal stereotypes associated with femininity. Following Ridgeway and Kricheli-Katz (2013), it may be argued that being 'off-diagonal' may create disadvantages in female-gendered areas, while in male areas, it may create 'binds of freedom' – freedom from the initial negative stereotypes for females. It could be hypothesized that the high-status and traditional male dominance of the medical profession protects minority females from the discrimination that they may otherwise have faced.

Enduring stereotypes related to gender, or ethnicity might systematically influence whether individuals consider female or male GPs as more trustworthy. For example, cultural beliefs and stereotypes, such as women being more communicative and nurturing, while men are seen as more technically competent, are among the core components that influence how we perceive gender (Ridgeway, 1997, 2011). These stereotypes can be endorsed by those who do not support such believes (Correll, 2004).

Communication is one of the most important dimension of patient satisfaction with physicians (Iversen and Lurås, 2011; Lurås, 2007). Its overlay with cultural beliefs and stereotypes such as women being more communicative, nurturing, and less of a threat may function together and affect perceived trustworthiness (Iversen and Lurås, 2011; Ridgeway, 1997, 2011). Arguably, this advantage will be in favor of women, as men and women are seen as equally competent (Bye et al., 2014). Preferences, such as GPs being more attentive, caring, involved, or being comfortable with sharing sensitive and intimate information with a specific GP, are unlikely to vary systematically with the treatments and therefore outside the scope of this study.

Hypotheses

These theoretical perspectives lead to three, partly competing, empirical expectations. Given the strong barriers to entry into the medical profession, a first hypothesis derived from the occupational closure theory is that (H1) the differences in trust between the various groups are small to non-existent. The in-group favoritism perspective predicts (H2) that the majority will have more trust in majority GPs, while the minorities in minority GPs. Furthermore, as minorities are likely to have higher in-group identification, it can be expected that this effect is stronger for minorities. The intersectionality perspective draws further attention to the interplay between the respondents and GPs gender and ethnicity. (H3) The juxtaposition of the GPs' high status with the gender and ethnicity of the physicians creates 'binds of freedom' for some groups. It is expected that minority male GPs are less trusted, while minority female GPs will be more trusted than the majority, as they do not conform to the initial stereotypes and are additionally protected by the high status of the medical profession.

Research design

A vignette experiment both identifies and isolates the causal effect of the GPs' ethnicity and gender. The random assignment of treatments ensures that there are no observable or unobservable differences between the groups post-treatment. As treatment is the only aspect varying between the groups, causal inferences are possible (Gerber and

Green, 2012). Respondents were randomly allocated to a short resume of a GP upon opening the questionnaire and asked how much they trust the described GP. The data are well-balanced with respect to the treatments, suggesting that the randomization worked as intended. The difference in the number of individuals allocated to each treatment are small (less than 2%) and treatment allocation is not predicted by any of the background indicators (see Table 2). In this way, the vignette study allows for the identification of the average treatment effects of the information (Gerber and Green, 2012).

The vignette was incorporated in a survey investigating the prestige and status of various professional groups. The electronic survey was sent in October–November 2015 to a probability sample that is representative of the adult (18–80 years) Norwegian population in terms of age, gender, education, and geography. The response rate of 41% is similar to other electronic surveys that have been carried out in Norway (Christensen and Lægreid, 2005; Selle and Wollebæk, 2012) totaling 4006 respondents. The group with the highest nonresponse rate comprised individuals under the age of 30 with lower secondary education. Post-sampling weights have been calculated to adjust for the potential bias in nonresponse. The presented results are weighted, yet results remain substantively unchanged when weights are not included.

The questionnaire includes some socio-demographic information, which is used in balance tests and as controls. The variables include the highest completed education level for the respondent and their parents, their main activity in the past 12 months, self-reported annual income scored from 1 (under 20,000 euros) to 9 (over 100,000 euros), age, country of birth, and region of birth for the parents. As minority GPs are more concentrated in rural areas (Diaz et al., 2014), a control for this has been included. The models include dummies for county of residence, and the centrality of the municipality (driving hours from regional center). The survey also included an item regarding confidence in various occupational groups. This question was asked before the vignette and participants rated 34 occupations including doctors.[1] The order of the

[1] The question was as follows: Different individuals have different levels of confidence in different occupational groups. On a scale from 1 ('no confidence') to 7 ('complete confidence'): How much confidence do you have in the following occupational groups? (the complete list of occupations is included in the supplementary material).

occupations was randomly assigned to each interviewee. Toward the end of the questionnaire, participants were asked to rank the professionals in which they had the most confidence relating to health-care matters. This question was used to assess whether being exposed to the treatments had any longer-lasting effects.

