Sexual Orientation Discrimination in the Cypriot Labour Market: Distastes or Uncertainty?

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ABSTRACT

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Sexual orientation and employment bias is examined in Cyprus (Republic of Cyprus: Nicosia, Limassol, Larnaca, Paphos) by implementing an experiment for the period 2010-2011. The design is aimed at answering three main questions: Do gay and lesbian people face occupational access constraints and entry wage bias than comparable heterosexuals? Do gay and lesbian people benefit from providing more job-related information? Does the differential treatment between gay/lesbian and heterosexual applicants disappear as the information of the applicants increases? Methodologically, we sent applications to advertised vacancies and we experimented with two information sets the 'sexual orientation' and 'information' of the potential applicants. The estimations suggest that gay and lesbian applicants face significant bias than heterosexual applicants. Moreover, both heterosexual and gay/lesbian applicants gain by providing more job-related information. However, the estimations suggest that the informational premium for sexual orientation minorities could not reduce the discriminatory patterns. The current results indicate that discrimination against sexual orientation minorities in the Cypriot labour market is a matter of preference, not the result of limited information. One strategy the Cypriot government may employ is to try to affect public opinion and people's attitudes towards sexual orientation minorities. This is the first nationwide field experiment in the Cypriot labour market and contributes to the literature as it is the first field study on sexual orientation which tries to disentangle statistical from taste-based discrimination in the labour market.

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1. Introduction

Economists suggest that labour market discrimination takes place because employers dislike minorities or/and because employers assume that minority employees are less skilled and profitable as employees than the general population (Becker 1957; Phelps, 1972; Arrow, 1973; Becker 1993; Arrow 1998; Baumle and Fossett, 2005; Brue et al., 2006; Charles and Guryan, 2008). In the current study, we are interested in examining the employment of gay males and lesbians in Cyprus. Unfortunately, in Cyprus no data samples include the sexual orientation of individuals which precludes an investigation of this discrimination hypothesis. The current study, assesses differential treatment of sexual orientation minorities using an established experimental technique; the so-called Correspondence Test (Riach and Rich, 2002). The goal is to produce pairs of applicants who submit a written job application to the same firm. These fictitious applicants should be identical in all relevant characteristics so that any systematic difference in treatment within a pair can only be attributed to the effects of sexual orientation. In the current study, following Adam (1981), Weichselbaumer (2003), Drydakis (2009; 2011), Tilcsik (2011) and Ahmed et al. (2012) a gay male /lesbian applicant's sexual orientation was disclosed through a reference in his/her curriculum vitae to work as a volunteer for a gay association. Since discrimination theories are only valid if the employer believes that the employee is a gay male/lesbian, this study focuses on a group of people likely to be viewed as gay male/lesbian (Drydakis, 2009; 2011).

In this study, we firstly examine whether gay male and lesbian applicants face occupational access constraints and entry wage bias than comparable heterosexuals. More importantly, in the current study we contribute to the literature by examining how

increasing job-related information should affect sexual orientation bias in the labour market. We hypothesize that adding favourable job-related information to the applications should reduce occupational access and wage difference between sexual orientation minorities and majorities (Feltovich and Papageorgiou, 2004; Lahey, 2008; Kaas and Manger, 2011). Indeed, economic models of statistical discrimination emphasize the cognitive utility of group estimates as a means of dealing with the problems of low information and uncertainty (Arrow 1973; 1998; Altonji, and Pierret, 2001; Van Hoye and Lievens, 2003). This study is the first field experiment on sexual orientation which aims to disentangle statistical from taste-based discrimination in the labour market. Thus, the scope of this study is to explain real-world social issues and to provide knowledge and insight that is relevant for improving our understanding of the world and to help solve the problems faced by sexual orientation minorities.

The study is organized as follows. Section 2 presents an overview of gay male and lesbian issues in Cyprus. Section 3 provides a review of the existing literature on field experiments of discrimination. Section 4 describes the methodology in detail. Section 5 presents the descriptive statistics, and Section 6 presents the estimations followed by a discussion.

2. Sexual orientation issues in Cyprus

The population of Cyprus is ethnically and geographically divided between the majority Greek speakers in the South Cypriot Cities (Republic of Cyprus: Nicosia, Limassol, Larnaca, Paphos) and the Turkish speakers in the occupied North Cypriot Cities (Nicosia, Kyrenia, Famagusta). Cyprus currently boasts the only divided capital in Europe with the United Nations Green Line running from East to West across the

country, and dividing Nicosia (the capital) in the process. Although the European Union aims to integrate its entire membership into a new model of active citizenship within the context of diversity, sexual orientation minorities in Cyprus are at a disadvantage. According to the European Union Agency for Fundamental Rights (European Union Agency for Fundamental Rights FRA, 2008) prejudices amongst society and the lack of targeted awareness raising measures have so far prevented gay males and lesbians from using the equality body procedure (Council Directive 2000/78/EC) at national level.

The scarce qualitative surveys show that homophobia and discrimination against gay male and lesbian people is widespread, and the issue of homosexuality is a taboo subject in the South Cypriot Cities (European Union Agency for Fundamental Rights FRA, 2008; 2009). Eurobarometer surveys (2006; 2007) estimate that Southern Cyprus is the most puritanical society in the European Union in terms of general attitudes toward homosexuality. Eurobarometer (2007) reveals that a large majority of Cypriots (86%) feel that homosexuality is a taboo, compared to 48% of European Union respondents. Moreover, Eurobarometer (2006) shows that 14% of Cypriots feel that same sex marriage should be allowed, compared to 44% of European Union respondents. In fact, Onoufriou (2009) evaluates that gay male and lesbian people in Greek-Cyprus are viewed as a threat to national and orthodox tradition. Where gay male and lesbian people do not succeed in the roles assumed for them they are viewed as outcasts who have let the family, and even Cyprus, down in some way (Onoufriou, 2009).

It is increasingly important, given the legal actions in Cyprus that have the potential to affect sexual orientation minorities to understand the relationship and the underlying mechanisms between sexual orientation and employment. It is crucial to

have employment data for sexual orientation minorities for current evaluations and future comparisons in order to assert gay male and lesbian rights for better working conditions and to mobilize people around the rights of sexual orientation minorities. Provided that identifying the sources of sexual orientation differences (i.e. distastes or uncertainty against minorities) in employment is crucial in implementing effective policy decisions so as to reduce them (Neumark, 1999). Field experiments on discrimination have become particularly relevant in view of the European Union's decision in its Employment Equality Directive to require member states to extend legislation ensuring equality of opportunity, including sexual orientation-based labour discrimination (Makkonen, 2007). Such a potential of directly collecting discrimination data may in turn further support antidiscrimination policies (Makkonen, 2007).

3. Field experiments of discrimination in the labour market

The correspondence test involves sending carefully matched pairs of written job applications in response to advertised vacancies to test for hiring discrimination in labour at the initial stage of interview selection (Riach and Rich, 2002). The applicants are typically matched on attributes such as age, education, experiences and marital status. Employers' reactions are typically measured by written responses or callbacks. Different forms of field experiments have been used to test for discrimination in hiring. A number of these studies have documented a significant relationship between ethnicity (Jowell and Prescott-Clarke, 1970; Bertrand and Mullainathan, 2004), gender (Neumark, et al. 1996; Weichselbaumer, 2004) and labour market outcomes.

