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**Evaluation of Implicit and Explicit
Gender Bias at Work:
an Experimental Study**

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Abstract

In an optic of sustainable gender equality at work, the objective of this research is to investigate the possible dissociation between implicit and explicit gender bias within the banking system's predisposition towards female integration across hierarchical levels. The element that stands out in this project is the adoption of both explicit and implicit measures to provide an accurate and realistic perception of employees, with the aim of identifying potential tacit discrimination attitudes. Those, often downplayed, represent a crucial part of women's work perception and performance, and can have an impact on their career advancement and on the overall organization.

Introduction

According to some scholars, gender discrimination at workplace is a consequence of different phenomena, such as the gender pay gap, the lack of women's career progress, gender stereotyping in higher managerial positions, sexual harassment, and job insecurity (Batool, 2020). According to another line of reasoning, gender discrimination is rather the cause of those issues and the consequence of cultural stereotypes rooted in the societal context (Carrasco et al., 2015; Longman & Lafreniere, 2012; Kim & Kweon, 2022). For instance, Vokić et al. (2016) claims that gender bias leads to the following types of gender segregation: educational, horizontal occupational, vertical/hierarchical occupational, pay segregation, and segregation in values and preferences. Among those, one of the most common and widely researched is the gender wage gap, also partially dealt with by regulatory laws (Blau & Kahn, 2017). However, the gender unbalance goes beyond the salary difference, and it has been investigated by several scholars to check for potential implications on the financial and productive performance, with studies ranging from the regression of the firm's age on the pay gap (Cukrowska-Torzewska et al., 2020), to the impact of female leadership on firm's performance (Flabbi et al., 2019), to the relationship between gender discrimination and job satisfaction (Settles et al., 2013). Similarly, there is also the question of whether premiums are being fairly attributed to both men and women (Card et al., 2016), and female managers' shares adequately distributed (Flabbi et al., 2019). With respect to the financial sector, Elamer et al. (2020) suggested that it diverges from others, because of its contingency to regulation and a major compliance standard factor. Considering the bigger picture, the banking system's stability has a direct impact on the nation's financial stability, because monetary policies are effective only when the financial system is stable (Nguyen, 2021). If it is true that banks' role is crucial for the national financial wellbeing, it is also true that banking institutions are exposed to more risk because of their loan activities, which makes

the information asymmetry quite problematic (Khatib, 2020). Additionally, the banking sector is characterized by the predominant role of directors to approve all key decisions, emphasizing the great influence on the banks' efficiency and performance (Khatib, 2020). It can be deduced that a meagre presence of women on banks' board of directors impacts the overall bank's achievement – whether in a positive or negative trend -, and consequently on the overall country's financial stability. According to De Vita and Magliocco (2018), the banking sector is traditionally androcentric, and in Italy it is still widely dominated by the idea of “*think manager, think male*” and “*think crisis, think female*”. Moreover, according to the two authors, this sector is particularly strategic for a sustainable development of the economy, as it plays in an economic arena in which the gender quota effects may unveil an unexpected inconsistency with the policy goal of gender empowerment, given the capillary male predominance. Especially in the banking sector, where trust is among the top priorities, the burden of reputation could play a relevant role in implementing gender quotas. As it will be analyzed in the paper, the issue of gender quotas' real impact on gender bias could cause a backlash that would widen the gap and reinforce the stereotypes that repetitively emerge at the workplace, as analyzed in the following chapter.

Chapter 1 – Explicit and implicit gender bias

1.1. Discrimination in climbing the hierarchy ladder

Another form of explicit gender bias in the work environment comprehends the lack of equal chances in internal escalation. Lack of career progress for women contributes towards gender discrimination, and the obstacle presents itself from graduation day, when women's career profiles already lag behind their male counterparts (Batool, 2020). Similarly, Petit (2007) showed that, sending identical CVs differing only in the applicant's gender, women are less likely to be invited for interview, especially for high-qualified positions. According to FTSE 100 list, in 2018 only 7 out of 100 CEOs were females (Statista, 2019), and in 2021 the number has only increased by 1, leading to the assumption that women are considered less compatible compared to their male counterparts for higher managerial positions. When trying to reach top positions in organizations, women have been reported as being less keen to achievement and less power oriented (Schuh et al., 2014), as well as more conservative in decision-making processes (Baixauli-Soler et al., 2015). The resulting impact is that women may not even try to reach senior management positions, because doing so would conflict with their self-image (Powell & Butterfield, 2013). The well-researched theory behind it is called self-fulfilling prophecy, which causes a change in behavior in a person who is falsely attributed a definition, as Park & Punaram (2020) claimed. Basing their research on the work of the sociologist Robert K. Merton (1948), they stated that the underlying mechanism behind this theory is that a false concept becomes true by association, therefore translating a bias into a belief (Park & Punaram, 2020). Stereotypes like this have been found to affect women's performance and to reduce their motivation to succeed, generating vulnerability, and anxiety in female leaders (Walker & Aritz, 2015). This impacts the motivation level of women working at lower levels and makes it twice as hard for women to get to the same position as men (Batool, 2020). The common metaphor of "glass ceiling" has

