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How You Speak is How They Suffer

A Study on how Gendered Wording Affects the Selection of Employees in the Workplace

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ABSTRACT

The tendency to favor one sex over another without having solid reasons for it is widespread. Due to gender stereotypes, men and women suffer from being discriminated based on what is defined in society as masculine and feminine behavior. Several studies examined negative effects of gender stereotypes in the workplace and explored how they contribute to form the so-called gender bias. The present study investigates into these negative effects and specifically focuses on stereotypical attributes. Two manipulations were designed in terms of employee requirements that included either masculine or feminine gendered wording. Additionally, each group received two employee profiles that matched these requirements. By use of an online survey, it was tested whether the gendered wording and participants' sex had an effect on the selection of employees. A total of 221 participants were randomized into two groups, each receiving one of the two manipulations. Additionally, participants were tested among five decision-making styles (Scott & Bruce, 1995). Results demonstrated no significant effects of gendered wording and sex. Nonetheless, the findings showed a small difference in choice. In specific, men chose the male employee considerably more often than the female one for the feminine attributes. Also, results showed that participants preferred the employee of their own sex. Lastly, results indicated that rational decision-making processes were the most prevalent. Future research is needed to substantiate these findings and examine participants' rationale for the employee selection. In conclusion, the tested intervention serves as an inducement for reflection. In particular, organizations can use the findings to reflect their internal and external communication and determine if it includes gender stereotypes. Hereby, gendered wording will hopefully be detected in the workplace and soon be reduced, along with its negative effects.

INTRODUCTION

The ubiquity of gender stereotypes in present society goes beyond the effect on individuals by affecting organizational operations likewise (Ellemers, 2018; Heilman, 2012). This struggle becomes apparent when looking at the influence of stereotypes on the maintenance of workplace inequality and the impediment of internal diversity management (Gaucher, Friesen, Kay, 2011; Heilman, 2012; Kurniawan, Nurhaeni, Mugijatna & Habsari, 2018). The implicit clustering of individuals based on gender occurs even in absence of any perceived relevance or gain of informational benefits (Ellemers, 2018; Ito & Urland, 2003). Considering the vast amount of decisions individuals are confronted with on a daily basis, it remains important to acknowledge the presence of gender stereotypes and how they hinder conscious reasoning (Heilman, 2012). Furthermore, these mental constructs can be seen as contributing to the formation of gender bias (Heilman, 2001; International Labor Organization [ILO], 2017). This bias relates to immediate assessments of individuals and the consequential favoritism of one gender over another (ILO, 2017; Heilman, 2012; Hillman, 2018; MacNell, Driscoll, & Hunt, 2014). When applied to organizational contexts, several scholars substantiated negative effects of gender bias on decision-making processes, for instance on job promotion or employee recruiting (Girod et al., 2016; Kurniawan et al., 2018; Stahlberg, Braun, Irmen, & Sczesny, 2007). When realizing its effect on the rational perception, the importance of counteracting the formation and prevalence of gender bias seems undeniable (Bielby, 2000).

While the gender bias relates to several kinds of gender-related misperceptions, the specific ones of interest for the present study are the aforementioned gender stereotypes. The present paper studies these stereotypes by means of gendered wording. Gendered wording can be generally defined as the use of words which convey a specific gender preference (Gaucher, Friesen, Kay, 2011). Doing so, it has been described as reinforcing existing gender stereotypes (Ellemers, 2018; Sczesny, Formanowicz, & Moser, 2016). Exemplary for this is the use of gendered wording in employee recruiting during past decades. Hereby, explicit statements within job advertisements indicated to search for either men or women (Darity & Mason 1998; ILO, 2017). Unsurprisingly, this explicit search has become illegal in most developed countries (Kuhn & Shen, 2010). Nonetheless, gendered wording is still present by means of subtle communicative processes that unconsciously affect individuals' reasoning about the abilities of employees (ILO, 2017). This can be seen in the internal and external communication, involving, for instance, an imbalance of masculine and feminine words or the utilization of gender-stereotypical attributes (Gaucher et al., 2011; ILO, 2017). These problematic communicative

processes, such as being reflected in gendered language within job descriptions, can be seen as possible causes of workplace inequality (Gaucher et al., 2011, Heilman, 2012; Kurniawan, Nurhaeni, Mugijatna, & Habsari, 2018). As strengthened by Rudman and Glick (2002), communication that commonly associates a specific gender contributes to hiring discrimination.

The importance of examining possible, mostly negative, effects of these communicative processes becomes even more important when considering the difficulties organizations have with the integration of diverse workplaces (Doornenbal & Havermans, 2015; Menendez, 2017). Although the problem of lacking gender equality within organizations has been recognized and heavily discussed for years, the extent of actual implementing internal diversity seems to stagnate. Exemplary for this is a recent publication by McKinsey (2018) in which they report that women nowadays mark only 17 percent of executive members. Furthermore, 88 percent of their respondents reported a disbelief of their organization trying to achieve improvement in that aspect (McKinsey, 2018). The reported uneven distribution is consistent with the general assumption that employees face unequal conditions in the labor market and the workplace because of their sex (Bielby, 2000; Cohen & Huffman, 2007; Verniers & Vala, 2018).

Despite the fact that several studies have generally focused on gender stereotypes and gender bias, none of them has explicitly explored the effect of gendered wording on the selection process of employees. By setting it into an organizational context and focusing on gender-stereotypical attributes in specific, the research at hand seeks to give greater insight on how communication affects this selection. In order to investigate a possible effect, the present research will tackle the following fundamental research question:

> *Does gendered wording have an effect on the selection of employees within organizational contexts?*

The overarching goal of the study is to show the significance of subtle communication differences and how these can determine organizational processes like job hiring. The outcome of the study and the generated knowledge will enable organizations to take further steps towards improving their internal communication and realizing its influence on important decision-making. If the internal language by means of gendered wording impedes the selection of proper skilled employees, future research within the field of communication is needed to examine how these can be counteracted and diminished.

In order to test the research question, a unique manipulation was designed that combines search profiles as role descriptions with matching employee profiles. To circumvent the assignation being biased due to specific job titles, the research focuses solely on internal selections in order to fulfill an unoccupied team position. To set out the study, the present paper starts with a theoretical framework that explores the constructs of interest. These include gender diversity in general and how gender bias, gender stereotypes and gendered wording in specific relate to the problem of unsuccessful diversity management. The importance of examining all these constructs lies in the need to show their relationship to each other and, thus, lay a concrete foundation for the present study. As seen within the chapter, the terms sex and gender are often used synonymous by various scholars. For the sake of clarity, however, the present paper distinguishes between these two as soon as referring to the conducted study. Sex, therefore, indicates a biological category, whereas gender concerns the "psychological meaning ascribed to the sexes" (Abele, 2003, p. 768). In the method section, the study and its explicit research method will be explained. Additionally, the particular instruments that were designed to test for a possible effect will be presented. The results section will entail the outcomes of the statistical analyses that were used to test the chosen hypotheses. A discussion part will elaborate on these results and relate them to the research question of interest. Simultaneously, several limitations of the study in line with necessary future steps will be discussed. Lastly, the conclusion will briefly restate the study and combine the findings.

THEORETICAL FRAMEWORK

2.1 Gender diversity

In general, the term gender diversity refers to an equal heterogeneous representation of men and women in various units (e.g. a team or organization) and is especially used in organizational contexts (Pelled, Eisenhardt, & Xin, 1999). As the presence of women in the workforce has increased over the years, the general concern with gender diversity has heightened simultaneously (Heilman, 2012; Pelled et al., 1999). As a result, several scholars have addressed the potential benefits that go in hand with a gender diverse workplace. Two of the most often referred to benefits, mostly being due to having a greater variety of interpersonal behavior styles, are the improvement of team effectiveness and performance (Bear & Wolley, 2011; Ely & Thomas, 2001; Pelled et al., 1999). The enhancement in team performance is further strengthened through the greater accessibility of information resources of gender diverse teams (Doornenbal & Havermans, 2015; Shore et al., 2010). Additionally, heterogeneous groups offer a wider talent pool that contributes to an increase of creativity and innovation outcomes (Doornenbal & Havermans, 2015; Ely & Thomas, 2001). Nonetheless, besides the various benefits of establishing gender diversity, other scholars have additionally demonstrated downsides of gender diverse teams (e.g. Ely & Thomas, 2001). These studies have shown, for instance, a negative effect on the level of team identification, given that the overall satisfaction of team performance has already been low (Doornenbal & Havermans, 2015). In view of these contradictory outcomes, Williams and O'Reilly (1998) defined careful and sustained attention as a necessary condition in order for gender diversity to lead to an increase of employee performance.

Although the consensus sees gender diverse teams as beneficial, organizations seem to struggle with fully establishing workplace inclusion (Doornenbal & Havermans, 2015; ILO, 2017; Shore et al., 2010). This present lack of workplace diversity has been demonstrated in several reports, including one by McKinsey (2018) that concluded a gender disproportion in the number of executive members. Among many others, Shore et al. (2010) derive similar conclusions by stating that women have fewer opportunities to hold higher-level positions. Besides certain positions, women struggle from being fewer selected for promotions when compared to men, even in absence of any differences in professionalism or performance (Ellemers, 2018). Additionally, a meta-analysis substantiated a broader tendency towards an undervaluation of women's professional performance (Joshi, Son, & Roh, as cited in Ellemers, 2018). Despite the fact that predominantly women are negatively affected, some scholars examined whether men suffer from concrete disadvantages likewise. Some came to the

conclusion that within care-focused occupations (e.g. nursing) women typically dominate the workplace. In turn, this leads to fewer job opportunities within these fields for men (Ellemers, 2018; Heilman, 2012; Verniers & Vala, 2018). This reinforces the assumption that the successful integration of gender diversity and the formation of gender diverse teams ultimately remains a challenge for organizations.