Adam (1981) conducted a field experiment to test discrimination based on sexual orientation and found a reduction of 10% in job offer rates for gay male and

lesbian applicants in Toronto, Canada. Weichselbaumer (2003) used a similar technique to investigate whether the Austrian labour market discriminated against lesbians. She found that the indication of a lesbian identity reduced the offer rate by 12-13%. Moreover, Drydakis (2009) led to the observation that gay males faced lower access to occupations (26%) and lower initial wage offers (1.5%) from employers in Greece. In addition, Drydakis (2011) found that lesbians face lower occupational access (27%) and are offered lower entry wages (6%) than their heterosexual counterparts in Greece. Furthermore, Tilcsik (2011) estimated that openly gay male applicants faced significant discrimination in the US labour market. Finally, Ahmed et al., (2012) found that gay males faced lower access to occupations (3-6%), as well as, lesbians faced occupational access constraints (6%) in Sweden[1]. The findings of these Correspondence Tests are consistent with the notion that a majority of the population has a tendency to discriminate, motivating employers to discriminate against both gay males and lesbians (Becker, 1957; 1993). Importantly, however, discrimination can also occur if employers use group information when evaluating applicants (Arrow, 1973; 1998).

In brief, the distaste hypothesis (Becker, 1957; 1993) describes discrimination as a preference or taste for which the discriminator is willing to pay. The taste for discrimination by employers is based on the idea that they want to maintain a physical

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[1] Furthermore, Ahmed et al. (2008) and Ahmed and Hammarstedt (2009) using various Correspondent Tests found no indication of differential treatment of lesbians, but they found discrimination against gay males in the Swedish housing market. Similarly, Lauster and Easterbrook (2011) using a Correspondent Test found housing discriminated against gay males in Canada. Note also that, Hebl et al. (2002) using a sexual orientation Audit in Texas labour marker found various interesting patterns.

or social distance from certain groups or that they fear that their customers or co-workers dislike transacting with minorities. Becker suggests that discrimination coefficients incorporate the influence of characteristics unrelated to productivity, such as tastes and attitudes towards gay male and lesbian people (England, 1994; Jaret, 1995). Following the taste theory, employers may offer gay males and lesbians a lower wage compared to the heterosexuals in order to equalize the unit cost of labour once psychic costs are factored in. However, if the distaste for the gay male and lesbian population is high enough, employers will prefer not to employ then in their firms. Charles and Guryan (2008) test for, and confirm, a series of key predictions from the standard Becker model in the US labour market. So long as employers' prejudices persist, the size of the penalty will be directly related to the strength of the employer's prejudice, and discrimination will be practiced consistently against the minorities by prejudiced agents[2].

In addition, statistical discrimination (Phelps, 1972; Arrow, 1973; 1998) predicts that unequal treatment is a result of a profit-maximizing response by employers to uncertainty about the actual productivity and quality of individual employees. In particular, Blank et al. (2004) analyze that statistical discrimination refers to situations of discrimination on the basis of beliefs that reflect the actual distributions of

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[2] Psychological research (Herek, 2004) demonstrates the existence of sexual stigma (the shared knowledge of society's negative regard for any behavior, identity, relationship or community that is not heterosexual), heterosexism (the cultural ideology that perpetuates sexual stigma), and sexual prejudice (negative attitudes based on sexual orientation) and the effects that such attitudes have on the everyday experiences of gay male and lesbian people.

characteristics of different groups. In a world of imperfect information, employers face risks regarding employees' profitability, and specific characteristics become inexpensive screening devices (Pager and Karafin, 2009). If employers believe that there is a systematic difference between gay male/lesbian and heterosexual employees in their reliability, aptitude, productivity, work commitment, job stability etc. then differences in employment outcomes may arise (Altonji and Pierret, 2001; Feltovich and Papageorgiou, 2004; Lahey, 2008). Specifically, if employers' uncertainty regarding sexual orientation minorities' productivity, work commitment etc. is strong enough, they will not employ gay male/lesbian people to their works, or they employ them in jobs in which it is easier to monitor their productivity or in jobs for which turnover is not problem. These acts are not based specifically on prejudice or negative affect toward a class of individuals but rather are motivated by practical concerns and negative stereotypes and are grounded in what the decision maker believes to be valid inferences about productivity and risk[3]. Importantly, however, if employer's beliefs are inaccurate or uniformed, it might not be statistical discrimination (Blank et al. 2004).

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[3] Importantly, although there are evidences that lesbians earn more than heterosexual women in the US (Badgett, 2001; Berg and Lien, 2002; Jepsen, 2007; Daneshvary et al., 2008), in UK (Arabsheibani et al., 2005), and in the Netherlands (Plug and Berkhout, 2004) all correspondence tests suggest that lesbians face statistically significant hiring discrimination in Toronto (Adam, 1981), Austria (Weichselbaumer, 2003), Greece (Drydakis, 2011), and Sweden (Ahmed et al., 2012). Since, discriminatory treatments are assigned we can suggest that statistical discrimination against lesbians might be present at the initial stage of the hiring process. Working in a collaborative spirit, one may suggest that lesbians face entry employment inequalities (driven by taste and/or

Van Hoye and Lievens (2003), as well as, Feltovich and Papageorgiou (2004) evaluate that given limited information, an employer is more likely to resort to negative stereotypes in order to make hiring decisions but the authors highlight the possibility that discrimination is reduced or even eliminated when a decision-maker has enough positive information. The few existing empirical studies provide contradictory outcomes. On the one hand, Kaas and Manger (2011) find that ethnic discrimination in the German labour market is disappeared when favourable information is provided. In the same vein, Lahey (2008) suggest that no evidence is found to support taste-based discrimination as a reason for age discrimination in the US labour market, and some evidence is found to support statistical discrimination. On the other hand, Bosch et al. (2010) show that positive information can not eliminate discriminatory behavior against ethnic minorities in the Spanish housing market. Similarly, in Sweden, Ahmed et al. (2010) estimate that the amount of housing discrimination against ethnic minorities remains unchanged by providing more information about ethnic people. Importantly, however, we should be very careful in the way we interpret these patterns because there are differences depending on how one evaluates the phenomenon under consideration.

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statistical motivations) that become wage premiums in the future (Drydakis, 2011). However, this is an open question. As Elmslie and Tebaldi (2007) point out, the level of discriminatory attitudes against lesbians is ''indeterminate theoretically''. On the one hand, lesbian women could suffer. On the other hand, lesbians may be preferred.

4. Design of the experiment

4.a Methodology and application structure

This research focuses on the Republic of Cyprus (South Cypriot Cities: Nicosia, Limassol, Larnaca, Paphos) which is administered by Greek Cypriots. The data were gathered between January 2010 and January 2011 as part of the Southern Cypriot Area Study (SCAS) conducted by the Panteion University of Social and Political Sciences. The 2010-2011 SCAS is one component of the multi-city study of the Scientific Center for the Study of Discrimination (SCSD). The current experiment was structured in two stages. In the first stage, we fabricated two imaginary employees equal in human capital. The two applied for the same job by sending application forms using different fax devices (see, Appendix A). We applied to vacancies that demanded eight hours a day and five days a week of either male or female employment. These vacancies were identified through a random sample of advertisements appearing on websites[4]. We concentrated on low-qualified jobs because applicants for such positions are expected to be face greater discrimination risk (Badgett et al. 2007; Eurobarometer, 2007; Drydakis, 2012). Thus, it was our priority to estimate low-qualified people's occupational access, and evaluate then the reasons for such discrimination (Eurobarometer, 2007). We investigated different occupations with vacancies that might demonstrate a variation in discriminatory behavior. The occupations covered a large spectrum of work environments: office jobs, industry jobs, café and restaurant services and shop sales. Other occupations were excluded. For example, many low-qualified job vacancies in

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[4] In Greek-Cyprus, six internet sites advertise job openings. This is the most expedient way to search for a job. All are also online. We became members of these sites and had a large pool of job openings.

agriculture, construction, cleaning and delivery only had telephone numbers available for contact.

