**Measuring Hiring Discrimination against Transgender Job Applicants: A review and a research agenda**

Ciarán McFadden

Department of International Business,

The Business School,

Edinburgh Napier University,

Edinburgh,

Scotland.

EH14 1DJ

**Corresponding author’s Email:** [**C.McFadden@napier.ac.uk**](mailto:C.McFadden@napier.ac.uk)

**Biographical Details**

Dr. Ciarán McFadden is a lecturer in human resource management and organisational behaviour at Edinburgh Napier University’s Business School, in Scotland. His research interests include identity, workplace diversity and inclusion, and LGBTQ career and workplace experiences.

**Abstract**

***Purpose***

The purpose of this paper is to provide an explanation and discussion of the factors to take into consideration when designing studies to measure hiring discrimination against transgender job applicants.

***Design/Methodology/Approach***

The paper builds on previous research on hiring discrimination studies, and academic literature and surveys related to transgender employment, to build a detailed discussion of how hiring discrimination for transgender job applicants can differ from that faced by other marginalised groups. By isolating and describing a number of relevant considerations, the paper aims to act as a guide for future studies to build upon.

***Findings***

Three types of hiring discrimination studies are discussed: correspondence experiments, in-person experiments, and student cohort experiments. Three main categories of factors relevant to an experiments design are discussed: the legal context, industry/role factors, and transgender-specific factors. A flow-chart detailing the research design-decision making process is given.

***Research Limitations/Implications***

The discussion within this paper will act as a reference and a guide for researchers seeking to address this dearth of empirical studies in the literature. While the factors most relevant to transgender-specific studies are identified, there may be more that could affect an experiment’s design.

***Originality/Value***

Hiring discrimination against transgender people has been recorded in many surveys, but there is little empirical measurement of this discrimination. To the author’s knowledge, this paper is the first to examine the experimental design decisions related to transgender hiring discrimination. In doing this, it addresses a dearth in the literature and aims to spark further conversations and studies of this nature to further expand our knowledge of these employees.

**Introduction**

Transgender issues have never been under so much scrutiny. The transgender community, which has throughout history and different cultures always been relatively small, has in recent years faced unprecedented attention, both positive and negative, by politicians, the media, and organisations. President Trump’s ban on transgender service members serving in the military, and multiple states’ proposed ‘bathroom bills’ (which attempt to block transgender people from using bathrooms corresponding to their gender identity) have garnered much media attention, and criticism and praise from many groups. Organisations, often in response to their LGBT employee networks or external NGOs, are increasingly drafting and enacting transitioning policies and transgender-specific inclusion practices. Newspapers, magazines and websites dedicate pages upon pages to celebrities with transgender, genderqueer, or nonbinary identities, styles, children and causes.

However, despite all this attention, academia – or at least certain domains with academia – has lagged behind. The business, management and economics literatures have barely broached the subject of transgender people; little research has been conducted on the careers and workplace experiences of transgender employees (Collins, McFadden, Rocco and Mathis, 2015; McFadden and Crowley-Henry, 2016), and issues relating to transgender employees are in many cases subsumed (and in so doing often minimised or ignored) under the broader LGBTQ grouping (McFadden, 2015). With more people within 18 and 24 identifying as trans than in any other age group (Flores, Herman, Gates and Brown, 2016), organisations will be increasingly tasked in forthcoming years with ensuring that their workplaces are inclusive recruiters and employers. To do that, however, they must first be able to access evidence-based, empirical research that paints a true picture of the transgender employee’s experience. Allowing the narrative to be constructed, reconstructed, twisted and wrought by popular media and politicians is therefore problematic.

In addition, there are multiple issues that are unique to the transgender community that do not affect cisgender lesbian, gay or bisexual people, such as physically transitioning, socially transitioning, and the aforementioned bathroom issue. Transgender people also face higher homelessness and unemployment than cisgender (non-transgender) people (Drydakis, 2017). While discrimination is a problem faced by each subgroup of the LGBT community, the exact type of discrimination differs from group to group. Hiring discrimination, the focus of this paper, is a topic that, whilst under-researched pre-2010, has recently been studied in relation to lesbian and gay job applicants in many different geographic, cultural, and organisational contexts (e.g. Ahmed, Andersson and Hammarstedt, 2013; Drydakis, 2009; Tilcsik, 2011; Weichselbaumer, 2003). Experiences of hiring discrimination have been recorded in surveys of transgender participants (e.g. Badgett et al., 2007; McNeil, Bailey, Ellis and Regan, 2013; FRA, 2014; Grant et al., 2011; James et al., 2016, Valfort, 2017), but only a very limited number of empirical studies, with small sample sizes, have been conducted to measure the level of discrimination against transgender job applicants (e.g. Bardales, 2013; Make The Road New York, 2010).

Part of the reticence to study transgender hiring discrimination may come from the relatively small size of the population and its associated perceived importance; in other words, it does not appear as pressing an issue as, for example, discrimination against females. Another reason, however, could be due to the complexity of the scenarios one must try to parse when conducting studies of this type; in other words, it is too difficult a subject to try even broach. The very concept of ‘transgender’ is, for many societies and many individuals within those societies, a relatively new or novel consideration, despite the long history of non-cisgender identities within multiple geographical, cultural and religious arenas.

This article attempts to serve as a response to both of these possible qualms, and as a research agenda, to hopefully fuel future research in this area. In relation to the complexity of the topic, and in keeping with the conference stream, the paper endeavours to break the process of measuring hiring discrimination against transgender job applicants into its most fundamental parts. In relation to the possible perceived insignificance of this topic relative to similar research with other, larger, marginalised populations, the fundamental importance of studying this (at times and in certain places) very vulnerable population, and in particular measuring discrimination against them with an aim to address it more comprehensively, is discussed. This paper is thus part literature review and part research agenda, bringing together the extant relevant literature on transgender and other minority populations from previous years in order to outline what can and must be done in the forthcoming years.

Attention is first paid to the various factors that should be included, excluded, allowed for or generally considered when designing a study exploring this topic, e.g., the industry variables, the role characteristics, and the unique features of the transgender population itself. Then, the methods by which one may conduct research on this topic (including resume experiments, in-person studies, and laboratory-setting recruitment experiments) are discussed. Where appropriate, reference is made to existing studies that measure hiring discrimination against other marginalised employee groups, to provide exemplars to help guide understanding of the experimental design process. Lastly, the conclusion summarises the article’s main points and makes overall recommendations to future researchers.