2.2 Gender bias

One of the reasons that contribute to the lack of gender diversity in organizations is the gender bias. Although it is a rather subtle mechanism, its existence and pervasiveness has been substantiated by several scholars over the years (e.g. Girod et al., 2016; Greenwald & Banaji, 1995; Hillman, 2018; Kurniawan et al., 2018; Moss-Racusin, Dovidio, Brescoll, Graham, Handelsman, 2012; van der Lee & Ellemers, 2015). Gender bias encompasses immediate judgments on individuals based on their gender. As a result, it mostly leads to favoring one gender over another despite evidential grounds for such favoritism (Stahlberg et al., 2007). This favoritism, however, is mostly implicit and therefore hard to tackle (Girod et al., 2016). The outcome is highly problematic as such gender-related misperceptions affect decision-making processes without being consciously aware of it (ILO, 2017; Stahlberg et al., 2007). Exemplary for these decision-making processes is the recruitment and promotion of employees through which mostly women are negatively affected (Girod et al., 2016; Stahlberg et al., 2007). Heilman (2012) further strengthens this effect and refers to the workplace-related gender bias as being a "major contributor to the scarcity of women in upper level organizational positions" (p. 114). Furthermore, a study conducted by Correll, Bernard, and Paik (2007) reported a higher preference of male candidates even though the applications themselves have been identical among male and female candidates.

Nonetheless, besides the disproportion in the workplace, no differences can be found in the engagement of gender bias between men and women (Heilman, 2012). While it may seem surprising, the fact that stereotypes in general are not used by solely one gender might explain such relatively balanced engagement. Thus, it remains important to explore the underlying reasons for the development of gender bias. Being manifold and even potentially varying from one job field to another, Heilman (2012) concluded several factors leading to the formation of the gender bias in organizational contexts. Among these factors are ambiguity of employee expertise due to the provision of inconsistent information, lack of specificity of evaluation criteria for the recruiting site and biased expectations prior to actual employing certain candidates (Heilman, 2012). The latter is strengthened by the fact that individuals have fewer

problems with remembering expectation-consistent information than with expectation-inconsistent information (Higgins & Bargh, 1987). Thus, when applied to the recruitment context, women behaving consistently to expectations regarding their behavior have a higher chance of being recalled. These emerging expectations indicate a certain omnipresence of gender stereotypes, which, as Heilman (2012) noted, are the root cause of the gender bias.

Considering the fact that men and women participate in the gender bias, it seems necessary to question whether their own sex could indicate a preference for others due to higher similarity. Doing so, the following hypothesis will be tested to examine a possible effect of participants' sex on the employee selection:

H1: Participants will prefer the employee of their own sex

2.3 Gender stereotypes

In general, stereotypes can be defined as expectations that relate to members of particular social groups (Heilman, 2001). Although stereotypes are mainly based on incomplete information and perceptions, they are perceived as being useful for cognitive sense making (Heilman, 2001; McGarty, Yzerbyt, & Spears, 2002). These cognitive schemata, however, are mostly habitual and unconscious (Bielby, 2000) As powerful filters that activate specific brain areas, they influence the automatic processing of objective information (Amodio, 2014; Ito & Urland, 2003). In situations where information about people are missing, stereotypes are a first choice of evaluation and judgement (Heilman, 2001). Ellemers (2018) further reported favoritism of information that matches and confirms present stereotypes over stereotype-inconsistent information.

Until today, gender stereotypes are mostly based on a binary categorization, referring to comparisons of men to women and women to men. In particular, these stereotypes "exaggerate the perceived implications of categorizing people by their gender and offer an oversimplified view of reality" (Ellemers, 2018, p. 278). The categorization reinforces the perceived barriers between the two sexes (Ellemers, 2018). Already from an early age on, children apply the implicit clustering of unknown individuals (Ito & Urland, 2003). This behavior is enforced through the communication of parents to their children and the extent to which gender stereotypes are transmitted. Endendijk et al. (2014) substantiated an association between gender talk and children's attitude about gender that is influenced by, for instance, the communication of appropriate behavior for girls and boys. Thus, the perceived differences between men and women are taught to and internalized already in early childhood.

Gender stereotypes themselves must be distinguished as two different types that are both highly influential for the association of perceived gender differences (Heilman, 2012). Descriptive stereotypes, on the one hand, indicate what men or women presumably are like, whereas prescriptive stereotypes, on the other hand, indicate norms about expected behavior in accordance to the gender (Burgess & Bordiga, 1999; Heilman, 2001). Due to the frequent reference to similar phenomena, both types are often perceived as correlated and indistinguishable. When applied to organizational contexts, these stereotypes are highly influential for the performance evaluation of employees (Burgess & Bordiga, 1999). Such influence especially affects women in high positions that suffer from a devaluation of their performance (Heilman, 2012). This devaluation is usually due to a perceived lack of fit that arises and leads to biased judgements (Burgess & Bordiga, 1999; Heilman, 2012). Considering the descriptive stereotypes with the mostly "male sex typing of managerial roles and positions" (Heilman, 2001, p. 660), the negative effect of the perceived lack of fit for executive women seems almost bound to occur.

Additionally, in the workplace, stereotypical behavior associated with masculinity gets a higher value than what is perceived to be typical feminine behavior (Bird, 2003). However, if women refuse to display typical feminine behavior and moreover behave in accordance to masculine stereotypes, they are discriminated and less favorably evaluated than their counterpart (Ellemers, 2018; Fiske, Cuddy, Glick, & Xu, 2002; Heilman, 2001). Exemplary of such discriminative actions are experimental studies that revealed significantly lower perceptions of women's competences even though they had identical expertise to their male counterpart (e.g. Greenwald & Banaji, 1995; Ellemers, 2018; Moss-Racusin et al., 2012; van der Lee & Ellemers, 2015). Nonetheless, this problematic outcome, despite less empirical evidence, affects men likewise (Costrich, Feinstein, Kidder, Marecek, & Pascale, 1975). Especially job fields that require stereotypical attributes linked to femininity (e.g. warmth and altruism), men have a harder time in overcoming their attributed stereotypes (Ellemers, 2018; Heilman, 2012; Verniers & Vala, 2018). Thus, prescriptive stereotypes lead to discrimination of individuals who disconfirm stereotypical expectations (Burgess & Bordiga, 1999). In connection with descriptive stereotypes, both consequentially influence career developments and income levels (Ellemers, 2018). The aforementioned studies, therefore, substantiate the effect of stereotypical expectations on the judgement of abilities and work performance of men and women.

2.4 Gender-stereotypical attributes

Stemming from the exploration of gender stereotypes, several scholars defined classifications of gender-stereotypical attributes with bi-dimensional models (Suitner & Maass, 2008). These models vary by addressing stereotypical attributes as either being agentic and communal, competent and warm or by referring to trait lists of specific masculine and feminine behavior. These categorizations focus on attributes associated with typical masculine and feminine behavior and on expectations regarding their behavior (Heilman, 2012). Therefore, most attributes can be classified simultaneous as descriptive and prescriptive stereotypes.

Common attributes that researchers have identified as typical characterizations of men and women refer to agency and communality. These are used to stereotypically indicate either masculine (i.e. agency) or feminine (i.e. communality) characteristics (e.g. Abele, 2003; Burgess & Bordiga, 1999; Heilman, 2001; Suitner & Maass, 2008; Weisskopf, 1967). Bartz and Lydon (2004) defined these categories as men's self-definition being "based on uniqueness and distinguishing themselves from others (i.e., agency), whereas for women, self-definition is based on relationships and unions with others (i.e., communion)" (p. 1392).

Besides distinguishing between agentic and communal traits, the general classification of attributes being either masculine or feminine has been common as well. Considering, for instance, Bem (1974) who empirically distinguished between masculine, feminine and neutral traits. She explained that an orientation towards achieving and finishing tasks can be associated with masculinity, whereas femininity has been attributed towards "an affective concern for the welfare of others" (Bem, 1974, p. 156). Accordingly, role expectations about masculine behavior is often associated with traits concerning efficiency, whereas feminine behavior is often associated with interpersonal traits (Burgess & Bordiga, 1999; MacNell et al., 2015).

Although the existence of gender stereotypes seems almost indisputable, it is still difficult to retrieve a consensus regarding their origin. Critically reflecting on the nature of agency and community relations, some scholars referred to the formation as being evolutionary based (Abele, 2003). Others concluded that gender stereotypes emerge through unequal distributions of social rules, including the process of a sex-specific division of labor (Diekman & Eagly, 2000; Ellemers, 2018; Wood & Eagly, 2002). Nonetheless, the origin of such attributes remains less important for the present paper, as its focus lies primarily on their existence and effect.

2.5 Gendered wording

In consideration of the categorizations of stereotypical attributes, it remains important to explore common contexts and ways in which these are used. As for the present study, these stereotypical attributes were investigated by means of gendered wording. By definition, gendered wording relates to linguistic formulations that heavily refer to a specific gender, either by explicitly stating the sex or by using the aforementioned stereotypical attributes (Gaucher et al., 2011). The use of gendered words reinforces existing stereotypes and contributes to the upholding of prevalent gender belief systems (Ellemers, 2018; ILO, 2017; Sczesny et al., 2016; Stahlberg et al., 2007). When exploring how gendered wording has evolved over time, it becomes clarified that the way they have been used has changed dramatically. In particular, until the middle of the last century, it was common to address male or female applicants directly, or to use pronouns such as he and she, to recruit employees (Gaucher et al., 2011; Kuhn & Shen, 2010; Pedriana & Abraham, 2006). The reason for it seemed to have been rather straightforward, in that such explicit expressions conveyed who organizations seek for and would like to hire. On the other hand, however, the people who did not meet the organization's requirements from the outset were excluded immediately.