The qualifications and presentation styles of the two fictitious applicants (per sex) were matched as closely as possible. The applicants were identical in all employment-relevant characteristics except sexual orientation. Each of the applicants was given a distinctive first and last Greek Cypriot name, a mobile telephone number, and a postal address. Each of the name combinations alternated between homosexual and heterosexual sexualities. The addresses were chosen in order to indicate the same social class. The applicants were 30 years old, natives and unmarried. Both applicants had finished high school approximately twelve years before, had basic knowledge of English and P/C, and had ten years of work experience in positions similar to the vacant one for which they were applying. Moreover, in order to avoid detection, the candidates' high schools and previous workplaces were located in different areas within each city. Finally, we included items on the resumes to signal that the applicants had similar hobbies (cinema and music).

The application forms were faxed simultaneously and within one day of the advertisement's first appearance. If the firms were interested in any of the applicants, they could be reached either through postal addresses or by telephone. The styles of the cover letters and curriculum vitae were different for each applicant. Pre-tests ensured that neither of the two cover letters and resumes elicited preferences. Nevertheless, the different styles were allocated equally between the heterosexual and gay male/lesbian applicants in order to control for the possibility that the style of a cover letter and curriculum vitae could influence an employer's response. For the same reason,

applications were sent to each vacancy at different times. In half of the cases, the heterosexual seekers' application was sent first.

In the second stage, whenever employers called to arrange appointments with the applicants, the two applicants asked informal questions regarding monthly wage offers (Drydakis, 2009; 2011). In order to verify that employers were calling, each applicant raised the following questions: "Am I speaking to the employer?" or "Are you the employer?" When we did not have the chance to converse with employers, we did not raise any question regarding monthly wages. This question was reasonable because the status of the vacancies and applicants with low human capital qualifications allowed for straightforward interactions. For low-status vacancies, employers offer fixed wages as robust bargaining tools, and complicated arrangements based on human capital criteria were infrequent (Drydakis, 2009; 2011). In order to verify that the applicants were alike regarding all characteristics, such as articulation, age and manner of speaking, and responses to employers' questions or requests for clarifications, we conducted a pre-test that included a recording of the applicants' rehearsed responses and asked numerous individuals to assess the applicants regarding the relevant issues. The true experiment began after unanimity had been reached. Overall we employed four pairs of applicants (per each sex). However, to control for the effects lacking motivation, we alternated the applicant's role every month. The experiment was designed in order to minimize the inciting of repulsion or endearment by the applicants' words or behavior. Repulsion or endearment may have led to actions having little or nothing to do with wage discrimination. Finally, as in Drydakis (2009; 2011), we assumed that the likelihood of employer wage discrimination against gay male/lesbian applicants may vary with characteristics such as the employer's sex. It is of interest to ascertain whether male and

female employers discriminated against sexual orientation minorities in similar ways. In an attempt to assess the role of these characteristics, the applicants recorded this information when they received callbacks from employers.

4.b Gay male/lesbian labeling

In this study, as in Adam (1981), Weichselbaumer (2003), Drydakis (2009; 2011), Tilcsik (2011) and Ahmed et al. (2012) the gay male/lesbian applicants' sexual orientations were disclosed by the following line in the personal information part of the resume: ″member volunteer in the Cypriot Homosexual Association (from 2005 to 2008)″. No explicit information on sexual orientation was given by the heterosexual half of the applicants. The present labeling does suggest that the sexual orientation minority applicant successfully communicates his/her sexual orientation. Herek (1990) explained that homosexuality operates through a dual process of invisibility and attack. It usually remains culturally invisible; when people who engage in homosexual behavior or who are identified as gay male/lesbians become visible, they may become subject to societal attacks. Indeed, Drydakis (2009) discusses that "…after a short period of sending applications, the gay-labeled mobile phone started to receive intimidating calls (from males) regarding sexual orientation, and this lasted up until the end of the experiment…''. The potential for discriminatory treatment due to sexual orientation depends on the employers' ability to distinguish gay male/lesbian from heterosexual applicants. Even if employers wish to discriminate against gay male/lesbian employees, there are few ways of judging this aspect of individuals' lives[5].

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[5] As we mentioned before Southern Cyprus is the most puritanical society in the European Union in terms of general attitudes toward gay male and lesbian people

Researchers acknowledge that a concern with correspondence testing for sexual orientation is that the interaction of volunteerism/activism and sexual orientation may be important (Drydakis, 2011; Tilcsik, 2011). Generally talking, activists in any field could be also subjected to discrimination on the basis of political opinions and beliefs. It may also be possible that they receive preferential treatment. The two scenarios described remain controversial given the absence of empirical evaluation. In this study, the heterosexual applicants' curriculum vitae also mentioned past volunteerism in an environmental association; "Volunteer in the Nature: Environmental Union from 2005-2008". Similarly, being a member of this association may, positive or negative, affect employment possibilities and wages. Crucially, however, both documents indicated that those activities had ended in order to minimize the volunteerism/activism impact. In doing so, we control also, for the chance that volunteerism/activism may have created a conflict in the applicants' present duties (see also Weichselbaumer, 2003; Drydakis, 2009; 2011; Tilcsik 2011).

4.c Enhance applications' information

As previously discussed there is a consensus among economists that discrimination may be caused by preferences for and against members of certain groups (Eurobarometer, 2006; 2007). We suggest that it would not have been rational for Cypriot heterosexuals to highlight in their CVs gay male and lesbian activism. However, in those countries where people are tolerant regarding gay male and lesbian rights, and heterosexual people support gay male and lesbian movements, correspondent test results should be interpreted as discrimination against "potentially" gay males and lesbians.

and/or the lack of correct information about their skills, reliability and work commitment (Feltovich and Papageorgiou, 2004; Charles and Guryan, 2008; Pager and Karafin, 2009). Since taste and statistical discrimination can most likely coexist, we can only rule out the preference-based explanation if discrimination is eliminated after adding positive information about applicants (Feltovich and Papageorgiou, 2004; Van Hoye and Lievens, 2003). In the current study, we hypothesize that adding information to the application should not reduce the gap between sexual orientation minority applicants in the number of response and wage offers if discrimination is a result of firms' preferences for heterosexual applicants. However, it should decrease the gaps in the number of responses, as well as in wages offers received from firms between gay male/lesbian and heterosexual applicants if discrimination is caused by uncertainty (see also, Lahey, 2008; Ahmed et al. 2010; Bosch et al. 2010).