*Terminology*

As well as being a descriptive label in itself, the term transgender is often seen as an ‘umbrella’ term that includes any identities that do not conform to traditional characterisations of gender. A differentiation is usually made between sex (the physical characteristics that signify male or female) and gender (the innately felt self-identity of being male or female). Terms that can fall under the transgender umbrella include the generic descriptive ‘transgender’, denoting someone whose gender identity does not correspond with the gender assigned to them at birth; the dated ‘transsexual’; ‘genderqueer’ and ‘non-binary’, denoting those who eschew the conventional binarised notion of gender and identify at both sides, completely outside of, or at some place upon the gender spectrum; ‘genderfluid’ where one’s gender identity is not fixed; and ‘agender’, where one does not have a gender identity (Collins et al., 2015).

While it more acceptable and common to simply refer to transgender people in relation to their gender identity (i.e. man or woman), for the purposes of differentiating between cisgender and transgender job applicants, the terms transmale/transman and transfemale/transwoman, along with cismale/cisman and cisfemale/ciswoman, will be used in this paper.

**Types of Studies**

As discussed above, there are a number of experimental designs one might use when seeking to measure hiring discrimination. Below, three popular designs are described, each of which have one known study concerning transgender job applicants. These designs are discussed with reference to transgender population-specific considerations that may warrant an adaptation of these designs.

*Correspondence Tests*

The correspondence test (also known as correspondence experiment, audit study, field experiment and résumé) appears to be one of the most common studies designed to measure hiring discrimination. The experiment design involves sending pairs of ‘matched’ résumés in response to job adverts, usually within a defined area. The résumés are seen as matched because they are like in all aspects relevant to the job applied for (education, experience, etc.); the aim being to make both fictitious candidates equally qualified for the job. One key difference is included; a signal denoting one the candidates as a member of the population the researcher is studying (e.g. African American, female, gay, pregnant, Muslim). The signal, naturally, varies depending on what characteristic or feature the researcher aims to convey. The amount of positive replies (in most cases, a request for the fictitious candidate to come for interview) is recorded for each candidate. Any difference in the positive responses between the two candidates is usually interpreted as discrimination against one of them, as all relevant factors have been controlled for.

The first correspondence test was published in 1970 by Jowell and Prescott-Clarke, who measured race-based hiring discrimination in the city of Birmingham in the UK (Riach and Rich, 2002). Since then, correspondence tests have been used to measure hiring discrimination against women (e.g. Riach and Rich, 1987), racial minorities (e.g. Bertrand and Mullainathan, 2004), gay men (e.g. Tilcsik, 2011), lesbians (e.g. Weichselbaumer, 2003, 2015), and Muslims (Pierné, 2013). Since its conception, the method has stayed roughly the same, but has been adapted for technological advances. When the first correspondence tests were conducted (e.g. Jowell and Prescott-Clarke, 1970), the experimenters applied for jobs, and received call-backs, using the postal system. In more recent years (e.g. Bardales, 2013; Baert, Cockx, Gheyle and Vandamme, 2015) however, email is most often used for applicants, while emails and phone-calls (or rather, an answering machine service) are used for call-back measurement.

To the author’s knowledge, the only correspondence test conducted to measure transgender hiring discrimination is Bardales’ (2013) experiment within two cities in Texas, Houston (where net discrimination was 37%), and San Antonio (21%). While Bardales (2013) points out that the sample size was small and the generalizability somewhat limited, this first attempt at measuring hiring discrimination against transgender job applicants gives future researchers valuable insight into designing similar, larger-scale experiments in other contexts.

The key component of the correspondence test, the signal, is where some of the complexity lies in conducting this experiment in relation to transgender job applicants. Probably the simplest signal, gender, is to use names exclusive to one gender. To signal racial minority/majority candidates, the signal involves using candidate names that are perceived to be related to a certain racial origin (e.g. Bertrand and Mullainathan, 2004). To signal older/younger candidates, one can include a date of birth in the résumé (e.g. Baert, Norga, Thuy, and Van Hecke, 2015). Pierné (2013) used experience in a religious organisation that sounded Catholic-related or Muslim-related to signal that the respective candidate was a member of those religions. To convey sexual orientation, experience in an LGBT organisation or college society is included in previous studies (e.g. Tilcsik, 2011). It is important that the signalling feature remains an appropriate feature of a résumé, lest it might raise the hirer’s suspicion. Bardales (2013) manipulated both the experience section and the name of the transgender job applicant’s résumé in order to signal they were a transfemale; the applicant is given experience in a “Male-to-female” group and a “Transgender Women’s Group”, and a ‘legal name’ in parentheses follows the candidate’s name at the top of the résumé. These two manipulations may still be a viable option; however, in many jurisdictions, such as California and the Republic of Ireland, transgender people are able to legally change their name and gender markers with less trouble or bureaucracy than before, and one might reasonably expect that they would prefer to known only by their new name, which could render this manipulation somewhat unrealistic in future studies.

An additional, important consideration is the other factors that appear regularly on résumés that may lead the experimenter to inadvertently communicate some extra information about the fictitious candidate. For example, the area in which one lives may be associated with one’s socio-economic status, while name may convey information about one’s race. These variables should be controlled for in a study on transgender hiring discrimination, unless the experimenter is consciously investigating intersectional identities and issues (see the Recommendations section below). To control for these variables, one could follow Bertand and Mullainathan’s (2004) study, where they chose White and African-American sounding names by referring to demographic data and the likelihood that a particular name is given to children of a particular race. To control for socio-economic status, they randomly assigned addresses from different zip codes to the fictitious résumés. While Bertrand and Mullainathan’s (2004) US-based study found that résumés with zip codes that better education and per capita income received, Carlsson, Reshid and Rooth’s (2018) Swedish-based study found no such relationship, indicating possible area-specific effects. Whether or not this is the case, researchers hoping to measure hiring discrimination on the basis of the candidate’s transgender identity should be cognizant of the many variables that can affect a hirer’s interpretation (and subsequent evaluation) of a résumé. It should also be noted that this experimental design takes a lot of resources to conduct successfully – each application and the tracking of call-backs requires time, effort, and concentration on behalf of the researcher(s).

*In-Person Studies*

Before correspondence tests were first conducted, Daniels (1968) conducted a similar experiment, but instead of using matched résumés, employed pairs of actors to attend job interviews. Audit studies, or, as they are called here for clarity, in-person studies have been used to measure hiring discrimination in relation to gender (e.g. Neumark, Bank and Van Nort, 1996), race (e.g. Kenney and Wissoker, 1994), and, the first and perhaps only one of its kind, transgender identity (Make The Road New York, 2010).