Although this procedure has been prohibited for decades in several countries (Pedriana & Abraham, 2006), gendered wording still exists in a more subtle form. In organizational contexts, the communication of character traits and attributes is a common way to articulate certain job requirements (ILO, 2017; Gaucher et al., 2011). However, as explained earlier, such attributes are often highly stereotypical (Suitner & Maass, 2008). Thus, although not explicitly indicating to search for a specific sex, the use of these subtle cues is still highly problematic. By conveying a certain gender preference, people often unconsciously assign these attributes to a particular sex (Heilman, 2001; ILO, 2017; Sczesny et al., 2016). Consequently, gendered wording influences a person's judgement and decision-making which therefore leads to biased behavior (Stahlberg et al., 2007). A study by van der Lee and Ellemers (2015) revealed that the gendered language used to ask evaluators for their judgement of team candidates leads to prioritizing perceived talent over demonstrated dedication. As an outcome, in absence of any quality differences of the candidates' proposals, male applicants received higher ratings and were more likely to be rewarded (van der Lee & Ellemers, 2015). Therefore, it can be concluded that behavior expectations linked to male and female applicants and their perceived success in certain job positions affect personnel decisions (Heilman, 2001).

Following the brief consideration of important constructs, the present research is inspired by the current situation of gender diversity in the workplace and, given the implications

of gendered wording, largely based on the aforementioned gender-stereotypical attributes. Although the study is not taking into account the origin of gender stereotypes, their mere evidential existence provides enough background to conduct the research. In order to address the problem of mostly women being negatively affected, the present paper will investigate the following second hypothesis and tests for a possible effect of stereotypical attributes by means of gendered wording on the employee selection:

> *H2: The female employee is negatively affected by the male gendered wording of the role description*

The study differentiates between two groups, each receiving a gendered role description either with masculine-stereotypical attributes or with feminine-stereotypical attributes. To test for an effect of gendered wording, two unique employee profiles are provided in which the person whose sex does not match the stereotypical attributes has a slightly higher expertise. This slight difference serves to strengthen a potential effect of the gendered wording. As literature has revealed the formation of gender bias based on gendered wording and the significance of stereotype-consistent information, it is expected that participants will choose the employee who matches the stereotypical attributes. Additionally, participants' sex and gendered wording will be tested for an interaction effect:

> *H3: The effect of gendered wording on the employee selection depends on participants' sex*

As indicated by the hypotheses, the present study aims to test whether the presence of stereotypical attributes and the similarity due to a similar sex affect the selection of employees. Therefore, based on the foregoing literature review, gendered wording and sex were taken as possible predictors of employee selection.

METHODS AND INSTRUMENTS

3.1 Method

To investigate a possible effect of stereotypical attributes and test the corresponding hypotheses, an intervention was designed that included two unique role descriptions. Gendered wording was used to operationalize these descriptions and, therefore, examine the effect of gender stereotypes on the employee selection. The manipulations were implemented by means of an online survey that was used as a method for the present research. Online studies provide the opportunity to simultaneously approach large numbers of participants in a timely manner (Granello & Wheaton, 2004). This was the most convenient way of collecting data, when taking into account the required number of subjects. The convenience of conducting it online became further prevalent when considering the necessity to randomize large numbers of participants into two groups. Lastly, since the effect of gendered wording has not been linked to a specific target group, choosing an online survey allowed to approach a variety of participants ranging in sex, age and professional background.

3.2 Procedure

Prior to completing the survey, participants received an informed consent form that explained the topic of the study and asked for active consent (Appendix A). This information was kept general, as providing subjects with the actual goal of the research could have possibly resulted in biased responses. Therefore, participants were explained that the study investigates into team-building within organizational contexts. After giving their active consent, participants were directed to three demographical questions concerning their age, sex and prior professional experience in hiring. Through a built-in randomization procedure, subjects were then assigned to either the intervention or the control group. This consequentially led to one of the two manipulated role descriptions.

As a next step, subjects were provided with a scenario description that explained the fictional setting of being in charge of the selection of an additional team member (Appendix B). On a second page, the following manipulation was designed as a note from a supervisor indicating to search for a specific team member based on provided attributes. For the intervention group, this role description included five masculine-stereotypical attributes (Appendix C). For the control group, five feminine-stereotypical attributes were used (Appendix D). On a third page, participants were provided with profiles of both a male and a female employee that included aspects and milestones of their professional expertise (Appendix E; Appendix F). These profiles slightly differed per group based on the aforementioned

attributes in order to match the provided role description. Participants were consequently asked to select one of the two employees based on whom they perceive as more suitable for the requirements. On a following page, subjects needed to indicate the level of suitability by rating both employees on a scale from one to ten, with ten being the highest answer in terms of perceived suitability. Lastly, for explanatory reasons, subjects were asked to answer 25 questions relating to the General Decision-Making Survey [GDMS] (Scott & Bruce, 1995; Appendix G). In the end, subjects were thanked for their participation. All responses were anonymized.

3.3 Instruments

The online survey included role descriptions, two corresponding employee profiles, two different measurements asking for the selection of the team member and a final scale testing participants' decision-making. The survey randomized people in either an intervention or control group. Since this randomization worked automatically, it was ensured that participants were distributed among the groups to approximately the same number. Therefore, participants got only one of the designed role descriptions. In order to circumvent the assignation to role schemata or job titles instead of gender stereotypes, the descriptions were designed without indicating specific job positions of the employees. Thus, the role descriptions were manipulated solely by means of either masculine- or feminine-stereotypical attributes. For the choice of these attributes, a study by Gaucher, Friesen, and Kay (2011) that investigated gendered wording was highly influential. Furthermore, their concluded stereotypical attributes were compared with pools of traits presented by other studies that researched role stereotypes (e.g. Bartz & Lydon, 2004; Hoffman & Hurst, 1990). Therefore, the five chosen attributes stem from the work of these scholars and a thorough comparison of their conclusions, making the selection valid and reasonable. The control group received the role description with feminine-stereotypical attributes whereas the intervention group received the role description with masculine-stereotypical attributes.

The employee profiles were designed in a way that indicated higher expertise for the profile whose sex was not implicitly (i.e., below conscious awareness) asked for in the role description. Thus, each group received a unique set of two profiles from which the female employee was called Sarah and the male employee Frank. The subtle difference in expertise between the employees was indicated with several non-job-related criteria that are common within the workplace. These criteria involved memberships in committees, participation in training seminars or membership in the organization's works council. They were thoroughly

selected based on their apparent connection to one or several stereotypical attributes. A pretest was conducted prior to the actual study in order to test the relevance and validity of both the manipulated role descriptions and the employee profiles. Ten participants in total were asked to participate in the preliminary test. In addition to the final set of questions, they were asked for an assessment of the role description and profiles of perceived sex, age and level of expertise. The outcomes showed that the majority of participants assigned the role description to the intended sex. The manipulation check therefore indicated a successful and valid manipulation. Based on this finding, it was assumed that the intervention within the final study will be effective.

A binary question and two scale questions were used with which participants indicated their employee selection. The binary question included two options, namely choosing either Sarah or Frank. The scale questions asked for perceived suitability of the two employees based on a scale ranging from one to ten, with ten being most suitable. These two questions were included to show in more detail the extent to which participants perceived the employees as suitable and different.

To provide additional, explanatory information, a second scale was used that tested participants among their style of decision-making. This General Decision-Making Survey, developed by Scott and Bruce (1995), was chosen due to its high level of internal consistency, factor stability and validity. It distinguishes among five different decision-making styles, ranging from rational, dependent, intuitive and avoidant to spontaneous. The scale consists of 25 items by means of a five-point Likert-type scale. Selecting the GDMS as a measurement scale provided validity of internal consistency. Additionally, Cronbach's Alpha was taken as a means to test the five constructs among their scale reliability. Rational decision-making is described by proceeding in a structured and logical way (e.g. "I double-check my information sources to be sure I have the right facts before making a decision", $\alpha = .96$). The intuitive decision-making style is based on feelings and instincts (e.g. "When making a decision, I rely upon my instincts", $\alpha = .93$). Furthermore, dependent decision-making is characterized by relying on guidance from others (e.g. "I often need the assistance of other people when making important decisions", $\alpha = .96$). Avoidant decision-making characterizes the avoidance of situations in which important decisions are required (e.g. "I avoid making important decisions until the pressure is on", $\alpha = .97$). Lastly, spontaneous decision-making refers to individuals who make impulsive decisions (e.g. "When making decisions, I do what seems natural at the moment", $\alpha = .96$; Bayram & Aydemir, 2017; Scott & Bruce, 1995).

3.4 Participants

254 participants in total were recruited, 35 of them by using the survey administration and online data collection system Sona. These participants, being from undergraduate studies from a university in The Netherlands, received credits in exchange for completing the survey. The remaining 219 participants were recruited through the online distribution of the survey and a following snowball procedure. This means that the survey was distributed online and that participants further spread it with fellow subjects. After inspecting the responses for insufficient information, 33 respondents in total were eliminated. These responses lacked in providing an answer either to the demographic question concerning sex or to the binary decision question. Thus, the final sample used for the analysis contained 221 people, including 92 male and 129 female participants. Additionally, participants ranged in being born between 1956 and 2001 with an average age of 27 years old (M = 1992.46, SD = 9.31, *Median* = 1996). Lastly, Table 1 shows whether participants had prior professional hiring experience. To check for equal distribution of participants among the two groups, frequencies were checked per categorical variables of interest. Nearly half (49%) of the respondents were assigned to the control group, whereas the remaining (51%) were assigned to the intervention group. By comparing the participants' sex per group, more than half (58%) of the respondents in the control group were female whereas the other participants were male (42%). Within the intervention group, again more than half (59%) of the respondents were female whereas the others were male (41%). These numbers account for a relatively balanced distribution of subjects within the two groups. In the following, the results section will describe the three conducted statistical analyses and their results.