I differentiate between Norwegians and those with Western and non-Western heritage. The immigrant sample in the survey includes 393 individuals, of whom 63% have European heritage. The sample thus overestimates the number of European/Western immigrants and underestimates the number of non-Western immigrants compared with population data from 2015. In the immigrant sample, Pakistan (3%) and Somalia (≈ 2%) predominate. Immigrants from the Balkans and Eastern Europe are included under the Western category, where Bosnia and Herzegovina and Poland are the largest groups, representing around 6% of the entire immigrant sample. Among second-generation immigrants who participated in the survey, 84% have at least one parent from either Europe or North America, 10% from Asia, and the remaining 6% have at least one parent from Africa or South America. The individuals in the immigrant subsample are fluent in Norwegian, the language of the survey, and have, on average, slightly higher educational levels than the immigrant population in Norway.

Construction of the vignette

Two factors were balanced to create a typical description of a GP: making the case as realistic as possible and having enough details so that the interpretation is unambiguous.

The description of the GP used here is as follows.

Assume that you are going to choose a new general practitioner.
Consider GP X. She/he is 42 years old, has completed her/his medical education in Norway, and has comprehensive experience in the field.
Do you trust that X will do her/his job well in relation to you as a patient?

No trust (1) — Complete trust (7); Don't know (missing)

The resume is based on the information that is publicly available for all GPs, which is also the main reason for opting for a short vignette. The name and gender of the practitioner are randomized in the short resume. The names are gender-specific, and to minimize name effect, the most popular first and last names in the age group were used. Based upon the lists, it was possible to generate Norwegian and Pakistani names, the latter one reflecting the largest minority in Norway. The following names were randomly chosen: Geir Johansen, Anne Hansen, Ahmed Khan, Fatima Ali. Each name signals both gender and ethnicity and each first name is used by at least 2600 individuals (Fatima), to up to 60,000 (Anne); while the last names are used by at least 2600 (Khan) to 52,000 (Hansen) individuals (Statistics Norway, 2018b). The name treatment does not necessarily signal that the GPs are immigrants, but their different ethnic background. Opting for the name, reinforced with gender typical pronouns, is a weaker way of triggering ethnic and gender stereotypes compared to audit studies, or studies including cues to specifically activate stereotypes. Given the scope of this study, it is adequate, as it reflects the information the public typically bases their choice on.

Respondents are thereafter asked to rate their trust on a scale from 1 to 7, with a 'don't know' option. Unlike dichotomous scales, a Likert scale is advantageous, as the group with the higher perceived variance is more likely to pass a threshold – for example for choosing 'Yes' on a dichotomous scale – due to the longer tails of the distribution of unobserved characteristics (Carlsson and Eriksson, 2014; Siegelman and Heckman, 1993).

To avoid capturing bias against foreign education, I specify that the fictive GPs have completed their medical education in Norway. Other substantial reasons inform this choice. Firstly, immigrants with education from outside the European Economic Area

must have their education recognized as equivalent to the Norwegian education by the Norwegian Agency for Quality Assurance in Education, pass medical and national exams, including a language examination before commencing residencies or gain practice rights. Secondly, Pakistani names are mainly associated with second-generation immigrants (Midtbøen, 2016), and the overwhelming majority of this group has their education from Norway. Furthermore, the public seldom has access to where their medical doctors have completed their education. The discussion of the findings will return to this point, as the paucity of information informs about some of the limitations of this study.

Each interviewee only received one of the profile descriptions and otherwise answered identical questionnaires to facilitate causal identification. This design is more efficient as it allows comparison between participants (Aguinis and Bradley, 2014). As all the respondents have been assigned to vignettes which contain information similar to that found in the real world, such comparison are meaningful (Aguinis and Bradley, 2014). Keeping all other observable variables constant, while randomizing the treatments (the names), can ensure that any differential preferences observed can be attributed to the different treatments (Carlsson and Eriksson, 2014).