While in-person studies appear to have declined in popularity in recent years in comparison to correspondence tests (cost and ease being the most probable reasons), there are nevertheless some strengths to this approach. While in-person studies may lack efficiency and cost-effectiveness, and could be even more resource-intensive than correspondence tests, it could be argued that the breadth, depth and richness of data that can be collected in performing such an experiment could mitigate some of the disadvantages. When combined with field notes or debrief interviews, the actors in these studies could provide experiential information that could serve as valuable, descriptive qualitative data on discrimination, and a suitable addendum to quantitative analyses. In-person studies can also provide a viable alternative to correspondence tests or student cohort experiments if they involve an element of visual signalling (see the Gender Conformity section below)

Make the Road New York (2010) conducted the only in-person study involving transgender job applicants (to the author’s knowledge). Like Bardales (2013), they also had a small sample size. They employed two pairs of actors to act as job-seekers within Manhattan, of varying genders and races, who brought with them equivalent (fictitious résumés). They found a net rate of discrimination of 42% against transgender job applicants, but a lack of resources prevented them from conducting additional tests measuring the effects of gender identity and race on the findings measured.

In-person studies may be criticised because the crucial similarity between the two job applicants/actors in all aspects except the test characteristic can be difficult to achieve; in other words, while every effort on the part of the researcher can be taken to ensure that both actors appear identical, many unintentional variables may be implicated (Neumark, 2010). While there are advantages to this method that are not present with other types of tests, researchers should be aware of the work required to ensure that, to the best possible degree, the actors used are closely matched.

*Student Cohorts*

While correspondence tests allow a direct measurement of labor market discrimination, they are, as noted above, resource-intensive. In-person studies may be more suitable for more visual manipulations, but can also be resource-intensive and be difficult to design successfully. A potential alternative to these two tests is to use student cohorts to make fictitious hiring decisions; in other words, to base the hiring discrimination study not within the real labor market but within a laboratory setting. Student cohorts have been used in studies of hiring discrimination against candidates with facial disfigurements (e.g. Stevenage and McKay, 1999), those with foreign accents (Hosada and Stone-Romero, 2010), and those with a criminal history (Varghese, Hardin, Bauer, and Morgan, 2009).

In comparison to the other experimental designs discussed, one can imagine that there are many advantages to using a student cohort, including the ease of access to a large cohort (from the researcher’s or their colleagues’ classes), the relative ease of capturing responses, and the associated lowered resource requirements. However, a criticism of using student cohorts in studies like this is that their decisions may not be comparable to those hirers in the real labor market (Hosada and Stone-Romero, 2010). Students are, of course, not a stakeholder in a business; while a recruiter, HR employee or manager may face negative job-related consequences if they hire an unsuitable candidate, the students involved in fictitious recruitment experiments are not under this pressure. Agents in the real job market may therefore be more cautious in their hiring decisions, and see hiring a transgender job applicant as more of a risk (either because of their own prejudices, because of assumed prejudices on behalf of their colleagues or co-workers, or because of productivity-related generalizations of the transgender community) than students who are simply making a one-off, consequence-free, hiring decision. In addition, students have been found to be, on average, more socially liberal (Bailey and Williams, 2016), possibly leading to a more favourable evaluation of minority candidates.

The exact procedure when using a student cohort can vary according to the test characteristic. For example, Hosada and Stone-Romero (2010), measuring discrimination against those with foreign accents, had their students listen to a recorded audio interview as well as reading a résumé, before making an employment decision. Stevenage and McKay’s (1999) study related to facial disfigurement used a photograph along with the résumé. Van Borm and Baert (2019) conducted their study exploring the mechanisms underlying transgender labour market discrimination using a student cohort, the only such study known to the author. They found that their participants, while not intrinsically bias against fictitious transgender candidates themselves, did rate the transgender applicant lower than a similar cisgender applicant when asked whether customers and co-workers, respectively, would enjoy collaborating with the applicant. This raises the possibility of discrimination not directly from the hirer, but (it is presumed by the hirer) from a colleague or customer, which is explored in more detail in the Industry factors section below.

Because of their lower resource costs and their ability to mimic real hiring decisions, student cohorts provide a viable alternative to correspondence tests and in-person studies. However , because they are by design not situated in the real labor market, they perhaps should represent the first step in a series of experiments on hiring discrimination, to explore in a laboratory session the variable, concepts and relationships that may exist in real hirer cohorts.

**Mediating Factors**

Measuring hiring discrimination against transgender job applicants is a complex process. This section discusses the various factors that a researcher must be cognizant of before carrying out a study on this topic. There are numerous population-based factors, specific to transgender job applicants, to take into consideration. These factors interact with job-based factors, such as the type of role and the type of organization the applicant is applying to, as well as the industry and its associated history, culture, and value systems. Overlaying and complicating all of these factors even further are the legal factors of the jurisdiction. Choosing a research design, then, becomes a lot more complex than just choosing the basic method; one must decide what exactly it is they want to research, and, crucially, resolve how to exclude the other mediating factors from their analysis. Starting with the most pervasive of elements – the legal factors, the mediating factors that one should consider when designing a study to measure hiring discrimination against transgender applicants are explored below.

**Legal Factors**

On the societal level, a factor to consider is whether or not legislation designed to protect transgender employees and potential employees is present in the location being studied, as different rates of discrimination might be measured in jurisdictions with anti-discrimination protections in place. Implicated in this also is the presumed differences in socially liberal outlook that have led to and promoted the introduction of laws of these type.

Protection may be city or county-based (an ordinance) or country-wide. The question of whether existing anti-discrimination legislation is extended to cover transgender people is somewhat uniquely open to interpretation. While the European Commission had previously stated that the protected grounds of ‘sex’ could be extended only to those who had undergone *gender reassignment* (i.e. excluding those who had not fully physically transitioned), in 2015 they revised their position to include *gender identity* (which includes all transgender people) under the ‘sex’ grounds (TGEU, 2015).

The legal situation in the USA is less certain, however, and is a clear example of the ambiguity with regards transgender employment protection in many countries jurisdictions at present. At the time of writing (April 2019) there is no federal law in the USA that explicitly outlaws discrimination on the basis of gender identity (Movement Advancement Project, 2017). Multiple actors have argued for and against these protections, with the specific point of contention being the interpretation of Title VII of the Civil Rights Act of 1964, which prohibits discrimination in employment on the basis of sex, inter alia. President Obama’s Department of Justice said that it did, whilst President Trump’s Department of Justice argues that it does not. Whether or not Title VII can be extended to cover transgender employees will most likely be decided by the Supreme Court, upon hearing and judging a specific upcoming case (Bloomberg, 2019). Meanwhile, at state level, twenty-two states prohibit trans employment discrimination, and at least 225 cities and counties (Human Rights Campaign, 2019). There is therefore a great deal of variation in the degree of employment protection that transgender people have across different states and cities, and researchers seeking to measure transgender hiring discrimination in the USA, and in other countries with similarly variability, should therefore be cognizant of this possibly mediating factor when designing a study.