Table 1

Proportion of Hiring Experience by Sex

	Women		Men	
Hiring experience	n	%	n	%
Yes	5	3.9	14	15.6
No	124	96.1	76	84.4

RESULTS

4.1 Descriptive statistics

Before testing the three hypotheses, data was checked for descriptives of interest. Looking first at the binary question by group and by sex, an almost equal distribution in the selection becomes visible. As seen in Table 2, no large differences in selection can be found across both groups. In the control group, the male employee was chosen 61 times whereas the female employee was chosen 48 times. In the intervention group, the male employee was chosen 53 times, whereas the female employee was chosen 59 times. This accounts for a slightly higher choice of the male employee than of the female employee. When looking at the control group by sex, however, it becomes visible that men chose the male employee considerably more often than the female employee, with 29 times to 17 times. The total selection by sex indicates a greater choice regarding participants' own sex. Women chose the female employee (51.2%) slightly more often, whereas men chose the male employee (55.4%) slightly more often. Furthermore, these numbers indicate a small difference between men and women, showing that men chose the male employee more often than women chose the female employee.

Table 2

Proportion of Binary Decision by Role Description and by Sex

Role description		Women		Men		Total	
		%	n	%	n	%	n
Control	Frank	50.8	32	63.0	29	56.0	61
	Sarah	49.2	31	37.0	17	44.0	48
Intervention	Frank	47.0	31	47.8	22	47.3	53
	Sarah	53.0	35	52.2	24	52.7	59
Total	Frank	48.8	63	55.4	51	51.6	114
	Sarah	51.2	66	44.6	41	48.4	107
		100.0	129	100.0	92	100.0	221

Note. Control = group received feminine attributes; Intervention = group received masculine attributes

Taking a look at the scale questions, the mean for the female employee was slightly lower (M = 7.11, SD = 1.6) than for the male employee (M = 7.27, SD = 1.65). Figure 1 and Figure 2 present the mean in more detail by checking for sex and role description in order to determine whether a similar distribution to the binary question occurred. Women rated the male and the

female employee almost equally across the intervention and the control group. Men rated the male and female employee almost equally in the intervention group. A small difference can be noted in the control group, showing that men rated the male employee slightly higher for the feminine attributes than the female employee.

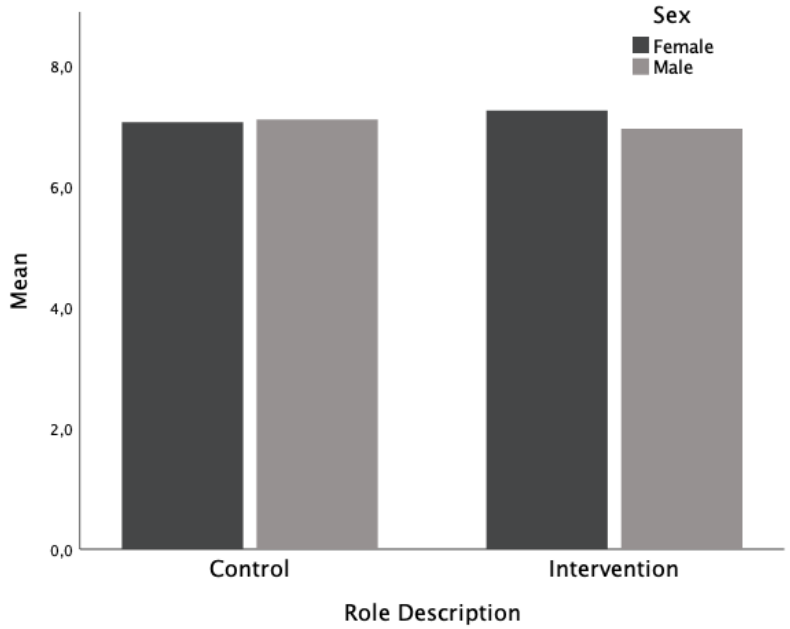

Figure 1. Comparison of mean scores of the scale decision for the female employee on role description and sex. Control received feminine attributes. Intervention received masculine attributes.

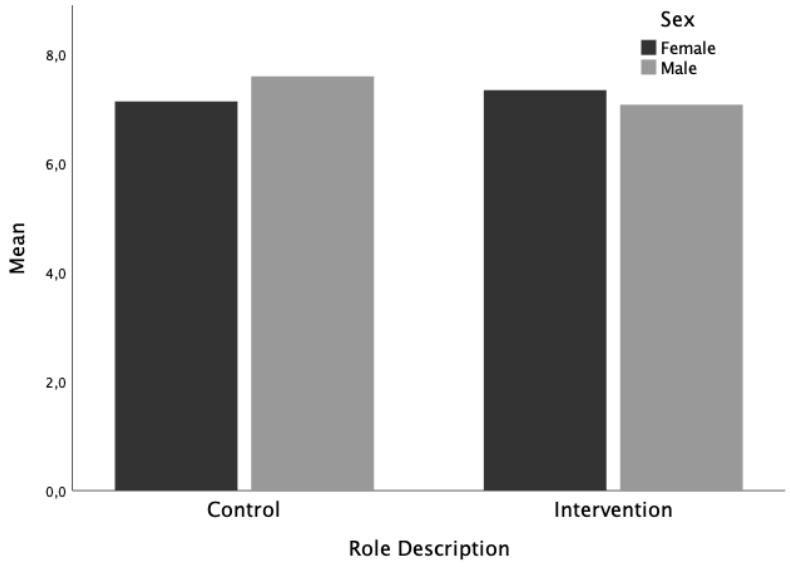

Figure 2. Comparison of mean scores of the scale decision for the male employee on role description and sex. Control received feminine attributes. Intervention received masculine attributes.

4.2 Regression analyses

To test the hypotheses and, thus, measure the expectancy of participants being biased due to gendered wording, two separate analyses were performed in SPSS according to the dependent variables. A logistic regression was used for the binary question to test the odds of participants selecting the male employee. Furthermore, two multiple regressions were run for the scale questions to test the effect of role description and sex on the selection. All dichotomous variables were dummy coded. Sex was coded as 1 = Male, 0 = Female. Additionally, role description was coded as 1 = Intervention Group, 0 = Control Group. Lastly, the binary decision question was coded as 1 = Male Employee and 0 = Female Employee. An alpha level of .05 was used for all statistical tests to indicate the statistical significance.

4.2.1 Logistic regression

A logistic regression was performed for the dependent dichotomous variable to ascertain the effects of sex and role description on the likelihood that the participants would or would not choose the male employee. The logistic regression was statistically non-significant ($X^2(3) = 3.29$, $p = .35$). This indicated that the model was not able to distinguish between participants who did or did not choose the male employee. The model explained only 2% (Nagelkerke R^2) of variance in selection and correctly classified only 54.3% of cases. When looking at the results for sex, the b coefficient is positive. This indicates that increasing sex is associated with increased odds of selecting the male employee. Based on odds ratio, men were more likely to choose the male employee than women ($OR = 1.65$; 65%). However, the overall effect for sex is non-significant ($Wald = 1.61$, $df = 1$, $p = .21$). For the results of role description, the b coefficient is negative. This indicates that increasing role description is associated with decreased odds of selecting the male employee. Based on odds ratio, the intervention group was less likely to choose the masculine employee than the control group ($OR = 0.86$; 14%). However, there is again a non-significant overall effect for role description ($Wald = .19$, $df = 1$, $p = .66$). Lastly, Figure 3 visualizes the interaction effect between role description and sex, indicating that sex moderates the effect of role description on the selection. Nonetheless, the interaction effect between sex and role description was non-significant ($Wald = .72$, $df = 1$, $p = .40$).

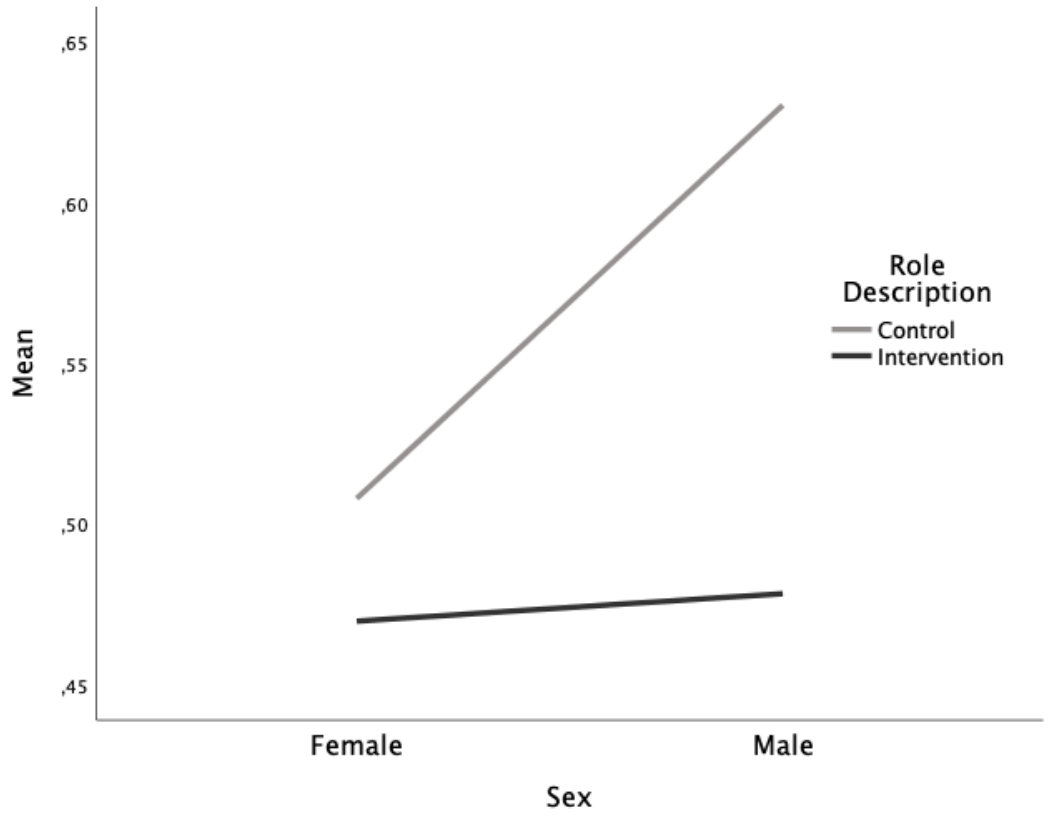

Figure 3. Interaction effect between role description and sex on the mean score of selection. Control received feminine attributes. Intervention received masculine attributes.