Methodologically, we created two additional applicants, one gay male/lesbian labeled and one heterosexual (for each sex) who gave favorable information about themselves; the so-called 'more-informative applicants' (see, Appendix B), and we experimented with two information sets the 'sexual orientation' and 'information' of the potential applicants. Thus, we had four different types of matched pairs and we randomized the particular application information (see, Appendix C). Firstly, we studied the extent to which the applicants received callbacks from firms, and initial wage offers. Secondly, we examined the difference between the applicants who had provided low information about themselves, and applicants who had provided favorable information about themselves. For obvious reasons, we sent a pair of applications for each job opening. The experiment would have been revealed if we had sent a more-informative

gay male/lesbian and less-informative gay male/lesbian application to the same job opening.

In this study, we added positive information on factors where gay male/lesbian employees may potentially suffer from prejudice; that is work commitment. Typically, statistical discrimination is discussed with respect to discrimination against women and ethnic minorities. In these cases gender roles and cultural norms may lead to differences in average education and productivity leaving the minority group at a disadvantage. This is not the case for gay males and lesbians who are usually well educated (Badgett et al., 2007). However, since sexual orientation minorities enjoy lower societal approval than heterosexuals (Eurobarometer, 2006; 2007, Badgett et al., 2007) potential biases could predict differences for the labour market commitment and labour behavior between heterosexual and gay males/lesbians, which fit in standard models of statistical discrimination such as Phelps (1972). Methodologically, we screened the resumes with human resource officials in public and private employment settings in order to assure that applicants' labour market commitment is signaled.

Employers often believe grading scales are useful predictors of cognitive ability that affects effectiveness and responsibility and they make hiring decisions that are based on them (Roth et al., 1996; Miller, 1998; Turban and Cable, 2003; Kaas and Manger, 2011). The more-informative applicants mentioned their high school diplomas grading scale (very good); their first degrees in English grade (A); and their certificates of P/C knowledge grade (A). Moreover, the CVs were more informative regarding applicants' previous responsibilities and job tasks. Furthermore, they mentioned some personal characteristics to emphasize their extroversion (sociable, amiable, energetic, enthusiastic) and conscientiousness (efficient, organized, productive). In actuality,

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informative applications regarding previous job responsibilities, as well as, the mentioned personality traits (non-cognitive traits) are key elements which affect market behavior (Boudreau et al., 2001; Turban and Cable, 2003; Muller and Plug, 2006; Hallinger and Bridges, 2007; Kaas and Manger, 2011). Finally, to enhance applicants' reliability, and work commitment the more-informative applicants attached letters of reference from previous employers[6] stating positive information about the applicants' traits such as affability, capacity for teamwork, efficiency, conscientiousness, responsibility, loyalty to the firm, willingness to exert effort on behalf of the firm, no absenteeism from work, and agreeableness. Studies do confirm the validity of recommendations to signal reliability and work stability in the screening process (Hallinger and Bridges, 2007; Kaas and Manger, 2011). On average, the mentioned studies suggest that applicants' work behavior can be signaled by grading scales, personal characteristics, previous job tasks, and letters of reference. If employers can accurately estimate differences in the quality or disposition of minorities and majorities on average, this information can be helpful in guiding decisions about individual minority and majority candidates for whom these characteristics are more difficult to observe directly. Thus, comparing the response rate across 'sexual orientation' and 'information' could allow us to study taste-based and statistical discrimination in the labour market.

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[6] The letters of reference were different for each applicant. These were allocated equally between the sexual orientations in order to control for the possibility that one could influence an employer's response. Pre-tests ensured that neither of the two letters gained preferences.

5. Descriptive statistics

5.a Less-informative applicants

The occupational access outcomes are displayed in Tables 1 and 2 for those applicants who have provided limited information. As it can be seen in the last two columns in Table 1, the net discrimination against the gay males occurred in 469 cases, or 71.9%. In Table 2, we see that the net discrimination against lesbians is 76.7%. The findings revealed significant occupational access differences for the two pairs across all sectors, suggesting that bias against gay males and lesbians is widespread. Importantly, in all cases, lesbians face higher net discrimination than gay males. This outcome might highlight sexual orientation minority women's status in the labour market (Drydakis, 2011). Moreover, the measurements show that in more prestigious jobs (office jobs), gay males and lesbians face higher occupational access constraints than in less prestigious jobs (industry, restaurant and café services, and shop sales). Discrimination against sexual orientation minorities might be assumed to be higher in jobs with higher status; thus, occupational segregation is expected to be more prevalent in white-collar than in blue-collar jobs (Drydakis, 2011).

[Table 1]-[Table 2]

Table 3, presents the entry wage offers to heterosexual and gay males/lesbians. The samples used in this study consist of 397 observations for heterosexual males and 103 observations for gay males. While the gay males were similar to their heterosexual counterparts in age, education level, and work experience, the data suggest that male heterosexual applicants were offered monthly wages, on average, higher than the gay

males: €1141.6 versus €1034.2[7]. On this basis, it seems that sexual orientation does have an effect on observable outcomes. In addition, for female heterosexual and lesbian applicants the wage offers are €1082.6 and €1016.0. In all cases, females are found to face lower monthly wages than males, regardless of their sexual orientations. In other words, an entry-based sex wage gap exists. Notice also that, for both majority and minority applicants, the blue-collar jobs (industries) constitute the least well-paid occupation in the current sample. Those applicants in white-collar occupations (office jobs) were offered the highest wages in this sample.

[Table 3]

5.b More-informative applicants

Would more information about a particular applicant reduce the occurrence of discrimination or are members of minority groups stigmatized by their sexual orientation? Comparisons of the applicant's sexual orientation and the amount of information revealed could allow us to measure the degree of discrimination and learn about its sources. Table 4 shows the occupational access results for more-informative male applicants. As it is observed, the net discrimination against gay males is 72.1 %. This finding suggests that adding information in the application increases the gay males' occupational access constrains by 0.2%. Importantly, note that, adding information in the application increases the probability of receiving a callback for both heterosexuals and gay males. However, for gay males the rate of increase is lower. To be precise, adding job-related information in the heterosexual males' application

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[7] In Cyprus, for the period 2010-11, the minimum legal monthly wage for unmarried workers without experience (approximately) was €830.

increases their occupational access by 11.3%. On the other hand, adding job-related information in the gay males' application increases their occupational access by 9.5%. Comparable patterns hold for heterosexual and lesbian women (see, Table 5). From the descriptive statistics we can infer that gay males and lesbians did not gain as much as the heterosexual applicants by providing positive information. More importantly, the occupational access gap between sexual orientation minority and heterosexual applicants did not decrease from when they provided less information to when they provided further information about themselves. The informational premium for sexual orientation minority applicants cannot reduce the discriminatory patterns. It is indicated that labour market discrimination against gay male and lesbian applicants is probably a matter of preference, not the result of a lack of information and uncertainty about applicants' work behavior.

[Table 4] - [Table 5]

Similarly, in Table 6 we observe that the wage gap between more-informative heterosexual and gay male/lesbian applicants is higher than the wage gap between less-informative heterosexual and gay male/lesbian applicants. Actually, the provision of information raises heterosexual male applicants' monthly wages by 2.3% (for female heterosexuals the change is on the order of 4.6%), while for gay males the wage offers are raised by 1.9% (for lesbians the wage offers are raised by 2.2%). Both heterosexual and gay males/lesbians gain by providing more information. However, adding information to the application does not reduce the discriminatory gap between gay male/lesbian applicants in the entry wage offers.