As well as being cognizant of the legislative context in which one is basing their study, another consideration is that the study in itself could seek to measure of the effectiveness of legislation designed to protect transgender employees from discrimination. Bardales (2013) conducted a small correspondence test (a method discussed below) that measured both the level of hiring discrimination against transgender job applicants and how well the laws present in two cities affected the rate of discrimination recorded. Although there was little statistical difference recorded between the rates across both cities, the author suggests that the experimental design choices and sample size are problematic, and that future research is warranted.

However, although protections may differ from area to area, many organizations may offer their own non-discrimination policies that include transgender employees, and presumably, transgender job applicants, which may run counter to the prevailing legal protections in the organization’s surrounding region. This is discussed in the *Industry Factors* section below.

**Industry and Role Factors**

The industry and role for which the fictitious candidates are applying will naturally be of importance and interests to researchers. Below, factors that may be more prevalent, relevant, or important in studies of transgender hiring discrimination are outlined. While they are discussed discretely below, in actuality these factors will coalesce; it is up to the researcher(s) to decide what and how to isolate these variables when designing their study. At the risk of complicating a study, but also to provide more findings, multiple factors may also be investigated.

*Customer-facing roles and co-worker discrimination*

As discussed above, Van Borm and Baert (2019) found that their student cohort rated transgender candidates lower than cisgender candidates when asked if their colleagues or customers would enjoy collaborating with them. In customer-facing roles, such as bank clerk or sales assistant, negative treatment against transgender candidates can occur not because the hiring manager is themselves discriminatory, but because they believe that the customers themselves may react negatively to having a transgender person attend to them. Similarly, anticipated discrimination against the job applicant by existing employees in the organisation could be a reason for hiring discrimination against the transgender job applicant. While theoretically sound, more study is needed to empirically explore these concepts in relation to transgender job applicants. Researchers could investigate these types of discrimination in together or separately.

*Male and Female Dominated Industries*

Male dominated industries, such as law enforcement, construction, and engineering, and female dominated industries, such as nursing, primary education, and counselling, have been used in multiple studies of hiring discrimination against straight male and female, lesbian and gay candidates (e.g. Ahmed et al., 2013; Riach and Rich, 1995, 2006). Ahmed et al. (2013) found that gay male applicants are discriminated against in typically male-dominated occupations, while lesbian applicants are discriminated against in typically female-dominated occupations. Riach and Rich (1995, 2006) found that women were discriminated against in typically male-dominated occupations. They also found that men were discriminated against in female-dominated occupations (Riach and Rich, 2006). There is thus an established literature that shows that the existing gender breakdown of an industry is implicated in hiring discrimination against certain job applicants.

As with the other factors discussed, however, the rate of discrimination against transgender job applicants in either male or female dominated industries remains virtually unknown. However, a study looking at this topic may shine a light not only on the experiences on transgender employees but on gendered occupations in general. There are a number of combinations, and possible outcomes, that would be implicated in such a study, wherein the complexity (but also, one could argue, the importance) lies. For example, how do recruiters in a male dominated industry such as construction react, on average, to a transmale applicant: in a similar sense to cismale applicants (no trans-based discrimination), less favourably than cismale applicants but more favourably than cisfemale applicants (trans-based discrimination present to a lesser degree than sex-based discrimination), or less favourably than any cisgender applicants (trans-based discrimination is more prominent than sex-based discrimination)? Carefully-designed studies could reveal the extent to which transgender applicants, both transmale and transfemale, face discrimination in both male and female dominated industries, and may also uncover some more generalized findings about the role of gender in these industries. However, regardless of whether or not the researcher is including gendered occupations in their analysis, they should at the least be aware of the existence of male and female-dominated industries and roles, and either include or control for them in their experiment design, in case they inadvertently distort the collected data.

*Large and Small Organisations*

As discussed in the *Societal Factors* section, many countries may play host to wide variations in the level of protection against transgender employment discrimination. However, many multi-national organisations have non-discrimination policies that include gender identity – for example, 85% of the Fortune 500 (HRC, 2019).These policies may or may not run counter to the laws or ordinances present in the location of the office wherein a job posting is situated. Smaller organisations, however, may not extend their non-discrimination policies to gender identity, or may not have a formalised non-discrimination policy at all, instead following local legislative and cultural contexts. While Baert, De Meyer, Moerman and Omey (2018) did not find a relationship between firm size and hiring discrimination against female, ethnic minority, or older candidates, it is possible that the recency with which transgender issues have gained attention (relative to gender, age and ethnicity discrimination) might result in lesser-developed policies and practices within smaller organisations.

Larger organisations may also use different methods of screening in their recruitment process. Computer-assisted screening of résumés is a feature in many large organisations, where an algorithm, rather than a human, decides whether or not to send a candidate past the first stage of the application process. While these algorithms have recently courted some controversy with regard to gender bias (Reuters, 2019), they may in future become more commonly used, and are a consideration for researchers designing hiring discrimination experiments involving larger organisations.

*High Skill and Low Skill Occupations*

The differences between high skill and low skill occupations present another consideration for researchers examining hiring discrimination (against any marginalised group). A low skill occupation will, almost by definition, have lower barriers to entry and therefore is more likely to have more applicants; a high skill occupation would have a higher threshold and arguably would have lesser applicants for a job opening. With the former, taste-based discrimination (Becker, 1957) may be more prevalent, as the hirer could more easily afford to choose not to hire a qualified transgender applicant, because there would most likely be an equally qualified cisgender applicant. In high-skill occupations, as the applicant pool gets smaller, the economic penalty for not choosing the most qualified applicant because they were transgender would get steeper, as similarly skilled applicants may not be present.

In a similar vein, Baert et al. (2015) measured hiring discrimination against ethnic minority candidates for occupations where recruitment was both difficult and not difficult. They found that candidates with a foreign sounding name would have to apply for twice as many applications for occupations where recruitment was easy. Where recruitment was not easy (e.g. high labor market tightness), the candidate with the foreign sounding name and the native-sound control candidate received an equal amount of callbacks, suggesting there may be a relationship between hiring discrimination and labor market tightness.

An exploration of high/low skill occupations, or similarly, labor market tightness, with regards to transgender job applicants, would not only provide much-needed data on this employee cohort’s experiences, but would also shed light on hiring discrimination in general, by exploring the phenomenon in various different occupations and settings.