Evaluation of assumptions

The vignette was placed in a section containing questions regarding confidence in healthcare services and institutions. Interviewees were not asked about their gender bias and attitudes toward minorities. Any potentially discriminatory behavior is seen as inherently negative and individuals have incentives to hide such behavior. To assess whether this was the case, the mean score on the vignette was correlated with the question concerning confidence in various professional groups, including physicians, which was presented to the respondents before the vignette. As participants could not go back in the questionnaire, the initial trust level in GPs is not affected by the treatment received.

<(Table 1 around here.)>

Table 1 shows that the average scores on the two items are very similar. The similar mean score may indicate that respondents did not try to overcompensate for any

potential discriminatory attitudes; however, it might also imply that the added information does not influence the perception of GPs. The moderate bivariate correlation indicates that respondents might not have fully consistent preferences.

The 'don't know' alternative in the vignette could be an opt-out opportunity. Around 3% of the respondents chose this alternative. In the survey as a whole, the rate of 'don't know' responses was 2–4%, and these responses were removed from the analyses. Neither the respondent's background characteristics nor the treatment received predicted a 'don't know' response on the vignette question. Such responses are more a threat to the external validity of the findings than to its internal validity. Thus, caution is needed when extrapolating the results of the study to the population.

Results

Interpreting the findings from this study as causal rests on the assumption of a successful randomization (Gerber and Green, 2012). To test whether randomization was successful, F-tests across groups for equality of means in the observable background characteristics were conducted. Additional tests included the following variables: county, parents' level of education, individual's field of education, income, age cohort, employment, and marital status. None of these variables correlated with the distribution of the treatments. There is little reason to believe that the allocation of the treatments influenced the interviewees' answers. As all respondents were exposed to the same questionnaire, it is reasonable to infer that the assumption of non-interference holds.

On average, respondents have 3% more confidence in a female GP than a male GP, a small difference that is unlikely to have any significant substantial implications (supplementary I). There are no noticeable differences in confidence levels between minority and native GPs, each group having an average confidence score of 5.6. These initial results indicate that individuals are on average more trustful of female GPs but are indifferent to the ethnicity of the practitioner. These results are in line with the theoretical expectations of little variation in trust in GPs.

To identify the interplay of gender and ethnicity on trust in GPs, the treatments are regressed against the vignette outcome. Figure 1 presents the OLS results of the

treatments without and with controls on trust in GPs. Geir Johansen is chosen as the baseline as he represents a Norwegian male, which is the dominant category in the occupation, both in terms of gender and ethnicity (Helsedirektoratet, 2015). The model with controls accounts for respondents' gender and region of origin, the level of pre-experimental confidence in doctors, and the full set of control variables. The organization of GPs in municipalities brings forth a potential problem of heterogeneity (individuals interact with practitioners in their local municipality and municipalities have different numbers of GPs). This is addressed by clustering standard errors at the municipality level in the models with controls. Clustering does not affect the significance level of the coefficients (supplementary material includes full model specifications.).

<(Figure 1 around here.)>

The overall results presented in Figure 1 show that the inclusion of controls does not alter the magnitude or significance of the results, as expected. The overall effects of the various treatments are either 0 and insignificant, as in the case of Ahmed, or relatively modest across the pooled cases. The results show that the ascribed ethnic background of the fictive GP has no significant effect on the overall confidence score they received. This overall result is in accordance to the first hypothesis, which suggests small differences given the high status and occupational closure of the occupation. Respondents have, however, more trust in women (Anne and Fatima) than men (Geir and Ahmed), although the effect is relatively modest (around 3% more trust). Thus, gender seems to be the dominant dimension in the pooled sample; ethnicity appears to have a more negative effect for men (Ahmed) than women (Fatima). These results highlight the relevance of stereotypes pertaining to the women's role when evaluating the results.

<(Table 2 around here.)>

The intersectionality perspective draws a closer focus on the interaction between the gender and ethnicity of the respondent and those ascribed to the GPs. The results from the interaction models are presented in Table 2. The models are built sequentially

to investigate whether the magnitude of the effects is affected by the inclusion of covariates. Columns 1, 2 and 4 contain models without controls, while columns 3 and 5 include control variables. Again, the overall significance and magnitude of the coefficients are not substantially affected by the inclusion of controls.

The results show that the gender of the respondent does not affect their level of confidence in the fictive GPs. The interaction coefficients are both very close to 0 and not significant. Nonetheless, males seem to have significantly higher confidence in female GPs. The effect for Fatima is only significant in the model with controls. However, these effects are small. The predicted effects for gender interactions are presented in supplementary material E.