[Table 6]

6. Estimations

Table 7 presents the occupational access regression results for men and women (Bertrand and Mullainathan, 2004; Drydakis, 2009; Ahmed et al., 2010; Bosch et al., 2010). For convenience, Appendix D summarizes the variable definitions. Panel I shows that the estimated probability (marginal effects) of less-informative gay male applicants receiving an invitation for an interview is 38.9 percentage points lower than that for less-informative heterosexual male applicants, where the result is statistically significant at the 1 percent level. The estimations provide evidence that the sexual orientation minority applicant would receive fewer interview callbacks when two identical applicants engaged in an identical job search. Because of the limited number of positions available, these differences in offers rates imply welfare losses for sexual orientation minorities. One question, then remains to be examined; does the magnitude of discrimination against gay males change when the applicants provide more information about themselves? Panel II presents that the probability of more-informative gay males receiving an invitation for an interview is 39.2 percentage points lower than that for more-informative heterosexual males. The estimation is statistically significant at the 1 percent level. Consequently, increasing the amount of information in the applications will not reduce occupational access discrimination in the labour market.

Panel III presents regression results for the total sample; less- and more-informative applicants. The probability of gay males receiving an invitation for an interview is 39.0 percentage points lower than that for heterosexual males. On the one hand, the estimations indicate that, applicants who provide more information have a higher probability of receiving callbacks, where the result is statistically significant at the 1 percent level. On the other hand, however, the interaction effect; "*sexual*

orientation x more-informative applications" indicates that discrimination against gay males does not change when gay males provide further information. In other words, the difference in occupational access rates between less-informative heterosexual male and gay males is not statistically significant different from the difference in occupational access rates between more-informative heterosexual males and gay males.

For women, the estimations are 42.4 percentage points lower for less-informative lesbian applicants, and 43.4 percentage points lower for more-informative lesbian applicants (Panels IV and V). In all cases, the results are statistically significant at the 1 percent level. As it is observed, the interaction effect is again statistically insignificant (Panel VI). Importantly, it is estimated that lesbians face higher occupational barriers to new vacancies than gay males. This pattern is compatible with some European studies reviewed in this study (Drydakis 2009; 2011). The additional effect that having a lesbian background has on females' lives is of great concern and needs further evaluating. Social scientists should place an emphasis on the complex relationship between different types of inequalities, as they are concerned with not only gender relations but also the role of other types of social relations in the determination of occupational access outcomes.

As far as it concerns the other control variables, neither the cover letter's type nor the CV's type has a statistically significant effect. Similarly, the order in which the applications were sent, as well as, letters of reference's type had no significant effect. Note also that, the interaction terms between the sexual orientation dummy and occupation dummies are negative and statistically significant at the 1 percent level. In each occupation, gay males and lesbians faced significantly lower chances of being invited for an interview. As Drydakis (2009) claims, gay people are more likely to be

unemployed than heterosexuals, assuming that an applicant receives an interview only if he/she has a substantial chance of getting the job.

The current estimations agree with Adam's (1981), Weichselbaumer's (2003), Drydakis's (2009, 2011), Tilcsik's (2011) and Ahmed's et al. (2012) Correspondence Testing results. They find a statistically significant reduction in the invitation rates for applicants labeled as gay male/lesbian applicants. Apparently, the estimates in this study are higher than those in the studies cited. This pattern has two explanations. In the current experiment, the investigation focused on low qualified gay male/lesbian applicants. Adam (1981), Weichselbaumer (2003) and Tilcsik (2011) structured experiments to test the performance of qualified men and women, such as lawyers, managers, business and financial analysts, accountants, and administrative assistants. The issue of sexual orientation might be complicated by the wide variety of firm-specific labour market forms, the strong influence of occupational factors in determining employment practices, and their impact on gay males' and lesbian's employment positions and prospects, as well as the problems associated with making comparisons at the sectoral level across different markets. On the other hand, the Eurobarometer (2007) measures Cyprus as the most puritanical society in Europe when it comes to general attitudes toward homosexuality. Cyprus is perceived to be strongly reluctant to deal with issues such as sexual orientation in the labour market compared to Sweden, Austria and Greece (Eurobarometer, 2006; 2007).

To continue with, Table 8 presents the wage coefficients (OLS). The negative effect of minority sexual orientation is significant in all panels at the 1 percent level. For less-informative gay males the estimated wage bias is 9.0 percent lower (Panel I), for more-informative gay males it is 9.5 percent lower (Panel II), and for both less- and

more-informative gay males it is 9.2 percent lower (Panel III)[8]. Moreover, for less-informative lesbians the estimated wage bias is 5.6 percent lower (Panel IV), for more-informative lesbians it is 5.9 percent lower (Panel V), and for both less- and more-informative lesbians it is 5.8 percent lower (Panel VI). In all cases, applicants who provide more information were offered higher wages, where the results are statistically significant. However, the interaction effect estimator is statistically insignificant. The wage estimations indicate that gay male and lesbian applicants are at disadvantage in the labour market and that this discrimination persists even when applicants provide detailed information about themselves. Note also that lesbians face lower wage bias than gay males[9].

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[8] Indeed, in the literature, there is strong evidence of wage discrimination against gay males. In UK, Arabsheibani et al. (2005) find that gay males earn less than heterosexual males. In Sweden, Ahmed and Hammarstedt (2010) estimate that gay males earn less than heterosexual males. In Greece, Drydakis (2012) finds that gay males earn less than heterosexual males. In the US, Black et al. (2003) estimate comparable patterns.

[9] The general trend in the literature suggests that lesbian employees may earn more than (or the same as) heterosexual women (Arabsheibani et al. 2005; Jepsen, 2007; Ahmed and Hammarstedt, 2010). These patterns can be evaluated through human capital accumulation and specialization choices, household formation, work effort, location, spending, and personality characteristics (Drydakis, 2011; 2012). In the current study, however, lesbians face significant entry wage bias than heterosexual women. As previously discussed, Cyprus is perceived to be strongly reluctant to deal with issues such as sexual orientation in the labour market, and also it is ranked as the most puritanical society in Europe when it comes to general attitudes toward homosexuality

In the wage regressions, the order in which the application was sent, the cover letter, CV and letters of reference type, the employers' callback order, the interaction effect between the sexual orientation dummy and employers' callback order, the applicant's impact[10], and the interaction between the sexual orientation dummy and applicant's impact were found to have insignificant effects on wage offers. However, the interactions between the sexual orientation dummy and occupation dummies are significant. As the descriptive statistics suggested, wage offers are statistically significantly different for gay males/lesbians and heterosexuals. Furthermore, employers' gender had insignificant effect on wage offers. Similarly, the interaction effect between the sexual orientation dummy and employers' gender is statistically insignificant.

7. Discussion

This study attempted to evaluate the role of preference-based and statistical discrimination in the Cypriot labour market by directly observing the change in the behavior of the firms by manipulating the information provided in applicants' resumes.

(Eurobarometer, 2006; 2007). These attitudes may affect lesbians' entry wages offers (see, also Drydakis, 2011).

[10] Since four pairs of applicants (for each gender) were used in this study, a test of homogeneity across pairs was undertaken to check whether or not one or more pairs of applicants were driving the results. Eventually, we accept the null hypothesis of homogeneity at the 1% level. This implies the success of efforts to control for participants' effects that might have biased the occupational access and entry wage outcomes.

We hypothesized that increasing information about the applicants should not affect the amount of discrimination against sexual orientation minorities if discrimination was preference based, but it should decrease the discrimination against minorities if part of the discrimination was statistical. The results showed that the extent of discrimination against gay male/lesbian applicants after adding information remains unchanged.