**Population-Specific Factors**

As stated above, the term transgender can refer to a number of non-cisgender identities, such as transman, transwoman, and genderqueer. Indeed, transgender is often used as an umbrella term to describe any identity that does not conform to binarized notions of gender. Those with certain intersectional identities, where multiple marginalized identities exist in concert (such as an African American transwomen) face discrimination of different severities and types. When one wants to measure hiring discrimination against transgender job applicants, then, they must first decide on *which* subpopulation(s) within the transgender community they want to base their study upon, as the complicated interplay of these multiple considerations may result in complicated or even unworkable data. Some of the population factors, explored below, will be more of a consideration in studies focusing on résumé experiments, while other factors may be implicated in studies concerning face-to-face interviews or recruitment experiments involving photographs.

*Taste-based Discrimination and Statistical Discrimination*

Two types of discrimination are often cited when attempting to explain the underlying mechanisms of, or reasons for, labor market discrimination against minority workers: *taste-based discrimination* and *statistical discrimination*. Becker (1957) is credited with the former; taste-based discrimination, as the name suggests, relates to discrimination arising from an aversion on behalf of the hirer for working with a member of a particular group, or a preference for working for a member of another group, regardless of either worker’s perceived productivity (Becker, 1957). For transgender workers, a taste-based discrimination would no doubt be related to transphobia, “an emotional disgust toward individuals who not conform to society’s gender expectations” (Hill and Willoughby, 2005: 533), which is an unavoidable, prevalent and observable phenomenon in many aspects of society and the lives of transgender people (Hill and Willoughby, 2005).

The other type of discrimination that is commonly associated with labor market discrimination, statistical discrimination, is credited to Phelps (1972), and arises not from a distaste on the part of the hirer but because the hirer has imperfect information about the individual applicant and must "fill in the blanks”. They instead use the individual applicant’s membership of a group to decide whether or not to hire them, by making generalisations about the group itself. A hirer may therefore stereotype an applicant as probably having certain undesirable characteristics that could interfere with their productivity and, not from any particular distaste for the applicants group itself, but from this presumption, will decide not to hire them (Phelps, 1972). In applying this concept to transgender workers, common stereotypes about the transgender community that could be related to productivity. Von Borm and Baert (2018)

There has been very little research conducted to explore these two concepts in relation to transgender job applicants, and more is needed to explore the roles of and interplay between taste-based discrimination and statistical discrimination in the labor market. In one such study, Von Borm and Baert (2018) empirically tested hiring discrimination against transgender candidates in an attempt to discern whether the root cause was taste-based discrimination or statistical discrimination. Using a student cohort that evaluated fictitious transgender and cisgender job applicants, they found no taste-based discrimination on behalf of the hirer, but did statistical discrimination in relation to health. The authors did, however, find that the participants were less likely to hire a transgender applicant when asked to consider the applicant collaborating with co-workers and customers – this type of taste-based discrimination by proxy is explored in more detail below. The roles of taste-based discrimination and statistical discrimination, while easily hypothesised, appear to remain as yet empirically tested in the labor market.

*Transmen and Transwomen*

As discussed above, previous literature has shown cisgender women and men face hiring discrimination in male and female-dominated occupations, respectively. However, women often face increased and varied forms of employment discrimination, including wage discrimination, the ‘sticky floor’, and the ‘glass ceiling’. Similarly, survey evidence and qualitative research has found that transwomen often face increased, and different forms of, discrimination than transmen (Schilt and Wiswall, 2008; Grant et al., 2011). This has important implications for the design of a study measuring transgender hiring discrimination; gender differences between transgender job applicants is a variable that should be either included or controlled for in an analysis.

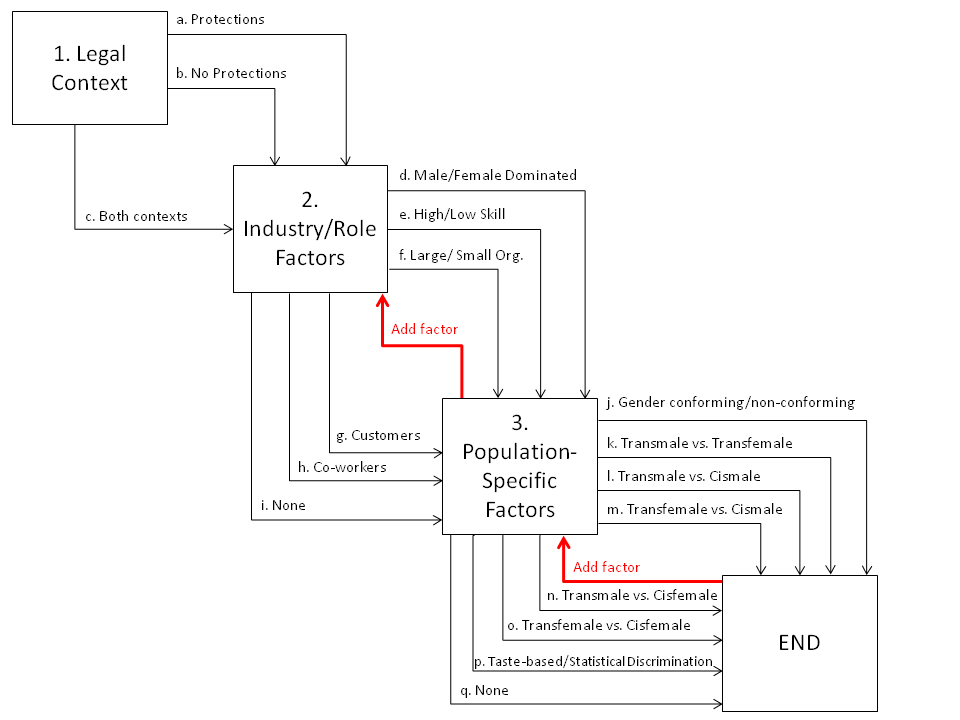
However, the different levels of discrimination faced by transmen and transwomen are complicated by gender stereotyping within industries and occupations (see above). Genderqueer individuals (see *Gender Conformity*, below) may also face hiring discrimination, but, because this identity has only recently been given attention, any discrimination they face could result from ignorance rather than outright hatred.

Like the discussion on male and female-dominated industries above, determining rates of discrimination against transmen versus transwomen may render some interesting findings and discussions in relation to gender in the workplace in general.