In order to ensure reliability and validity of the data, several assumptions were checked for the logistic regression. The Hosmer and Lemeshow test was used to test the linearity of Logit. Its outcome indicated that the model was a good fit to the data (p = 1). Analysis of collinearity statistics showed that there is no multicollinearity in the data, as VIF scores were below 10 and tolerance scores above 0.2. Cook's Distance values were all under 1, suggesting that individual cases did not unduly influence the model.

4.2.2 Multiple regression

For the two dependent scale variables, two separate multiple regressions were conducted to test for possible effects of sex and role description on the perceived suitability of the female and the male employee. The model included sex and role description as independent variables with an interaction effect between these two.

Female employee

For the dependent variable of the female employee, a hierarchical multiple regression was used to test the overall model and whether it improves by adding the interaction effect to the

independent variables. The results of the regression indicated that at Stage one, sex and role description did not contribute significantly to the regression model, $F(2, 218) = .20$, $p = .82$. The model only explained 0.2% of variance. The addition of the interaction effect between sex and role description in Stage two did not significantly improve the model ($R^2 = 0.3$, $F(3, 217) = .34$, $p = .79$). The results for the final model display no significant effect of sex ($b = .05$, $t(217) = .15$, $p = .89$) and role description ($b = .19$, $t(217) = .69$, $p = .49$) on perceived suitability. The interaction effect did not contribute significantly to the model, $b = -.35$, $t(217) = -.79$, $p = .43$. Based on the analysis, the hypotheses could not be supported, since no effect of the independent variables on the dependent variable could be found.

Male employee

For the dependent variable of the male employee, a second hierarchical multiple regression was used to test the overall model and whether it improves by adding the interaction effect to the independent variables. The results of the regression indicated that at Stage one, sex and role description did not contribute significantly to the regression model, $F(2, 217) = .18$, $p = .84$. The model only explained 0.2% of the variance. The addition of the interaction effect between sex and role description in Stage two did not significantly improve the model ($R^2 = 1.2$, $F(3, 216) = .98$, $p = .40$). The results for the final model display no significant effect of sex ($b = .46$, $t(216) = 1.44$, $p = .15$) and role description ($b = .21$, $t(216) = .71$, $p = .48$) on perceived suitability. The interaction effect did not contribute significantly to the model, $b = -.73$, $t(217) = -1.61$, $p = .11$. Based on the analysis, the hypotheses could not be supported, since no effect of the independent variables on the dependent variable could be found.

In order to ensure reliability and validity of the data, several assumptions were checked for the two multiple regressions. Analysis of collinearity statistics showed that there is no multicollinearity in the data, as VIF scores were below 10 and tolerance scores above 0.2. The P-P plot for the model suggested that the assumption of normality of the residuals was met. The plot of standardized residuals versus standardized predicted values showed no obvious signs of funneling, indicating that the assumption of homoscedasticity was met. Cook's Distance values were all under 1, suggesting that individual cases did not unduly influence the model. Due to the dichotomous nature of the independent variables, the assumption of linearity was met.

4.2.3 Additional findings

Two additional analyses were conducted to check for possible effects on the dependent variables of the male and the female employee. These two multiple regression analyses included the demographic variables of hiring experience and age as additional independent predictors.

Appendix H shows the outcome of the analyses. These indicated improved explained variance for the two models in comparison to the main analyses (R^2 = 0.53; R^2 = 0.31). Nonetheless, the inclusion of additional variables did not lead to any significant effects (see Appendix H).

To explore the decision-making styles among participants, the five factors of the GDMS were investigated by taking a look at their mean scores. In general, participants mostly hold a rational decision-making style (M = 3.79, SD = .78), followed by an intuitive (M = 3.58, SD = .67) and dependent (M = 3.22, SD = .83) decision-making style. The spontaneous (M = 2.83, SD = .79) as well as the avoidant (M = 2.57, SD = .91) decision-making styles were less applicable to the sample population. Figure 4 shows the mean scores by comparing the control group with the intervention group. Additionally, Figure 5 visualizes the mean scores by comparing female participants with male participants. The graphs show that the aforementioned ranking of mean scores is consistent among groups and participants' sex. In specific, participants scored the highest on the rational decision-making style.

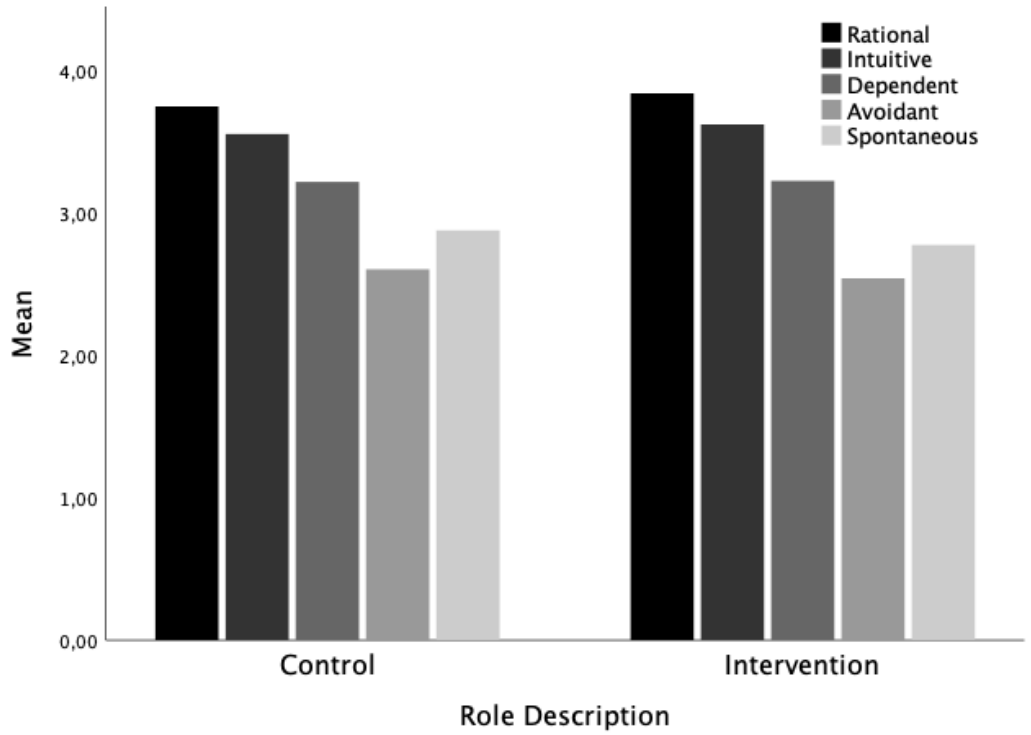

Figure 4. Comparison of mean scores for decision-making styles by role description. Control received feminine attributes. Intervention received masculine attributes.

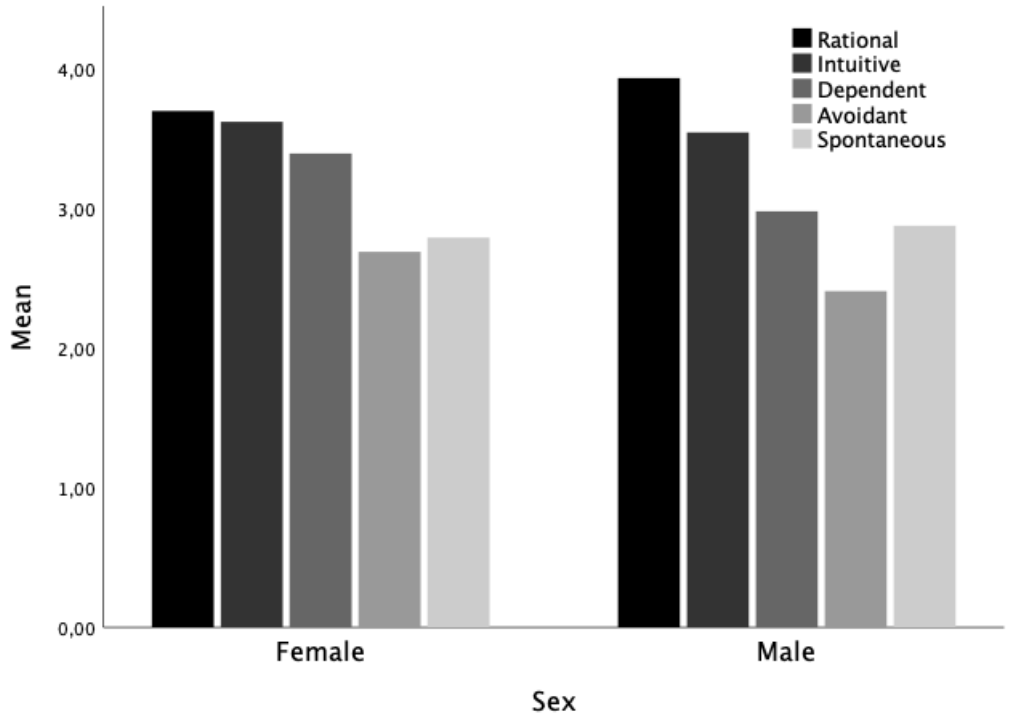

Figure 5. Comparison of mean scores for decision-making styles by sex.

DISCUSSION

5.1 General discussion

The present study tried to answer the research question whether gendered wording affects the selection of employees in organizational contexts. The results showed that none of the stated hypotheses can be confirmed. No significant effects could be found that would substantiate the consequence of stereotypical attributes on the selection of employees. Thus, the study could not find that gendered wording affects the selection of employees. Considering the binary decision question, an almost even distribution of participants can be observed by sex and by received role description. This accounts for half of the participants choosing the employee whose expertise matched the requirements whereas the other half chose the one that was stereotypically referred to by the attributes. Although it could be argued that half of the participants must have been biased in one way or another, it remains difficult to draw such conclusions, given the nature of logistic regressions. Despite this lack of opportunity to draw explicit findings, it is still possible to observe some interesting outcomes by looking at the proportion of participants within the selection.

