**Perfection bias in personnel selection: Are female candidates evaluated on more dimensions than male candidates?**

**Theoretical background**

Even though the last decades have seen substantial progress toward gender equality in education and employment, at least in Western countries (European Commission, 2020), the gender gap in workforce participation, pay, and access to high-status positions is still considerable. In 2019, the employment rate of women in Italy was 53%, whereas it was 73% for men (European Commission, 2020). Most psychosocial studies have explained gender differences in the workplace in terms of gender stereotypes (Davison & Burke, 2000; Ryan et al., 2016) and the lack-of-fit between the requirements of job positions – which mainly focus on the “masculine” competence-related characteristics – and the characteristic stereotypically attributed to women (i.e., warmth; Heilman, 2012). Going beyond gender stereotypes, recent studies (Moscatelli et al., 2020; Prati et al., 2019) have however demonstrated that women might also be the target of a “perfection bias”: Namely, they are evaluated against more criteria so that a weakness along a single dimension is more likely to affect employment decisions, whereas men are more clearly evaluated against competence.

**Aims and hypotheses**

The aims of the present project are twofold. First, this project will extend the evidence on the perfection bias. Whereas previous studies (Moscatelli et al., 2020) focused on women’s and men’s evaluation against three dimensions (i.e., competence, morality, and sociability), a wider range of dimensions will be considered, including dimensions that are apparently not relevant for work. It will also be examined whether evaluations of men and women are associated with selection decisions and attributed wage. To this aim, Study 1 will focus on the perceived importance of several dimensions in the evaluation of women and men, whereas Study 2 will adopt an information gathering paradigm in simulated job interviews. Second, this project aims to analyze whether women are aware that they are more likely to be evaluated along multiple dimensions and whether this perception is associated with expected wage. Study 3 will, therefore, compare men’s and women’s expectations in fictional selection for a job position.

It is hypothesized that more importance will be attributed to all dimensions in the evaluation of women vs. men. Men should be more likely to be selected and to be awarded a higher wage compared to women (Study 1). Participants should choose questions that are related to a broader range of dimensions in interviewing female vs. male candidates (Study 2). Finally, women should expect that evaluators would attribute high importance to all dimensions, whereas men should expect that competence would be considered the most important dimension. Women are also expected to award themselves lower wages than men (Study 3).

**Methods**

Participants will be recruited among university students and the general population; questionnaires will be administered online. For each study, the minimum sample size has been calculated using G\*power (Faul et al., 2009), to detect a small-to-medium effect size (Cohen, 1988) with 80% power and an alpha level of .05

**Study 1**

The design will be 2 (candidate gender) × 2 (participant gender) × 6 (evaluation dimension: competence, morality, sociability, physical attractiveness, body and apparel care, emotional stability; *within participants*). Participants (*N* = 105) will rate the importance of different traits (related to the six dimensions) in evaluating a candidate for a vacant position (which has already been pretested as being not gender-typed; see Menegatti et al., 2020). A MANOVA will be run to test for variations in the evaluation of men and women. ANOVAs on selection decision and attributed wage will reveal whether women are less likely to be selected, and are awarded lower wages, compared to men. The analyses will also allow controlling for possible differences due to participant gender. Regression analyses will be run to examine the associations between the importance attributed to the dimensions, selection decision, and the amount of awarded wage for female and male candidates.

**Study 2**

The design will be 2 (candidate gender) × 2 (participant gender). Participants (*N* = 128) will be required to play the role of interviewers in job selection and choose six questions out of a list of 30 (5 questions for each dimension) to be addressed to a (female or male) candidate. An index of “breath” of the interview will be calculated, based on the extent to which the interviewer chooses dimensions others than competence. An ANOVA will examine whether participants follow a different information-gathering strategy in interviewing female and male candidates; non-parametric comparisons will reveal which specific dimensions are more frequently used for women and men.

**Study 3**

The experimental design will be 2 (participant gender) × 7 (evaluation dimensions: competence, morality, sociability, attractiveness, body and apparel care, emotional stability, stability of intimate relationships; *within participants*). Female and male participants (*N* = 225) will be required to imagine that they applied for a job position, and to rate the extent to which they think that the selectors would consider important a series of traits. Participants will also estimate their wage if selected for the job. A series of analyses of variance will allow examining whether women expect that selectors give higher importance to multiple evaluation dimensions and award themselves a lower wage, compared to men. Regression analyses will be run to test which dimensions are related to the expected wage for women and men.

**Expected results and Implications**

Studies 1 and 2 are expected to show that in job evaluation, multiple dimensions are important in evaluating women, whereas men are more likely to be evaluated for their competence. Study 3 will highlight whether women are aware that when applying for a job, all the considered dimensions are important in evaluation. These findings might contribute to the literature of gender bias in the workplace by demonstrating that women are the target of a perfection bias, which renders them more vulnerable in the selection process. If women are judged on multiple dimensions, they might be more reluctant to apply for a vacancy unless they fulfil all the job demands (e.g., Mohr, 2014), might be required to excel in every domain they are evaluated against and might be more likely to fail.

**Declaration of commitment to request ethical approval**

The studies will be conducted following APA and the University of Bologna's ethical norms. The Bio-Ethical Committee of the University of Bologna has already approved study 1 and Study 3. Study 2 will be submitted for approval as soon as the fellowship starts.

**References**

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**Plan of Research and Training Activities**

The post-doc fellow is expected to make a preliminary reading of the literature on gender stereotypes and gender bias in personnel selection. Then the questionnaires of Study 1 and Study 3 will be finalized and the data collected. The fellow will also plan the procedure of Study 2 and submit the proposal to the Bio-Ethical Committee; after the approval, the questionnaire of Study 2 will be settled and the data collected. Data of all Studies will be then analyzed and discussed in collaboration with prof. Naomi Ellemers (University of Utrecht). The post-doc fellow will work on scientific manuscripts for submission to international peer-review journals. If feasible, the findings will also be presented in National and International Conferences.

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|  | ***Months*** |
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| ***Activities*** |

 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Literature review |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 1- Finalization and data collection |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 1- Data analyses |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 2 - Submission for ethical approval |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 2 - Finalization and data collection |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 2 - Data analyses |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 3- Finalization and data collection |  |  |  |  |  |  |  |  |  |  |  |  |
| Study 3- Data analyses |  |  |  |  |  |  |  |  |  |  |  |  |
| Manuscript preparation |  |  |  |  |  |  |  |  |  |  |  |  |
| Submission and peer-review process |  |  |  |  |  |  |  |  |  |  |  |  |
| Conference presentations  |  |  |  |  |  |  |  |  |  |  |  |  |