*Gender Conformity*

Until now, the paper has not discussed the variety of gender identities and expressions that exist under the transgender grouping. As discussed above, the transgender umbrella term includes not only those who transition fully from male to female or female to male, but also those who identify with both and neither genders. The latter’s visual gender expression may therefore not match traditional binarized ideals of gender expression. Another consideration unique to transgender candidates is that of *passing*, i.e., one’s ability to appear as a cisgender person of one’s desired gender identity. A transwoman who *passes*, therefore, would appear to most or all as a cisgender woman. In their development of a scale to measure transphobia, Hill and Willoughby (2005: 534) also discussed genderism: “an ideology that reinforces the negative evaluation of gender non-conformity or an incongruence between sex and gender. It is a cultural belief that perpetuates negative judgments of people who do not present as a stereotypical man or woman”. By bringing together the concepts of gender non-conformity, passing/not-passing, and genderism, one can postulate that those who do not conform to traditional gender norms or do not pass will be more likely to encounter a negative hiring decision based on a genderist reaction to their appearance.

This, of course, is presumably predicated on the assumption that the hirer can *see* the gender non-conforming applicant in question. An in-person study (see above) could therefore be useful; however, as discussed, there are resource-related disadvantages to this method. A correspondence test could be used, but only in particular countries – one would most likely have to convey this visual information using a photograph on the résumé, which is not customary in the USA, the UK, the Netherland, the Republic of Ireland, amongst others, but is common in Germany, Japan, and China. In addition, Rich (2018) argues that the researcher cannot completely control the experiment when they use photos, as photos can convey some information unintentionally (for example, Rich’s discussion included perceived attractiveness, which would be another variable in an experiment involving gender conformity). An alternative to the visually-based experiment may be to include non-binary or alternative gender pronouns, such as *they/them*, *ze/hir, xe/xem*, but because these and the purpose they serve are less well known, the experimental manipulation may not work as well as hoped. There are thus a number of different avenues, each with their advantages and disadvantages, which a researcher may take to measure hiring discrimination on the basis of gender conformity or non-conformity of transgender job applicants.

**

*Figure 1. A flow-chart showing a research design decision-making process for studies measuring hiring discrimination against transgender job applicants. Source: author’s own.*

**Designing a Study**

The flow-chart in Figure 1 shows a research design decision-making process that follows from the discussion above. The aspect most pervasive and arguably most relevant to a study of hiring discrimination is the legal context in which the study takes place. As discussed above, there are a variety of legal contexts across and within countries, and the presence and effectiveness of these policies may have an impact on the rate of hiring discrimination (Bardales, 2013), so an important factor to consider before conducting a study is whether or not legal protections are present in the city/county/state/country under investigation (paths a and b in Figure 1). Like Bardales (2013), the aim of the study may not just be to study hiring discrimination but also to investigate how effective protections are in combatting it, so a researcher may choose to situate their study in both contexts (path c).

After choosing which legal context they want to base their study within, a researcher may decide to investigate if and how transgender hiring discrimination operates in different industries and roles. As discussed above, there are several different contexts and considerations one might want to include in their, including male-dominated industries and female-dominated industries (path d), large and small organisations (path f), and the possibility of taste-based proxy discrimination with regard to customers or co-workers (g and h, respectively).

Once a particular role or industry factor has been chosen (or not chosen), the factors specific to the transgender population that the researcher wishes to investigate can then be decided upon. At this point, one can decide on which combination of test group and control group to investigate (k, l, m, n, o), whether they want to investigate the type of discrimination at play (p), or whether their primary focus should be on gender conformity and its effect on hiring.

After the legal context decision, taking the bottom, outer-most path (e.g. No Protections 🡪 None 🡪 None, or Protections 🡪 None 🡪 None) would result in a study that simply tested hiring discrimination against transgender candidates in the researcher’s chosen legal context, with no other complicating factors or scenarios. Conversely, additional mediating factors may be added by following the red line back to the previous set of factors (e.g. if one wished to measure hiring discrimination on the basis of customers (g) in a female-dominated industry (d). However, as Van Borm and Baert (2018) conclude, adding complexity to a research design may result in an overly-complicated analysis, and increases the possibility of errors on behalf of a researcher. With the literature on this topic at such a nascent stage, it may behove researchers to focus more on general topics to firstly establish an empirical literature on transgender hiring discrimination, before moving to more specific contexts, combinations, or scenarios.

**Conclusion**

This paper can serve as a guide for any researchers wishing to study or measure hiring discrimination against transgender people. The discussion of the various methods that one may take in studying this topic, including and in addition to the popular correspondence test, can prompt researchers to consider the various design options before them, and perhaps lead to some novel design adaptations and studies. Figure 1 shows the multiple considerations one must consider before designing a study on this topic dividing them according to legal, industry/role factors, and population-specific factors. In doing so, this figure can hopefully help simplify the experiment design process, and help fuel further research to address the dearth in empirical quantitative research on this topic.

***Recommendations for Future Researchers***

*Areas of Study*

Within the business and management literature, research focusing on general transgender issues is overwhelmingly centred on the USA (McFadden and Crowley-Henry, 2016). In his exhaustive review of correspondence experiments performed since 2005, Baert (2018) highlights that almost two thirds of this type of study have been performed in Europe, with other countries, including some with the largest populations in the world, having no correspondence experiments performed. In addition, as noted above, there appears to been no correspondence tests performed in relation to transgender job applicants in Europe, and only two (with quite small samples) conducted in the USA. The state of the literature on this topic, therefore, can be likened to a blank slate, and thus there is ample opportunity and a pressing need for more research to be conducted around the world.

Sensitivity should, however, be shown when researching non-cisgender identities in other countries; other terminologies, identities, traditions or groups may be present in local cultures that do not resemble the prevailing Western context. For example, within the Indian subcontinent, *hijra* occupy a particular space within Hinduism, are seen as the favoured devotees of the Lord Rama, and can bestow blessings, yet are marginalised and often have to perform sex work to survive (Khan et al., 2009). While *hijra* could clumsily be compared to transfemales in the West, they are a distinct and separate group, a third gender, with particular traditions, challenges and issues (Kalra, 2012). Other areas with third gender or transgender inhabitants include Albania (the *sworn virgins*) (Dickemann, 1997), Samoa (*fa’afafine*) (Schmidt, 2003) and the Arabian Peninsula (*khanith)* (Murray, 1997)*.* Western concepts and phenomena may or may not be applicable to these populations; this also has yet to be tested.

*Non-Traditional and Intersectional Transgender Identities*

Although it may be disappointing that there has been very little empirical measurement of hiring discrimination against transgender job applicants, the fact that there are few studies could be somewhat of an advantage. Less traditional transgender identities, such as genderqueer, nonbinary, or agender, could be built in these studies from the very start, allowing a fuller picture of the entire transgender community to emerge.