A more stringent interpretation of the in-group favoritism perspective could lead to an expectation that Norwegians would prefer the fictive Norwegian GPs, while those with a non-Western heritage would favor the Pakistani GPs. However, the findings do not fully support such expectations. The Norwegians seem to prefer the female GPs (both Fatima and Anne), in contrast to Geir. However, the non-Western immigrants favor Ahmed and Fatima compared with Geir. Both coefficients are statistically and substantially significant, indicating 9% more confidence in Fatima and 21% in Ahmed, for the non-Western group compared with Norwegians. In sum, the results show that the level of in-group identification can be important for understanding who is considered a part of one's in-group.

This is further investigated by looking at immigrants from Western Europe, who are not part either of the Norwegian or non-Western groups. It could be expected that immigrants with a Western background should be indifferent to ethnicity. The results for this group support the expectation. Nevertheless, in terms of gender, they prefer Geir to Anne. A similar pattern exists for Fatima, although it is not statistically significant. Like the non-Western group, which prefers Ahmed to Fatima, immigrants with a Western background appear to have a bias in favor of men but are indifferent to ethnicity.

Later in the survey, the respondents were asked to rate their confidence in various professionals and institutions in the health-care sector, including GPs, in matters related to their health. This question can shed some light on whether being exposed to

any of the treatments has a longer-lasting effect. Analogous regressions to those in Table 2, included in the supplementary material, show no differences between those who were exposed to immigrant or female GPs in the vignette for Norwegians and non-Western immigrants. Western immigrants who were exposed to Fatima or Ahmed rated GPs lower in this question.

Discussion

This study examined how trust in GPs varies with the gender and ethnicity of the public and physician. Trust is a relevant factor for client discrimination, as it informs whether the relationship between the practitioner and potential client is feasible. As gendered and ethnic stereotypes encompass aspects related both to the competence, and the good nature or sincerity of individuals (Bye et al., 2014), trust informs how these stereotypes may affect professionals. The main finding of this paper is that there is little overall variation in trust in physicians. When accounting for the interaction between the respondents' and GPs' gender, the findings reveal some variation – non-Western immigrants have more trust in non-Western fictive GPs, while Norwegians are indifferent to the ethnicity of the fictive GP (Table 2, supplementary F, G).

The findings are supportive of the presented theoretical frameworks. The small variations in trust indicate that the occupation's high status, combined with the barriers to entry in the occupation may have the potential to shield practitioners from client discrimination in terms of trust, as suggested by the occupational closure perspective. The Norwegian interviewees consider GPs with a minority background to be as trustworthy as native GPs. This result indicates that, when one ascribed potentially stigmatizing characteristic (ethnicity, gender) is overlaid with a positive one (high-status profession), the effect of the negative characteristic diminishes. This effect is strongest for minority women, although this remains relatively small. These findings are in concordance with the expectations from the intersectional theory, which stipulates that women might be shielded from the negative effect for being a minority, as they do not conform to the initial stereotypes, or that they are perceived as less of a threat.

The level of in-group identification, existing stereotypes regarding gender roles and their cultural conditionality are potential explanations for interactions between the background of the respondent and that of the GPs. The finding that Norwegians trust female GPs more, regardless of their ethnicity is in line with extant research (Feingold, 1994; Hall and Roter, 2002). Communication (an important dimension of patient satisfaction with GPs), cultural beliefs and stereotypes such as women being more communicative, nurturing, and less of a threat may function together and affect perceived trustworthiness, especially as in the Norwegian context women and men are seen as comparable in terms of competence (Bye et al., 2014; Iversen and Lurås, 2011; Ridgeway, 2011). The potential cultural dependency of stereotypes is highlighted by the less robust results showing that Western and non-Western immigrants seem to prefer male to female GPs.