First, participants preferred the employee of their own sex as reflected in slightly higher numbers for the corresponding employee. These numbers further indicate that men chose the male employee more often than women chose the female employee. In addition, men chose the male employee considerably more often for the feminine attributes than the female employee. The latter raises the question whether the difference is based on a rational decision due to the male employee's higher expertise. Given the quantitative nature of the study and the inability to allow follow-up questions, one can only speculate about other possible factors that could have influenced this choice. One possibility is that the participants selected the male employee as a demonstration that men hold warm and communal traits likewise. However, the optional responses do not support this assumption. More specifically, these only support the selection being based on rationality and better expertise. For example, one participant argued that the de-escalation workshop seemed like a more useful experience for the specific job description than the business-graphic workshop (personal communication). Furthermore, a second participant provided the following information:

> As previously stated, someone with great empathy is needed for the function. Both of them seem to have qualities that fit this description such as Emotionally intelligence trainings. However, Frank also has a training on professional reactions in escalating

> conversations what can be useful during group work and group processes. (personal communication)

Due to the uneven distribution within the binary question, the scale questions were examined for similar results. Nonetheless, it was not possible to depict a result that fits the finding that men chose the male employee for the feminine attributes more often than the female employee. In specific, men in the control group did not rate the male employee considerably higher than the female employee. Although a difference can be observed, it remains relatively small compared to the clear share for the binary decision.

5.2 Limitations and future research

As the study did not involve follow-up questions, it is only a matter of speculation why the results do not support each other. One possibility concerns the fact that participants had to give a definite answer because of the binary question, even though they did not perceive the employees as different. This binary question and thus the dichotomization of the decision variable are similar to the problem of median splits. In both cases, such decisions rarely reflect the true median nor do they express explicit judgments. In addition to the resulting loss of important information, the variability of the sample is lost as well (Lasarov & Hoffmann, 2017).

Furthermore, the present paper was based on the work of scholars who investigated gendered wording and substantiated negative effects of stereotypical attributes within the workplace (viz., Bartz & Lydon, 2004; Gaucher, Friesen, & Kay, 2011). These attributes were then carefully selected for the present study. As their presence has been substantiated, it is unlikely that the absence of effects is due to the general choice of these attributes. Nonetheless, these authors did not present the attributes in such an explicit context, meaning that the present study additionally designed two new specific employee profiles. The profiles provided, however, might ultimately have been too similar leading participants to search for minor differences that would suggest a correct choice. The results were conscious and petty selections that do not typically fit the subconscious evolvement of gender bias. This is strengthened by Sczesny and Kühnen (2004) who conclude that social stereotypes do not always affect individuals' decision-making. They argue that in recruiting contexts, individuals behave more careful and methodological and consequentially become more inclined to correct stereotypes. Although only a minority of participants within the present study had experience in recruiting, the subtle differences in profiles could have led them to high cautiousness. This, in turn, might have caused them to ultimately overcome the unconscious nature of stereotypes. The outcome

of the GDMS supports this assumption by indicating that the rational decision-making style had the highest mean compared to the other styles. This repeatedly shows that most participants chose the employee carefully rather than being driven by spontaneous decisions.

In conclusion, the main limitations of the study appear to be the quantitative selection process and the high similarity of profiles. Although the latter was tested prior by means of a manipulation check, it does not seem to have been sufficient. To avoid not only contradictory results but also maintain important variability, future research should go beyond a mere quantitative selection. Qualitative studies such as interviews could facilitate the questioning and justification of the employee selection. In addition, they would allow the recognition of gender-specific phrasing by taking into account the spoken language of participants. In this way, when examining the gendered wording and the gender bias, factors beyond the sole selection would be considered. These include the rationale and the explicit argumentation of participants for selecting a particular employee. Interviews would further allow obtaining specific compromises participants do to ultimately make a decision. Lastly, a manipulation check within the actual study could enable the assessment of the manipulation among all participants.

5.3. Theoretical and practical implications

Besides these approaches to improve the present study, it remains important to acknowledge some theoretical and practical implications. First of all, the findings indicate differences that emerged throughout the study even though they cannot be attributed to the designed intervention. As a rather balanced selection occurred, further research is needed to examine whether these findings can be linked to the equality in expertise of the employees or to other possible factors. Thus, given the difficulty to draw explicit theoretical implications, the study could inspire other scholars who would like to further investigate into the presence of gender-stereotypical attributes within the workplace. The specific setup of the study could serve as a starting point to develop interventions with a less specific context to facilitate the observation of results.

As described, half of the participants were driven by rationality and carefulness in their decisions. Although not what expected, the outcome is still positive as it indicates that numerous people chose the employee based on expertise. Nonetheless, it is unlikely to perceive the gender bias as being eliminated. It seems reasonable to assume that besides stereotypes, a variety of other factors play an important role in its formation. Therefore, the findings practically imply that organizations should give high importance to understand how decisions

are made and which factors underlie the choices. Language still plays an important role regardless of whether gendered wording led to a distorted perception. The mere presence and articulation of stereotypical attributes in daily life should be further questioned, especially once important decisions are involved. Since stereotypes are ubiquitous, it remains difficult to believe that the use of them could completely be avoided. Nonetheless, a first step towards more conscious choices is to realize their influence on decision-making. Rather than restricting language, the possibility to achieve gender equality concerns an analysis of how internal and external communication within organizations can be improved. Therefore, apart from the general understanding of selection, the practical implication for organizations concerns the internal reflection. In specific, organizations should reflect on their communication means and examine how these might transmit certain stigma and gender stereotypes. If such reflection would take place on an organizational and individual level, it seems reasonable to expect that employees get sensitized for detecting where their choices stem from and whether these were influenced by stereotypes. Ultimately, this reflection could lead to improved communication minimizing the formation of gender bias.

CONCLUSION

The foregoing literature review showed that gender stereotypes and the consequential gender bias have been substantiated thoroughly by several scholars. Barriers between the sexes are reinforced by what seems to be defined as masculine and feminine behavior. These unequal conditions within the workplace are often based on distorted perceptions of competences. The present study specifically investigated gender-stereotypical attributes and their effect on the selection of employees. Additionally, the study tried to examine whether participants prefer employees of their own sex. Gendered wording was used as an operationalization method in order to transmit the stereotypical attributes within role descriptions. Subjects were divided into two groups receiving either masculine- or feminine-wording. Based on this, participants filled out an online survey in which they were asked to select and rate a new team employee. Additionally, the study tested participants among their decision-making styles.

The analyses showed that participants hardly differed in whom they chose. However, male participants considerably more often chose the male employee within the control group receiving feminine attributes. Although this finding deviates from the other results, the predictors of sex and role description did not have a significant effect on the selection. Thus, no significant differences in selection can be concluded. Whom participants chose must therefore depend on other, possibly additional factors. Rather than prematurely concluding the absence of gender bias, limitations of the study must be considered. First, the employee profiles might have been too similar. This could have led participants to a highly methodological decision-making. Second, the employee selection itself might have been hindered by the binary nature of the question, causing a loss of variability. Additionally, the quantitative nature of the study did not allow for any follow-up questions. These, however, would have allowed more specific investigations, considering the contradictory results of the binary and the scale questions. Thus, to gain more insight into subjects' rationale, future research should implement qualitative elements. Doing so, it could focus on unconscious usage of stereotypes within spoken language. Organizations and individuals can take the findings as a starting point to reflect on their own use. By carefully considering their communication, impediments to equality stemming from language can be detected. Internal and external language can be improved, allowing men and women equal chances of getting hired. Even though discarding the stereotypical expectations of masculinity and femininity seems difficult, society appears to be on its way to improvement given the recent increasing coverage about gender equality. Once large institutions and organizations further reflect on their communication and rethink their current diversity management, a positive development in the future seems certain.

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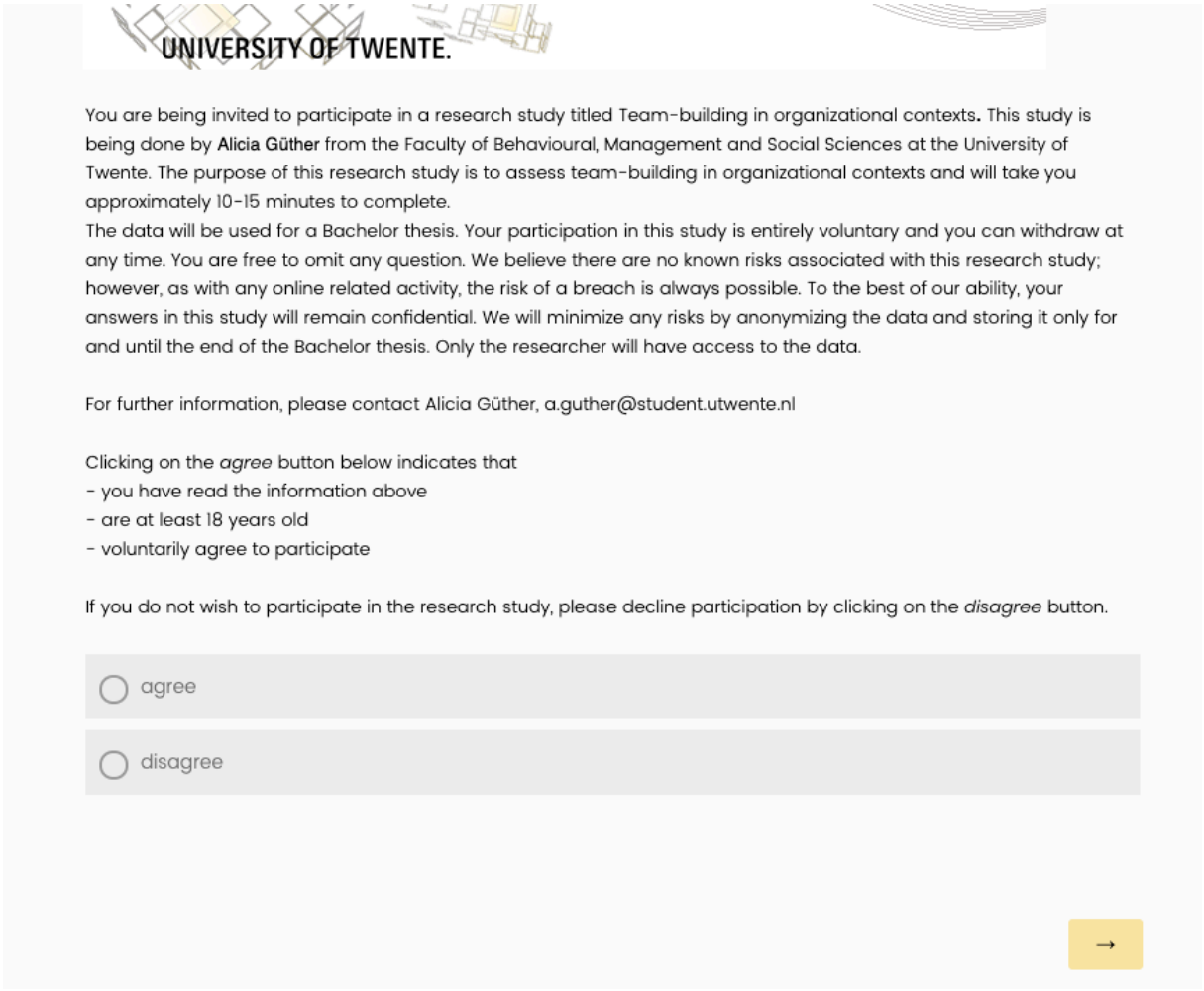
APPENDIX A