Intersectional identities, where an individual has a combination of marginalised identities, can lead to some quite specific outcomes; while the differences in experience between transmen and transwomen have been discussed above, race and socioeconomic status are also implicated. For example, a recent survey (Edelman et al., 2015) reports that transgender people of color in the USA were more likely to have been denied a job than white transgender people 49% versus 30%, respectively. Other such combination of identities may lead to distinctive outcomes in studies on hiring discrimination, and would provide valuable detailed and nuanced information on the state of transgender experiences in the labor market. Ultimately, a researcher must consciously decide whether or not to include intersectional identities in their analysis. Whilst not including other marginalised identities in the study may lead to a simpler design and a more focused measurement of discrimination against transgender candidates specifically, the inclusion of intersectionality as a consideration in a study could lead to a richer analysis that better reflects wider society. In deciding (for the sake of simplicity or otherwise) not to consider other personal identities such as ethnicity and class, one may run the risk of contributing to a suite of studies that have at its primary focus the experiences of white, middle-class transgender job applicants, resulting in a one dimensional and less representative literature.

**Limitations**

This paper has investigated a number of factors at the legal, industry/role and population level, presented in Figure 1, that one might take into account when researching hiring discrimination against transgender job applicants. However, there are a potentially huge number of factors that could affect the hiring process and could be taken into account when designing a study; this paper has presented only a few, chosen because it is believed they would add the most amount of information on transgender-specific hiring discrimination to the underdeveloped literature.

Similarly, there are multiple additional variables that may be brought into the design of the résumé, which for brevity have not been discussed at length here. For example, Bertrand and Mullainathan (2004) use high-quality and low quality résumés when investigating race-based discrimination to investigate the differences in call-backs for high and low-quality applications as well as between White and African American applicants. Bardales (2013), however, consciously used high-quality résumés in order to garner more observations in their correspondence test measuring transgender hiring discrimination, a design choice the author admits may have diminished statistical power by diluting the potential effect size.

**References**

Ahmed, A. M., Andersson, L., and Hammarsteft, M. (2013), “Are Gay Men and Lesbians Discriminated against in the Hiring Process?”, *Southern Economic Journal,* Vol. 79 No. 3, pp. 565-585.

Badgett, M. V. L., Holning Lau, Sears, B., and Ho, D. (2007), *Bias in the Workplace: Consistent Evidence of Sexual Orientation and Gender Identity Discrimination.* Williams Institute, University of California School of Law, Los Angeles.

Baert, S. (2018), “Hiring Discrimination: An Overview of (Almost) All Correspondence Experiments Since 2005”, in: Gaddis, S. M. (Ed.), *Audit Studies: Behind the Scenes with Theory, Method, and Nuance,* Methodos Series 14, Springer International Publishing AG, Cham, Switzerland, pp. 63-77.

Baert, S., De Meyer, A. S., Moerman, Y., and Omey, E. (2018), “Doessize matter? Hiring discrimination and firm size", *International Journal of Manpower,* Vol. 39 No. 4, pp. 550-566.

Bailey, J., Wallace, M., and Wright, B. (2013), “Are gay men and lesbians discriminated against when applying for jobs? A four-city, internet-based field experiment”, Journal of Homosexuality, Vol. 60 No. 1, pp. 873–894.

Bailey, M., and Williams, L. R. (2016), “Are college students really liberal? An exploration of student political ideology and attitudes toward policies impacting minorities”, *The Social Science Journal,* Vol. 52 No.1, pp. 309-317.

Bardales, N. (2013), “Finding a job in “a beard and a dress”. Evaluating the effectiveness of transgender ant-discrimination laws”. Unpublished manuscript.

Becker, G. (1957), *The* *Economics of Discrimination*. University of Chicago Press, Chicago.

Bertrand, M., and Mullainathan, S. (2004), “Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination”, *American Economic Review,* Vol. 94 No 1, pp. 991–1013.

*Bloomberg* (2019) “*Meet Aimee. She’s Trans and Got Fired Because of It”* [Website]. Available at: https://www.bloomberg.com/news/articles/2019-03-20/meet-aimee-she-s-trans-and-got-fired-because-of-it (accessed 3 April 2019).

Carlsson, M., Reshid, A. A., Rooth, R. O. (2018), “Neighborhood signalling effects, commuting time, and employment: Evidence for a field experiment”. *International Journal of Manpower,* Vol. 39 No. 4, pp. 534-549.

Collins, J. C., McFadden, C., Rocco, T. S., and Mathis, M. K. (2015), “The Problem of Transgender Marginalization and Exclusion: Critical Actions for Human Resource Development”, *Human Resource Development Review,* Vol. 14 No. 2, pp. 205-226.

Daniel, W. (1968), *Racial Discrimination in England*, Middlesex, Penguin Books.

Dickemann, M. (1997), “The Balkan Sworn Virgin”, in Roscoe, W., and Murray, S. O. (Eds.) *Islamic Homosexualities: Culture, History, and Literature,* New York, NYU Press, pp.187-203.

Drydakis, N. (2009), “Sexual Orientation Discrimination in the Labour Market”, *Labour Economics,* Vol.16, No. 1, pp. 364-72

Drydakis, N. (2011), “Women’s sexual orientation and labor market outcomes in Greece”, Feminist Economics, Vol. 11 No. 1, pp. 89-117.

Drydakis, N. (2015), “Measuring sexual orientation discrimination in the UK’s labour market; a field experiment”, Human Relations, Vol. 68 No. 1, pp. 1769–1796.

Drydakis, N. (2017), “Trans people, well-being, and labor market outcomes. *Iza World of Labor,* Vol.386. DOI: 10.15185/izawol.386

Edelman, E. A., Corado, R., Lumby, E. C., Gills, R. H., Elwell, J., Terry, J. A., and Emperador Dyer, J. (2015), *Access Denied: Washington, DC Trans Needs Assessment Report*, Washington, DC: DC Trans Coalition.

Flores, A. R., Herman, J. L., Gates, G. J. and Brown, T. N. T. (2016). *How Many Adults Identify as Transgender in the United States?,* Williams Institute, University of California School of Law, Los Angeles.

Grant, J. M., Mottet, L., Tanis, J. E., Harrison, J., Herman, J., and Keisling, M. (2011,. *Injustice at Every Turn: A report of the National Transgender Discrimination Survey,* National Center for Transgender Equality, Washington DC.

Hill, D. B., and Willoughby, B. L. B. (2005), “The Development and Validation of the Genderism and Transphobia Scale”, *Sex Roles,* Vol. 53 No. 7/8, pp. 531-544.

Hosada, M., and Stone-Romero, E. (2010), “The effects of foreign accents on employment-related decisions”*, Journal of Managerial Psychology,* Vol. 25, No. 2, pp. 113-132.

Human Rights Campaign (2019), *Cities and Counties with Non-Discrimination Ordinances that Include Gender Identity* [Website]. Available at: https://www.hrc.org/resources/cities-and-counties-with-non-discrimination-ordinances-that-include-gender (accessed 4 April 2019).