Neumark (1999) suggests that from a policy perspective, whether taste discrimination or statistical discrimination plays a major role in differences in labour market outcomes between majorities and minorities is significant. If taste discrimination accounts for the lower occupational access and entry wages of gay male/lesbian applicants, then antidiscrimination legislation may be the only appropriate response. However, if statistical discrimination is important, then a better means of assessing employees' productivity, skill and ability may contribute to the reduction of discrimination at the individual or group level (Altonji, and Pierret, 2001). As employees accumulate experience on the job, employers may acquire new information about performance/abilities and re-evaluate hiring standards, wage contracts and promotion decisions. In the current study, since, negative attitudes against gay male/lesbian people is the source of discrimination, one strategy the Cypriot government may employ is to try to affect public opinion and people's attitudes towards gay males and lesbians. Depriving people of an equal opportunity to a job that maximizes their human potential based on sexual orientation or any other attribute is a serious threat not only to a person's economic welfare but also to their sense of citizenship (Kalleberg, 2009). The current findings are especially striking when considered in the context of legislation aimed at securing improvements in the labour market position of minorities in Cyprus. To date, Cyprus has not had the opportunity to

devote substantial resources to public education in the area of employment, which is apparent in the public's general lack of awareness regarding the legal protection against unequal treatment. The lack of a controlled, public, educational, and informational instrument is a decisive factor preventing achievement of labour equality. The objective of eliminating this type of discrimination requires the mitigation of sexual prejudice and negative stereotypes and norms on the part of firms. That means information and affirmative action are required in order to regulate sexual-orientation minorities' access to and terms of employment.

Importantly, note that without further research, we cannot generalize the results of this study to other kinds of applicants, vacancies, employers, and cultures. Thus, many questions are left unanswered. This study focuses on the hiring stage and ignores potential discrimination that could arise later. In addition, the present estimates hold for low-wage, low-qualified people only. Labour market outcomes may be different for highly qualified people applying for more sophisticated vacancies. Moreover, if gay male and lesbian employees experience losses in earnings because they more frequently end up in dead-end jobs or face glass ceilings, estimates based on starting positions would not pick up these effects. Furthermore, in reality, job offers are also obtained via informal searches and networks. Moreover, given the low level of factual knowledge on characteristics that are valued by employers and how personal attributes traded off against profitability content, and the heterogeneity among employers in making these assessments, it was not obvious that we possessed the relevant information required to make perfect matches. There may be other relevant variables for the hiring decision that may differ across sexual groups and are missing in the resumes sent. Thus, the results of

this study are simply an indication of the relationship between sexual orientation and employment outcomes but are by no means the final word.

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Table 1. Aggregate correspondence test results for less-informative applicants:
Heterosexual males vs. gay males

	Jobs	Neither invited	At least one invited	Equal treatment	Only heterosexual males invited	Only gay males invited	Net discrimination		x^2 test
			(1)		(2)	(3)	(2)-(3)	(2)-(3)/(1)	
	No.	No.	No.	No.	No.	No.	No.	%	
Office Jobs	324	176	148	32	114	2	112	75.6	108.1***
Industries	337	182	155	38	115	2	113	72.9	109.1***
Restaurant & Café Services	248	101	147	41	103	3	100	68.0	94.3***
Shop Sales	314	105	202	52	147	3	144	71.2	138.2***
Total	1223	564	652	163	479	10	469	71.9	449.8***

Note: The null hypothesis is that "Both individuals are treated unfavorably equally often", that is, (2)=(3).
(***) Statistically significant at the 1% level.

Table 2. Aggregate correspondence test results for less-informative applicants:
Heterosexual females vs. lesbians

	Jobs	Neither Invited	At least one invited	Equal Treatment	Only heterosexual females invited	Only lesbians invited	Net discrimination		x^2 test
			(1)		(2)	(3)	(2)-(3)	(2)-(3)/(1)	
	No.	No.	No.	No.	No.	No.	No.	%	
Office Jobs	261	112	149	27	121	1	120	80.5	118.0***
Industries	250	109	141	32	108	1	107	75.8	105.0***
Restaurant & Café Services	172	97	75	19	54	2	52	72.0	48.2***
Shop Sales	357	201	156	31	123	2	121	78.8	117.1***
Total	1040	519	521	109	406	6	400	76.7	388.3***

Note: The null hypothesis is that "Both individuals are treated unfavorably equally often", that is, (2)=(3).
(***) Statistically significant at the 1% level.

Table 3. Mean monthly wage offers (€) for less-informative applicants:
Heterosexual males (females) vs. gay males (lesbians)

	Heterosexual males	Gay males	Raw difference	Difference test (t-test)	Heterosexual females	Lesbians	Raw difference	Difference test (t-test)
Office Jobs	1308.5 (88)	1186.6 (21)	121.9	3.1***	1119.4 (108)	1064.5 (10)	54.9	2.5***
Industries	1131.7 (82)	1016.4 (17)	115.3	3.2***	1080.8 (78)	1010.5 (19)	70.3	2.8***
Restaurant & Café Services	1117.8 (84)	1035.8 (29)	82.0	2.6***	1042.0 (43)	1011.1 (9)	30.9	2.5***
Shop Sales	1100.9 (143)	1042.1 (36)	58.8	3.0***	1060.1 (81)	1023.5 (20)	36.6	2.2***
Total	1141.6 (397)	1034.2 (103)	107.4	3.9***	1082.6 (310)	1016.0 (58)	66.6	2.9***

Note: (***) Statistically significant at the 1% level. The number of observations is in parentheses.

Table 4. Aggregate correspondence test results for more-informative applicants:
Heterosexual males vs. gay males

	Jobs	Neither invited	At least one invited	Equal treatment	Only heterosexual males invited	Only gay males invited	Net discrimination		x^2_{test}
			(1)		(2)	(3)	(2)-(3)	(2)-(3)/(1)	
	No.	No.	No.	No.	No.	No.	No.	%	
Office Jobs	305	154	151	26	123	2	121	80.1	117.1***
Industries	341	162	179	56	122	1	121	67.5	119.0***
Restaurant & Café Services	259	93	166	50	114	2	112	67.4	108.1***
Shop Sales	295	90	205	49	154	2	152	74.1	148.1***
Total	1200	499	701	181	513	7	506	72.1	501.3***

Note: The null hypothesis is that "Both individuals are treated unfavorably equally often", that is, (2)=(3).
(***) Statistically significant at the 1% level.

Table 5. Aggregate correspondence test results for more-informative applicants:
Heterosexual females vs. lesbians

	Jobs	Neither Invited	At least one invited	Equal Treatment	Only heterosexual females invited	Only lesbians invited	Net discrimination		x^2_{test}
			(1)		(2)	(3)	(2)-(3)	(2)-(3)/(1)	
	No.	No.	No.	No.	No.	No.	No.	%	
Office Jobs	274	97	177	35	141	1	140	79.0	138.0***
Industries	258	89	169	39	129	1	128	75.3	126.0***
Restaurant & Café Services	172	91	81	14	64	3	61	75.3	55.5***
Shop Sales	364	190	174	32	139	3	136	78.1	130.2***
Total	1068	467	601	120	473	8	465	77.3	449.5***

Note: The null hypothesis is that "Both individuals are treated unfavorably equally often", that is, (2)=(3).
(***) Statistically significant at the 1% level.