INFORMED CONSENT FORM



UNIVERSITY OF TWENTE.

You are being invited to participate in a research study titled Team-building in organizational contexts**.** This study is being done by **Alicia Güther** from the Faculty of Behavioural, Management and Social Sciences at the University of Twente. The purpose of this research study is to assess team-building in organizational contexts and will take you approximately 10-15 minutes to complete.
The data will be used for a Bachelor thesis. Your participation in this study is entirely voluntary and you can withdraw at any time. You are free to omit any question. We believe there are no known risks associated with this research study; however, as with any online related activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by anonymizing the data and storing it only for and until the end of the Bachelor thesis. Only the researcher will have access to the data.

For further information, please contact Alicia Güther, a.guther@student.utwente.nl

Clicking on the *agree* button below indicates that
- you have read the information above
- are at least 18 years old
- voluntarily agree to participate

If you do not wish to participate in the research study, please decline participation by clicking on the *disagree* button.

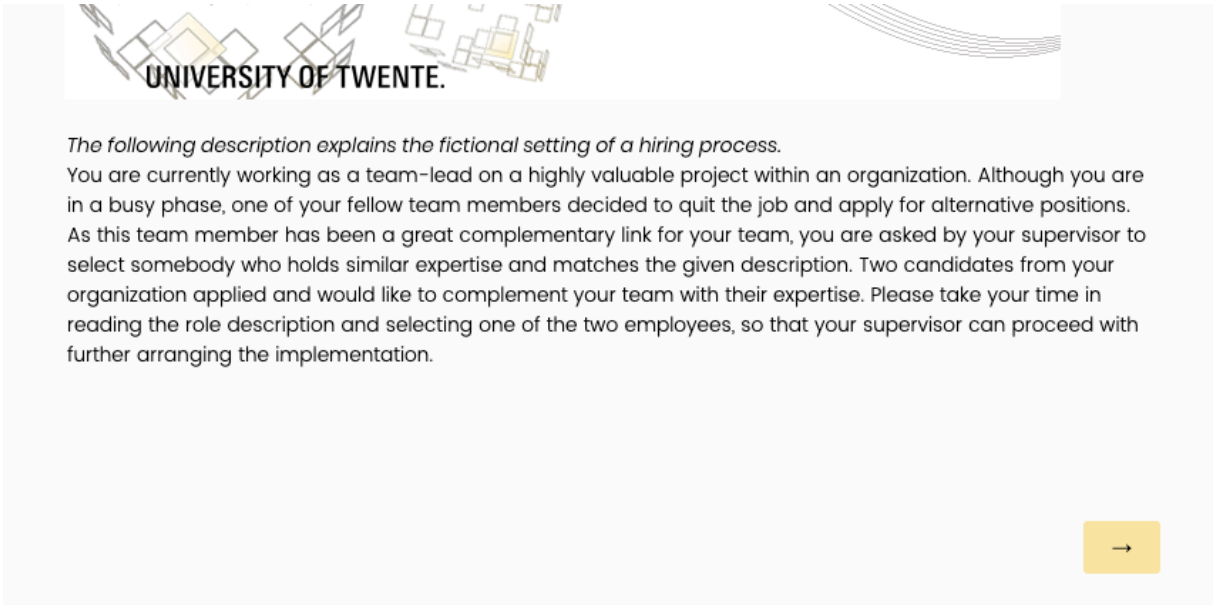
◯ agree

◯ disagree

→

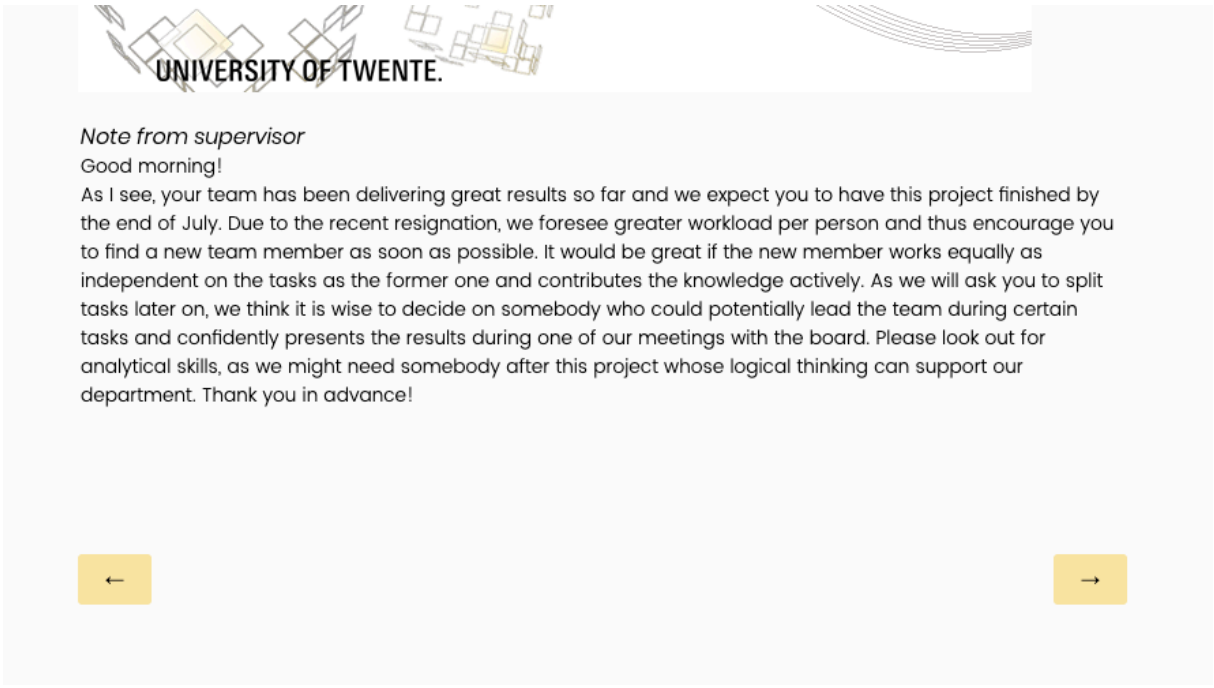
APPENDIX B

SCENARIO DESCRIPTION



APPENDIX C

ROLE DESCRIPTION INTERVENTION GROUP



APPENDIX D

ROLE DESCRIPTION CONTROL GROUP

APPENDIX E

EMPLOYEE PROFILES INTERVENTION GROUP

Sarah

- Board Member *Financial Resource Development* (2015 - 2017)
- Board Treasurer *Finance Commitee* (2017 -)
- Professional trainings
  - How to: Effectively organizing and executing staff meetings (8 hours)
  - Introduction to Data Science & Big Data (30 hours)
  - Team leading: Improving productivity through teamwork (22 hours)

Frank

- Board Member *Financial Resource Development* (2017 -)
- Mentorship for interns (2015 -)
- Professional trainings
  - PowerPoint: Business graphics for advanced users (6 hours)
  - Team leading: Improving productivity through teamwork (24 hours)
  - Introduction to Data Science & Big Data (30 hours)

APPENDIX F

EMPLOYEE PROFILES CONTROL GROUP

Sarah

- Mentorship for interns
- Professional trainings
  - Challenging demography: Working with cross-generational work environments (Weekend course)
  - PowerPoint: Business Graphics for advanced users (6 hours)
  - Emotional Intelligence Training (17 hours)
- Supporting the organization of corporate team activities
  - 2016: Mystery Dinner
  - 2017: Summer Kayaking

Frank

- Member in work council
- Professional trainings
  - De-escalation: Professional reactions in escalating conversations (4 hours)
  - Challenging demography: Working with cross-generational work environments (Weekend course)
  - Emotional Intelligence Training (17 hours)
- Supporting the organization of corporate team activities
  - 2018: Volunteering at Soup Kitchen Downtown

APPENDIX G

GENERAL DECISION-MAKING STYLES SURVEY

Listed below are statements describing how individuals go about making important decisions. Please indicate whether you agree or disagree with each statement about yourself.