However, the substantial interpretation of the causal treatment warrants further scrutiny. Trust has been discussed and conceptualized as a prerequisite for visiting physicians and accepting medical treatment (Parsons, 1951). Trust in GPs is related with increased continuity of care (Rolfe et al., 2014; Safran et al., 1998), thus having an intrinsic value. While trust may not be a perfect proxy for the choice of physicians, it does inform about the central components of the patient–physician relationship. However, trust is only one of the many indicators that has the potential to inform about the willingness to visit a practitioner and the continuation of care. In Norway, the number of patients and referral practices have a large influence on satisfaction with GPs and changing GPs, while the organization of PHC and the characteristics of the patients and physicians only have a minor influence (Iversen and Lurås, 2011; Lurås, 2007). Nevertheless, trust in GPs informs about the central components of the patient–physician relationship, both when choosing a physician and following their advice.

The results do not exclude that other forms of discrimination (i.e. avoidance) may be present. Future studies could examine whether minorities actively seek minority professionals, or whether there are institutional barriers, or bias which impede minority professionals for achieving the same outcomes as the majority. Secondly, the names used in the experiment may also signal religion. While the Pakistani names tend to be associated with Islam (Midtbøen, 2016), it is less clear whether the Norwegian

names signal religious beliefs. While, Norwegians view Muslim immigrants similarly to other immigrant groups (Bye et al., 2014; Strabac and Valenta, 2013), some caution is warranted when interpreting the treatments solely as ethnicity. Thirdly, as several of the presented theoretical perspectives give similar empirical expectations, it remains difficult to isolate the mechanisms leading to in-group favoritism for minorities. Stronger group identification, in-group favoritism, and fears of mistreatment may all explain this finding. Future research could investigate the source of this potential bias. Fears that physicians might also engage in involuntary discrimination (Halbert et al., 2006; Williams and Mohammed, 2009) might make non-Westerners have more confidence in non-Western than Norwegian GPs. Småland Goth and Berg (2011) describe that some immigrants had previous negative experiences with Norwegian physicians. Conflicting ideas regarding the role of the physician might also influence trust in GPs (Småland Goth and Berg, 2011). For example, Stachowski and Rye (2017) find that Polish labor migrants have lower confidence in the Norwegian GP system, and continue to use the Polish health-care system even after migrating. Furthermore, as non-Western minorities have more trust in the non-Western GPs, the findings can contribute to partly explaining why minority GPs have significantly more minority patients, as found by Diaz et al. (2014) and Sandvik et al. (2012).

The results of this study contribute to further our understanding of discriminatory preferences that follow practitioners even after navigating the hurdles of employment. A better understanding of client discrimination can aid our understanding of the 'paradox of integration' (Steinmann, 2018). Research focusing on unequal career outcomes between the majority and minorities often neglects the potential discrimination by clients to which professionals might also be exposed (Arai et al., 2016; Midtbøen, 2016). Although clients cannot always choose their professionals, in circumstances where they do, client discrimination and in-group favoritism might explain both in-job wage differences, and the reticence of managers to employ or interview minority candidates. Such worries are warranted in occupations where the practitioner interacts with the customer/client, which can vary from shop assistants to GPs, and is especially important for positions where employees' wages are influenced by commissions or the size of the client base. While the present study does not find

much support for client discrimination, the possibility cannot be excluded that managers may favor majority practitioners, or that minority GPs may face other forms of organizational bias after employment. As discussed, minority GPs more often have their practices located in rural areas and have more open places on their lists (Diaz et al., 2014). Future research is needed to understand whether such patterns may be explained by the practitioner's choice, or various forms of organizational bias.

While this study shows that there is little overall variation in trust in physicians, future research could investigate whether these patterns are valid for other occupational groups, try to offer a better understanding of organizational bias and exploring various strategies aimed at mitigating such biases. Insights from this study can contribute to explaining unequal in-job outcomes, such as income or promotions, between the majority and minority groups in other occupations where clients can choose their professionals.