Table 6. Mean monthly wage offers (€) for more-informative applicants:
Heterosexual males (females) vs. gay males (lesbians)

	Heterosexual males	Gay males	Raw difference	Difference test (t-test)	Heterosexual females	Lesbians	Raw difference	Difference test (t-test)
Office Jobs	1315.4 (114)	1191.1 (17)	124.3	4.0***	1133.1 (98)	1093.3 (15)	39.8	2.3***
Industries	1141.9 (131)	1051.7 (41)	90.2	3.8***	1106.2 (119)	1044.6 (28)	61.6	2.6***
Restaurant & Café Services	1122.1 (121)	1064.1 (38)	58	3.2***	1073.4 (52)	1027.2 (10)	46.2	2.4***
Shop Sales	1121.4 (127)	1047.7 (22)	73.7	3.1***	1102.1 (103)	1021.5 (19)	80.6	3.0***
Total	1168.0 (493)	1055.6 (118)	112.4	3.7***	1108.2 (372)	1038.8 (72)	92.2	2.8***

Note: (***) Statistically significant at the 1% level. The number of observations is in parentheses.

Table 7. Occupational access estimations (Probit - marginal effects)

	Panel I: Males	Panel II: Males	Panel III: Males	Panel IV :Females	Panel V :Females	Panel VI : Females
	Less-informative applicants	More-informative applicants	Total Sample	Less-informative applicants	More-informative applicants	Total Sample
Sexual orientation	-0.389 (0.017)***	-0.392 (0.017)***	-0.390 (0.012)***	-0.424 (0.018)***	-0.434 (0.026)***	-0.427 (0.019)***
Cover letter's type	0.015 (0.013)	0.016 (0.014)	0.008 (0.014)	-0.012 (0.014)	0.007 (0.022)	-0.014 (0.013)
Curriculum vitae's type	-0.002 (0.014)	-0.002 (0.022)	0.003 (0.007)	0.009 (0.010)	-0.010 (0.043)	0.009 (0.014)
Application's sending order	-0.030 (0.034)	-0.034 (0.053)	0.018 (0.025)	0.022 (0.017)	0.026 (0.021)	0.012 (0.011)
Office jobs	0.037 (0.029)	0.029 (0.025)	0.026 (0.022)	0.033 (0.028)	0.041 (0.027)	0.036 (0.027)
Industrial jobs	0.039 (0.029)	0.037 (0.028)	0.020 (0.014)	0.038 (0.026)	0.030 (0.020)	0.032 (0.023)
Restaurant and café services	0.036 (0.028)	0.039 (0.029)	0.027 (0.020)	0.030 (0.027)	0.037 (0.025)	0.042 (0.032)
Sexual orientation x office jobs	-0.005 (0.001)***	-0.002 (0.001)***	-0.008 (0.002)***	-0.004 (0.001)***	-0.003 (0.001)***	-0.004 (0.001)***
Sexual orientation x industrial jobs	-0.004 (0.001)***	-0.003 (0.001)***	-0.005 (0.002)***	-0.003 (0.001)***	-0.002 (0.001)***	-0.003 (0.001)***
Sexual orientation x restaurant and café services	-0.003 (0.001)***	-0.005 (0.001)***	-0.005 (0.001)***	-0.003 (0.001)***	-0.003 (0.001)***	-0.003 (0.001)***
More-informative applicants	-	-	0.035 (0.014)***	-	-	0.051 (0.018)***
Sexual orientation x more-informative applicants	-	-	-0.019 (0.028)	-	-	-0.034 (0.029)
Letter of reference's type	-	0.172 (0.120)	-	-	0.168 (0.133)	-
City effects	Yes	Yes	Yes	Yes	Yes	Yes
Time effects	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.053	0.044	0.062	0.057	0.052	0.066
Observations	2,446	2,400	4,846	2,080	2,136	4,216

Note: Each column is a separate regression. (***) Statistically significant at the 1% level. Standard errors adjusted for clustering are in parentheses.

Table 8. Wage (natural logs) Estimations (OLS)

	Panel I: Males Less-informative applicants	Panel II: Males More-informative applicants	Panel III: Males Total Sample	Panel IV :Females Less-informative applicants	Panel V :Females More-informative applicants	Panel VI : Females Total Sample
Sexual orientation	-0.090	-0.095	-0.092	-0.056	-0.059	-0.058
	(0.011)***	(0.019)***	(0.015)***	(0.011)***	(0.013)***	(0.012)***
Cover letter's type	-0.008	-0.005	0.008	0.004	-0.006	0.010
	(0.008)	(0.007)	(0.011)	(0.007)	(0.005)	(0.009)
Curriculum vitae's type	0.014	0.009	0.011	0.007	-0.003	-0.009
	(0.013)	(0.010)	(0.010)	(0.009)	(0.004)	(0.009)
Application's sending order	0.009	0.010	0.010	-0.007	0.012	0.006
	(0.016)	(0.012)	(0.009)	(0.008)	(0.009)	(0.007)
Office jobs	0.046	0.051	0.048	0.033	0.041	0.037
	(0.036)	(0.064)	(0.029)	(0.020)	(0.029)	(0.026)
Industrial jobs	0.041	0.043	0.041	0.040	0.042	0.040
	(0.021)**	(0.028)	(0.034)	(0.029)	(0.029)	(0.039)
Restaurant and café services	0.050	0.053	0.050	0.042	0.046	0.043
	(0.037)	(0.029)	(0.068)	(0.026)	(0.028)	(0.064)
Sexual orientation x office jobs	-0.023	-0.025	-0.023	-0.018	-0.020	-0.020
	(0.005)***	(0.004)***	(0.004)***	(0.006)***	(0.005)***	(0.005)***
Sexual orientation x industrial jobs	-0.021	-0.022	-0.021	-0.015	-0.018	-0.018
	(0.003)***	(0.004)***	(0.010)***	(0.005)***	(0.005)***	(0.004)***
Sexua lorientation x restaurant and café services	-0.020	-0.025	-0.023	-0.017	-0.019	-0.017
	(0.007)***	(0.006)***	(0.005)***	(0.006)***	(0.006)***	(0.007)***
Call back order	0.011	-0.007	-0.011	-0.009	0.010	0.013
	(0.009)	(0.012)	(0.010)	(0.009)	(0.008)	(0.011)
Employers' sex	0.024	-0.043	0.031	0.025	0.027	0.041
	(0.016)	(0.029)	(0.021)	(0.022)	(0.019)	(0.034)
Sexual orientation x employers' sex	-0.024	-0.031	-0.037	0.015	-0.019	-0.016
	(0.015)	(0.026)	(0.029)	(0.011)	(0.016)	(0.014)
More-informative applicants	-	-	0.015	-	-	0.021
			(0.009)*			(0.006)***
Sexual orientation x more informative applicants	-	-	0.001	-	-	-0.001
			(0.011)			(0.016)
Letter of reference's type	-	0.012	-	-	0.016	-
		(0.011)			(0.013)	
Tester effects	Yes	Yes	Yes	Yes	Yes	Yes
City effects	Yes	Yes	Yes	Yes	Yes	Yes
Time effects	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.315	0.370	0.365	0.266	0.310	0.324
Observations	500	611	1,111	368	444	812

Note: Each column is a separate regression. (*) Statistically significant at the 10% level. (**) Statistically significant at the 5% level. (***) Statistically significant at the 1% level. Standard errors adjusted for clustering are in parentheses.