Human Rights Campaign (2019), *Corporate Equality Index 2019. Rating Workplaces on Lesbian Gay, Bisexual, Transgender, and Queer Equality* [Website]. Available at: https://assets2.hrc.org/files/assets/resources/CEI-2019-FullReport.pdf?\_ga=2.50185702.1708323563.1555359099-667324104.1555359099 (accessed 10 April 2019).

James, S. E., Herman, J. L., Ranking, S., Keisling, M., Mottet, L., and Anafi, M. (2016), *The report of the 2015 US transgender survey.* National Center for Transgender Equality: Washington DC.

Jowell, R. and Prescott-Clarke, P. (1970), “Racial Discrimination and White-collar Workers in Britain”, *Race & Class,* Vol. 11 No. 4, pp. 397-417.

Kalra, G., (2012), “*Hijras*: the unique transgender culture of India”, *International Journal of Culture and Mental Health*, Vol. 5 No. 2, pp. 121-126.

Kenney, G. M., and Wissoker, D. A. (1994), “An Analysis of the Correlates of Discrimination Facing Young Hispanic Job-Seekers”, The *American Economic Review,* Vol. 84, No. 3, pp. 674-683.

Khan, S. I., Hussain, M. I., Parveen, S., Bhuiyan, M. I., Gourab, G., Sarker, G. F., Arafat, S. M., and Sikder, J. (2009), “Living on the Extreme Margin: Social Exclusion of the Transgender Population *(Hijra)* in Bangladesh", *Journal of Health, Population and Nutrition,* Vol. 27 No. 4, pp. 441-451.

Make the Road New York. (2010), Transgender need not apply: Gender identity job discrimination in New York City’s retail sector, Make the Road New York, New York.

McFadden, C. (2015), “Lesbian, Gay, Bisexual, and Transgender Careers and Human Resource Development: A Systematic Literature Review”, *Human Resource Development Review,* Vol. 14 No. 2, pp. 125-162.

McFadden, C. and Crowley-Henry, M. (2016), “A Systematic Literature Review on Trans\* Careers and Workplace Experiences”, in Köllen, T. (ed.), *Sexual Orientation and Transgender Issues in Organizations.* Springer, NYC, pp. 63-81.

McNeil, J., Bailey, L., Ellis, S., and Regan, M. (2013), *Speaking from the Margins. Trans Mental Health and Wellbeing in Ireland*. Transgender Equality Network Ireland, Dublin, Ireland.

Neumark, D. (2010), “Detecting discrimination in Audit and correspondence studies”, *IZA Discussion Papers*, No. 5263, Institute for the Study of Labor (Iza), Bonn.

Neumark, D., Bank, R. J., and Van Nort, K. D. (1996), “Sex Discrimination in Restaurant Hiring: An Audit Study”, *The Quarterly Journal of Economics,* Vol. 111 No. 3, pp. 915-941.

Murray, S. O. (1997), “The Sohari Khanith”, in Roscoe, W., and Murray, S. O. (Eds.)*, Islamic Homosexualities: Culture, History, and Literature,* NYU Press, New York, pp. 244-255.

Patacchini, E., Ragusa, G., and Zenou, Y. (2015), “Unexplored dimensions of discrimination in Europe: Homosexuality and physical appearance”, Journal of Population Economics, Vol. 28 No. 1, pp.1045–1073.

Phelps, E. S. (1972), “The Statistical Theory of Racism and Sexism”, *The American Economic Review*, Vol. 62 No. 4, pp. 659-661.

Pierné, G. (2013), “Hiring discrimination based on national origin and religious closenss: results from a field experiment in the Paris area, *IZA Journal of Labor Economics,* Vol. 2 No. 1, pp. 1-15.

*Reuters* (2018), *“Amazon scraps secret AI recruiting tool that showed bias against women”* [Website]. Available at: https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G (last accessed 14 April 2019).

Riach, P. A., and Rich, J. (1995), “An Investigation of Gender Discrimination in Labor Hiring”, Eastern *Economic Journal,* Vol. 21 No. 3, pp. 343-356.

Riach, P. A., and Rich, J. (2002), “Field Experiments of Discrimination in the Market Place”, *The Economic Journal*, Vol. 112 No. 483, pp. 480-518.

Riach, P. A., and Rich, J. (2006), “An Experimental Investigation of Sexual Discrimination in Hiring in the English Labor Market”, *Advances in Economic Analysis and Policy*, Vol. 6 No. 1, pp. 1-20.

Rich, J. (2018), “Do photos help or hinder field experiments of discrimination?” *International Journal of Manpower,* Vol. 39 No. 4, pp. 502-518.

Schilt, K., and Wiswall, M. (2008), “Before and after: Gender transitions, human capital, and workplace experiences”, *BE Journal of Economic Analysis & Policy,* Vol. 8 No.1, pp. 1-28.

Stevenage, S. V. and McKay, Y. (1999), “Model applicants: The effect of facial appearance on recruitment decisions”, *British Journal of Psychology,* Vol. 90, No. 1, pp. 221-234.

Stone, A., and Wright, T. (2013), “When your face doesn’t fit: employment discrimination against people with facial disfigurements”, *Journal of Applied Psychology,* Vol.43 No. 3, pp. 515-526.

Tilcisk, A. (2011), “Pride and Prejudice: Employment Discrimination against Openly Gay Men in the United States”, *American Journal of Sociology,* Vol. 117 No. 2, pp. 586-626.

TGEU (2015), *TGEU Press Statement: ALL trans people are protected against discrimination says EU Commission* [Website]. Available at: https://tgeu.org/tgeu-press-statement-all-trans-people-are-protected-against-discrimination-says-eu-commission/ (accessed 1 April 2019).

Van Borm, H., and Baert, S. (2018), “What drives hiring discrimination against transgenders?”, *International Journal of Manpower,* Vol. 39 No. 4, pp. 581-599.

Vargheese, F. P., Hardin, E. E., Bauer, R. L., and Morgan, R. D. (2009), “Attitudes Toward Hiring Offenders: The Roles of Criminal History, Job Qualifications, and Race”, *International Journal of Offender Therapy and Comparative Criminology*, Vol. 54 no. 5, pp. 769-782.

Weichselbaumer, D. (2003). “Sexual Orientation Discrimination in Hiring”. *Labour Economics* Vol. 10 No. 1, pp. 629–42.

Weichselbaumer, D. (2015), “Testing for discrimination against lesbians of different marital status: A field experiment”, Industrial Relations, Vol. 54 No.1, pp. 131–161.