		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	I double-check my information sources to be sure I have the right facts before making a decision (R)	1	2	3	4	5
2	When making a decision, I rely upon my instincts (I)	1	2	3	4	5
3	I often need the assistance of other people when making important decisions (D)	1	2	3	4	5
4	I avoid making important decisions until the pressure is on (A)	1	2	3	4	5
5	I generally make snap decisions (S)	1	2	3	4	5
6	I make decisions in a logical and systematic way (R)	1	2	3	4	5
7	When I make decisions, I tend to rely on my intuition (I)	1	2	3	4	5
8	I rarely make important decisions without consulting other people (D)	1	2	3	4	5
9	I postpone decision making whenever possible (A)	1	2	3	4	5
10	I often make decisions on the spur of the moment (S)	1	2	3	4	5
11	My decision making requires careful thought (R)	1	2	3	4	5
12	I generally make decisions that feel right to me (I)	1	2	3	4	5
13	If I have the support of others, it is easier for me to make important decisions (D)	1	2	3	4	5
14	I often procrastinate when it comes to making important decisions (A)	1	2	3	4	5
15	I make quick decisions (S)	1	2	3	4	5
16	When making a decision, I consider various options in terms of a specific goal (R)	1	2	3	4	5
17	When I make a decision, it is more important for me to feel the decision is	1	2	3	4	5

	right than to have a rational reason for it (I)					
18	I use the advice of other people in making my important decisions (D)	1	2	3	4	5
19	I generally make important decisions at the last minute (A)	1	2	3	4	5
20	I often make impulsive decisions (S)	1	2	3	4	5
21	I explore all my options before making a decision (R)	1	2	3	4	5
22	When I make a decision, I trust my inner feelings and reactions (I)	1	2	3	4	5
23	I like to have someone to steer me in the right direction when I am faced with important decisions (D)	1	2	3	4	5
24	I put off making many decisions because thinking about them makes me uneasy (A)	1	2	3	4	5
25	When making decisions, I do what seems natural at the moment (S)	1	2	3	4	5

R=rational, I=intuitive, D=dependent, A=avoidant, S=spontaneous

APPENDIX H

ADDITIONAL MULTIPLE REGRESSION ANALYSES

Model Summary[c]

Model	R	R^2	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.19[a]	.04	.02	1.63	.04
2	.23[b]	.05	.03	1.62	.02

a. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear
b. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear, SexRoleDescription
c. Dependent Variable: DecisionScaleFrank

ANOVA[a]

Model		*SS*	*df*	*MS*	*F*	*p*
1	Regression	18.91	4	4.73	1.78	.14[b]
	Residual	513.26	193	2.66		
	Total	532.16	197			
2	Regression	27.98	5	5.6	2.13	.06[c]
	Residual	504.18	192	2.62		
	Total	532.16	197			

a. Dependent Variable: DecisionScaleFrank
b. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear
c. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear, SexRoleDescription
Note. SS = sum of squares; *df* = degrees of freedom; *MS* = mean square; *F* = f-ratio
$p < .05$

Coefficients[a]

		Coefficient					95% CI	
Model		*b*	*SE*	*b**	*t*	*p*	LL	UL
1	(Constant)	-42.05	26.64		-1.58	.12	-94.6	10.49
	RoleDescription	-.00	.23	-.03	-.43	.67	-.56	.36
	Sex	.22	.25	.07	.87	.39	-.28	.72
	Birthyear	-.02	-.01	.13	1.79	.08	-.00	.05
	HiringExperience	.65	.43	.11	1.49	.14	-.21	1.5
2	(Constant)	-40.75	26.48		-1.54	.13	-92.98	11.48

RoleDescription	.25	.30	.08	.83	.41	-.34	.83
Sex	.66	.35	.20	1.91	.06	-.02	1.35
Birthyear	.02	.01	.13	1.75	.08	-.00	.05
HiringExperience	.66	.43	.11	1.52	.13	-.19	1.51
SexRoleDescription	-.88	.47	-.21	-1.86	.07	-1.81	.05

a. Dependent Variable: DecisionScaleFrank
Note. CI = confidence interval; LL = lower limit, UL = upper limit; *b* = unstandardized coefficient; *b** = standardized coefficient; *SE* = standard error
$p < .05$

Model Summary[c]

Model	R	R^2	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.17[a]	.03	.01	1.57	.03
2	.17[b]	.03	.01	1.57	.00

a. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear
b. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear, SexRoleDescription
c. Dependent Variable: DecisionScaleSarah

ANOVA[a]

Model		*SS*	*df*	*MS*	*F*	*p*
1	Regression	14.27	4	3.57	1.46	.22[b]
	Residual	475.23	194	2.45		
	Total	489.5	198			
2	Regression	15.25	5	3.05	1.24	.29[c]
	Residual	474.25	193	2.46		
	Total	489.5	198			

a. Dependent Variable: DecisionScaleSarah
b. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear
c. Predictors: (Constant), HiringExperience, RoleDescription, Sex, Birthyear, SexRoleDescription
Note. SS = sum of squares; *df* = degrees of freedom; *MS* = mean square; *F* = f-ratio
$p < .05$

Coefficients[a]

Model		Coefficient					95% CI	
		b	*SE*	*b**	*t*	*p*	LL	UL
1	(Constant)	-41.83	25.57		-1.64	.10	-92.26	8.59
	RoleDescription	.18	.22	.06	.79	.43	-.26	.61
	Sex	-.08	.24	-.03	-.34	.74	-.56	.40
	Birthyear	.02	.01	.14	1.89	.06	-.00	.05
	HiringExperience	.18	.42	.01	.42	.67	-.65	.10
2	(Constant)	-41.41	25.62		-1.62	.11	-91.93	9.12
	RoleDescription	.29	.29	.09	1.01	.32	-.28	.85
	Sex	.06	.34	.02	.19	.85	-.60	.72
	Birthyear	.02	.01	.14	1.86	.06	-.00	.05
	HiringExperience	.18	.42	.03	.43	.67	-.64	1
	SexRoleDescription	-.29	.46	-.07	-.63	.53	-1.18	.61

a. Dependent Variable: DecisionScaleSarah

Note. CI = confidence interval; LL = lower limit, UL = upper limit; *b* = unstandardized coefficient; *b** = standardized coefficient; *SE* = standard error

$p < .05$

APPENDIX I

LITERATURE LOG

Criteria preferred materials
For the present study, three different types of materials were used. These included journal publications, reports and books. For all these materials, both English as well as German language were criteria. However, mostly publications in English were taken for the present study. Additionally, material was judged based on relevant outcomes and whether these were still applicable to the present time and geographical location. Although one report was used that focused on outcomes in the US, other publications were not explicitly focused on particular geographical locations.

Selected Databases
Especially two databases were used for the present study, namely Scopus and the university-intern search engine FindUT. As literature was needed that covered both general as well as highly specific terms, using these general databases was the most suitable option. Although general search terms such as gender stereotypes could have been found via all common databases, gendered wording and gender bias were more explicit and not covered by all. In addition to searching freely on these databases, prior literature was used to gather possibly relevant material that could be of interest and, thus, covered necessary concepts.

Relevant terms

Concepts	Related terms	Smaller terms	Broader terms
Gender stereotypes	Prejudice, masculinity, femininity, discrimination, gender bias	Gender-stereotypical attributes; masculine-stereotypical attributes; feminine-stereotypical attributes	Stereotypes
Gendered wording	Gender stereotypes	Gender-loaded phrases	Gendered language
Gender bias	Gender discrimination, sexism	Perception bias	Bias
Gender diversity	Gender equality	Gender-diverse workplace	Diversity management

Reflection
Orientating myself started with general searches, including the more general terms such as gender stereotypes. Although I then already started to search for more specific terms, I perceived it as more difficult to find relevant sources without having established a broad understanding of the topic. I therefore focused first on literature that covered the topic more briefly before going into specific literature. Choices regarding qualitatively good information typically meant to include scientific articles and as little non-academic sources as possible. Although several newspaper publications were relevant to the topic, I restrained from using these and tried to find other publications. Within these, I focused on journal publications. Several non-journal publications that were used were thesis dissertations, reports and book chapters. Among all of these, the relevancy of the topic towards my specific study was important. This means that I tried to include mostly sources that were not restricted on specific geographical locations, in order to allow appliance to the present research question. Databases that I most commonly used were FindUT, Scopus and, to get a broad overview, Google Scholar. After gathering literature for a while, I however found myself stuck, meaning that it was difficult to find more and more relevant literature. What I have been doing then was to study the reference lists of the already gathered literature. This gave me a completely new opportunity to find more relevant literature. Generally speaking, the use of search terms remained steady throughout my work and did not really change. The only thing that did in fact change was that by reading more articles, I gathered new terms that I have not been thinking about beforehand. One of these are gender-stereotypical attributes which then later became a whole chapter within my theoretical framework. Studying the literature therefore helped to broaden my horizon. I did not use extremely advanced search actions and kept them rather simple. This is because I found an abundance of literature after deciding to study reference lists of other authors. If I would change how I gathered literature in the future, I would definitely start earlier with scanning through other articles' references. This allowed me to find more specific sources that were highly applicable to my research. Starting with it earlier instead of trying to find more and more sources that, in the end, were still too general, would have saved me a lot of time.

Search actions

	Date	Database	Search action	Total hits
1	15.04.2019	FindUT	Gender AND stereotypes	24899
2	15.04.2019	FindUT	Gender AND bias	46244
3	15.04.2019	FindUT	Gender AND bias AND workplace	3809
4	16.04.2019	Scopus	Gender AND stereotypes AND bias AND workplace	465
5	16.04.2019	FindUT	Gender AND stereotypes AND workplace	2279
6	16.04.2019	Scopus	Gendered wording	7
7	17.04.2019	Scopus	Gender-stereotypical AND attributes	79
8	17.04.2019	FindUT	Gender AND diversity AND stereotypes AND workplace	923
9	14.04.2019	Scopus	Stereotypes AND gender AND language AND workplace	2510
10	21.05.2019	FindUT	Online data collection AND survey	53796

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