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Figures

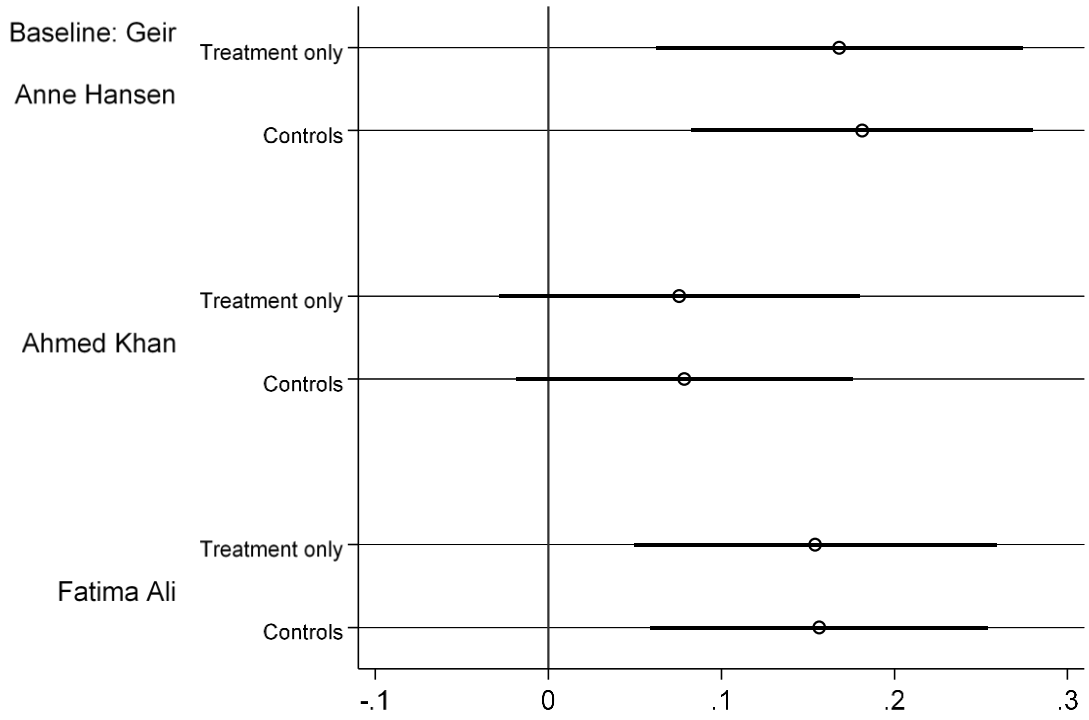

Figure 1: OLS estimates with treatment only, and with controls (age cohort, education, income, county, trust in doctors) and Geir Johansen as baseline on trust in GP and 95% confidence interval bands.

Tables

Table 1: Validity check for GP score against previous questions on confidence in medical doctors. “Don’t know” answers excluded from both questions.

Variable	N	Mean	St. Dev.	Min	Max
Confidence in doctors	3,831	5.70	1.06	1	7
Trust GP, pooled treatments	3,831	5.67	1.16	1	7
Correlation	0.36	Sig= 0.000			

Table 2: OLS regression results of treatments on confidence in GPs.

	(1)	(2)	(3)	(4)	(5)
Anne Hansen	0.168**	0.139*	0.177**	0.176***	0.192***
	(0.054)	(0.060)	(0.057)	(0.046)	(0.043)
Ahmed Khan	0.075	0.004	0.026	0.026	0.041
	(0.053)	(0.080)	(0.076)	(0.058)	(0.056)
Fatima Ali	0.154**	0.146	0.138*	0.146*	0.156**
	(0.053)	(0.075)	(0.065)	(0.058)	(0.060)
Female		0.086	0.055		0.084*
		(0.069)	(0.061)		(0.033)
Anne Hansen × female		0.040	-0.015		
		(0.095)	(0.098)		
Ahmed Khan × female		0.141	0.087		
		(0.102)	(0.084)		
Fatima Ali × female		0.008	0.038		
		(0.106)	(0.089)		
Non-Western			0.054	-0.581***	-0.407*
			(0.094)	(0.175)	(0.182)
Western			-0.040	0.080	0.119
			(0.063)	(0.143)	(0.124)
Anne Hansen × Non-Western				0.224	0.226
				(0.343)	(0.417)
Anne Hansen × Western				-0.330*	-0.440**
				(0.160)	(0.165)
Ahmed Khan × Non-Western				1.307***	1.158***
				(0.299)	(0.225)
Ahmed Khan × Western				0.150	-0.00278
				(0.167)	(0.140)
Fatima Ali × Non-Western				0.568*	0.449*
				(0.239)	(0.206)
Fatima Ali × Western				-0.162	-0.173
				(0.233)	(0.211)
Constant	5.567***	5.527***	2.838***	5.581***	2.840***
	(0.0388)	(0.0467)	(0.163)	(0.035)	(0.161)
Observations	3857	3844	3805	3844	3805
R^2	0.003	0.007	0.158	0.009	0.163

Note: Clustered standard errors in parentheses. Full set of controls included in models 3 and 5.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$