Appendix A: Curriculum Vitae. Less-informative applicants – short versions

Sexual orientation majority (Type A)	Sexual orientation minority (Type B)
Cover Letter Dear Sir/Madam, Please find attached my Curriculum Vitae for your kind consideration for the vacancy as was advertised in…. Yours sincerely, Name and surname **Curriculum Vitae** First Name: Last Name: Ethnicity: Greek Cypriot Marital Status: Unmarried Date of Birth: …/…/1980 Address: Location Telephone: Mobile **Education:** High School diploma in 1998, Location Basic Knowledge of English and P/C Driving license **Professional Experience:** From 2000 to 2004 Job task / Firm From 2004 to 2007 Job task / Firm From 2007 to . . . 2010/2011 Job task / Firm **Interests:** Cinema, Music Volunteer in the Nature: Environmental Union from 2005–2008	**Cover Letter** Dear Sir/Madam, Please consider my application for the vacancy as was advertised in…. I attach my Curriculum Vitae. Yours faithfully, Name and surname **Curriculum Vitae** First Name Last Name Date of Birth …/…/1980 Ethnicity Greek Cypriot Marital Status Unmarried Address Location Telephone Mobile **Experience** Firm / Job task 2000 –2003 Firm / Job 2003 – 2008 Firm / Job task 2008 – . . . 2010/2011 **Education** High School diploma in 1998, Location English Basic Knowledge P/C Basic Knowledge Driving license **Interests** Music and cinema Member-volunteer in the Cypriot Homosexual Association (05–08)

Appendix B: Curriculum vitae. More–informative applicants - short versions

Sexual orientation majority (Type A)	Sexual orientation minority (Type B)
Cover Letter	**Cover Letter**
Dear Sir/Madam,	Dear Sir/Madam,
Please find attached my Curriculum Vitae for your kind consideration for the vacancy as was advertised in…. I have ten years of relevant working experience (Job task / Job Specific Skills / Firm). I provide a reference letter from my previous employer.	Please consider my application for the vacancy as was advertised in…. I attach my Curriculum Vitae and a reference letter from my previous employer. In brief, I have ten years of relevant working experience (Job task / Job Specific Skills / Firm).
Yours sincerely,	Yours faithfully,
Name and surname	Name and surname
Curriculum Vitae	**Curriculum Vitae**
First Name:	First Name
Last Name:	Last Name
Ethnicity: Greek Cypriot	Date of Birth …/…/1980
Marital Status: Unmarried	Ethnicity Greek Cypriot
Date of Birth: …/…/1980	Marital Status Unmarried
Address: Location	Address Location
Telephone: Mobile	Telephone Mobile
Education:	**Experience**
High School diploma (Very Good) in 1998, Location,	Firm / Job task / Job Specific Skills
First degree in English, Grade A	February 2000 – November 2003
P/C certificate, Grade A	Firm / Job task / Job Specific Skills
Driving license	December 2003 – July 2008
	Firm / Job task / Job Specific Skills
	August 2008 – . . . 2010/2011
Professional Experience:	
From August 2000 to January 2004	**Education**
Job task / Job Specific Skills / Firm	High School diploma in 1998 (Very Good), Location
From March 2004 to March 2007	Certificate of P/C knowledge (Grade A)
Job task / Job Specific Skills / Firm	First degree in English (Grade A)
From April 2007 to . . . 2010/2011	Driving license
Job task / Job Specific Skills / Firm	
	Interests
Interests:	Music and cinema
Cinema Music	Member-volunteer in the Cypriot Homosexual Association (05–08)
Volunteer in the Nature: Environmental Union from 2005–2008	
	Personality
Personal Characteristics:	Sociable, productive, enthusiastic
Amiable, productive, energetic	
	Letter of Reference
Letter of Reference	Firm's Affiliation
Firm's Affiliation	Employer's contact information
Employer's contact information	
	To whom it may concern
To whom it may concern	I have great pleasure in recommending … in his/her professional pursuits. He was one of my finest employees. He/she was (Job task / Job Specific Skills)… for the past three years and he/she provides high quality work. He/she has capacity for teamwork and he/she...
I am writing this letter to strongly recommend … as a candidate for a … position. …worked with me and my firm extensively over the past three years and he/she provides high quality work (Job task / Job Specific Skills). He/she is efficient and has capacity for teamwork...	I recommend him/her to you highly.
In short, I give … my highest recommendation.	Sincerely yours,
Sincerely yours,	

Appendix C: Matched pair of applicants and randomized information

Matched pair 1: Heterosexual males vs gay males with low informative applications	Matched pair 2: Heterosexual males vs gay males with more informative applications
Standard information*	Standard information* + grading scales + personality traits + information regarding previous job tasks + letters of reference
Matched pair 3: Heterosexual females vs lesbians with low informative applications	Matched pair 4: Heterosexual females vs lesbians with more informative applications
Standard information*	Standard information* + grading scales + personality traits + information regarding previous job tasks + letters of reference

Notes: Standard information includes: Greek Cypriot names, mobile telephone number, postal address, age, ethnicity, marital status, school level, job experience, basic knowledge of English and P/C, and hobbies.

Appendix D: List of variables

Name	Definition
Callback	= 1 if the applicant receives an appointment, = 0 if not
Monthly wage offers (natural log)	= monthly wages offered (natural log) by employers
Sexual orientation	= 1 if the applicant is labeled as being gay male/lesbian, = 0 if not
Application's sending order	=1 if the gay males'/lesbian's CV is sent first, = 0 if not
Curriculum vitae's type	=1 if the CV is of type A, = 0 if not
Cover letter's type	=1 if the Cover Letter is of type A, = 0 if not
Letters of reference's type	=1 if the letters of reference is of type A, = 0 if not
Office jobs	= 1 if the applicant applied for a vacancy in office jobs, = 0 if not
Industrial jobs	=1 if the applicant applied for a vacancy in industrial jobs , = 0 if not
Restaurant and café services	=1 if the applicant applied for a vacancy in restaurant and café services, = 0 if not
More informative applicant	=1 if the application belongs to the more-informative applicant , = 0 if not
Callback order	=1 if the employer callbacks the gay male/lesbian applicant first, = 0 if not
Employers' gender	=1 if the employer is male, = 0 if not
Tester's impact	=1 for tester No. 1, = 0 if not
	=1 for tester No. 2, = 0 if not
	=1 for tester No. 3, = 0 if not
City effects	=1 if the applicant applied for a vacancy in Nicosia, = 0 if not
	= 1 if the applicant applied for a vacancy in Limassol, = 0 if not
	=1 if the applicant applied for a vacancy in Larnaca, = 0 if not
Time effects	=1 if the application is sent in January 2010, = 0 if not
	=1 if the application is sent in February 2010, = 0 if not
	=1 if the application is sent in March 2010, = 0 if not
	=1 if the application is sent in April 2010, = 0 if not
	=1 if the application is sent in May 2010, = 0 if not
	=1 if the application is sent in June 2010, = 0 if not
	=1 if the application is sent in July 2010, = 0 if not
	=1 if the application is sent in August 2010, = 0 if not
	=1 if the application is sent in September 2010, = 0 if not
	=1 if the application is sent in October 2010, = 0 if not
	=1 if the application is sent in November 2010, = 0 if not
	=1 if the application is sent in December 2010, = 0 if not