been largely used to capture this complex social phenomenon of invisible barriers that women face in climbing the career ladder (Bruckmüller & Braun, 2020). It has been argued by some scholars that such skewed representation of women in managerial positions implies blocked opportunities, whereas others argue that it is due to “*the sticky floor*” (Briel et al., 2022), which has been recently discussed along the “*glass cliff*” (Carton, 2022), which refers to the precarious and non-supportive context that many women face when they do break into a position of leadership. Either way, women are mostly kept in lower paying positions and encounter greater difficulties in being promoted to high-ranked positions. The effect is a vicious circle in which female workers are allocated to lower positions in firms’ hierarchies, receive less training and have fewer opportunity of career. Top and middle positions are therefore male-dominated, and men tend to assign challenging tasks mainly to males (De Pater et al., 2010) and offering less career opportunities to women. Paradoxically, women need to show higher ability and higher performance than men to be promoted to the same job, and often the choice still falls on a male candidate (Pema & Mehay, 2010). Furthermore, Herman et al. (2012) report how in Science, Technology and Engineering sectors, female employees are excluded from “*the group of boys*” in the phase of transition to motherhood, with the assignment of lower-responsibility tasks. As a result, women at the top positions in the firms’ hierarchies are often childless (Grund, 2015; Wilkinson et al., 2017). The study conducted by Bruckmüller & Braun (2020) delves into the often-downplayed effect that such disparity has on men, framing the matter as a man’s disadvantage as well as a woman’s disadvantage. In fact, when women are empowered to the par of men, they can contribute to the health, productivity, and development of the whole community, thus improving the prospects for the future generation. Additionally, according to Noble & Moore (2006), the underrepresentation of women in leadership positions is concerning because it violates human rights and diversity. It is further stressed that these two

elements of the exclusion of women from leadership roles negatively impact productivity, and undermine the organizations' ability to respond to change and threaten its future viability and vitality in the face of economic challenges of the changing place (Noble & Moore, 2006). However, Smith et al. (2013) show that also men who take parental leave face lower promotion chances than their male colleagues who do not, demonstrating that firms perceive parenthood and, more generally, family responsibilities as a signal of lower commitment and work effort. This leads to the conclusion that the conflict between work and family is the most commonly identified barrier preventing women from reaching leadership positions (Seierstad & Kirton, 2015).

1.2. Role discrimination

Switching from the vertical to the horizontal shift within the organization, gender bias and traditional thinking about gender roles still remains a menace (Eagly & Carli, 2007). In fact, the tendency to associate and dissociate women from certain job positions reinforces the idea that those specific, often lower-ranked roles are fit for women, whereas other roles are not. For instance, the secretary is usually associated with a woman, even though in essence there is no cognitive difference that impedes a man from fulfilling the role. Analyzing it from the male's perspective, the 'role strain' (i.e., the stress of experiencing a society-fueled incompatibility between one's gender identity and occupational stereotypes) is a common negative psychological experience among men who enter occupations that are non-traditional for their gender (Simpson, 2005). This implies a negative effect of societal job requirements that are gender conscious on men, too. Furthermore, gender stigma towards roles makes women more pessimistic about their career opportunities and, consequently, they tend to underestimate their professional capabilities (Kaiser, 2014). Therefore, they are disproportionately represented in lower-status and non-executive positions (Fernandez & Mors, 2008). Moreover, they are overall less likely to apply for male-dominated occupations,

unless female applicants are characterized by more ‘masculine’ traits, as independence, self-confidence, impassiveness, or assertiveness (Antecol & Cobb-Clark, 2013). The implication is that to be accepted to fulfil certain roles, women need to match men’s descriptions as much as possible, but there is also a biased assumption that the traits presented above are masculine rather than applicable to both sexes. This ulterior stereotype may reinforce the argument made by Moro et al. (2017), who focused on the creditworthiness issue related to gender discrimination. They found that women felt more prone to be rejected due to their gender, compared to men’s, leading to a higher credit restriction, and therefore often did not apply for the loan to avoid the rejection.

1.3. Sexual harassment

Gender discrimination can lead to more severe consequences such as sexual harassment and micro aggressions taking place at work. Batool (2020) identified sexual harassment at workplace as one of the major issues that women face, and that can stain them with regressed trauma. However, only in 1/3 of cases the harassment has been reported, according to the Young Women’s Trust (2018), with potential causes being mainly the fear of losing the job and being forced to work fewer hours, and facing other serious consequences (Siddique, 2018). Another important reason that explains the lack of a substantial reporting is to be found in the underlining idea that there is an unavailability of adequate channels that allow sexual harassment complaints to be processed in a fair way (Young Women’s Trust, 2018). It has been consolidated that there is a cause-and-effect relationship between gender discrimination and workplace stress, and that such discrimination influences the structural, cultural, and interactional spheres within the workplace stress (Batool, 2020). This type of gender bias that foresees unfair treatment of female workers because of their gender has been greatly researched, for instance in the facet of work scheduling, as women are less likely than men to be granted a request for flexible hours (Brescoli et al., 2013). Moreover, sexual

harassment - directly under the umbrella of gender discrimination - generates inequity for socioeconomic household's conditions and impacts both physical and mental health of women workers (Batoool, 2020). Several important psychological and personal consequences for female employees indicate that perceived gender discrimination against women is associated with a variety of negative organizational outcomes, such as higher turnover rates and lower levels of organizational commitment (Dalton et al., 2014). It is important to recognize that both women and men are negatively impacted by organizational sexism when it comes to job satisfaction and perception of the professional climate (Settles et al., 2013). This once again relates to the matter of gender discrimination as being a rather societal problem than a women-only issue.

1.4. Explicit and implicit micro aggressions

Furthermore, micro aggressions have been defined as *“the brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial, gender, sexual-orientation, and religious slights and insults to the target person or group”* (Beltran et al., 2021). Gender microaggressions devalue women and dismiss many of their accomplishments, thereby limiting women's effectiveness in professional environments. A classic example is that of a female employee contributing an idea during a meeting, which a male superior may not respond to or seemingly not hear. However, the same does not happen for the opposite sex, implying an implicit exclusion from formal and informal meetings, lack of effective mentorship compared to men, male mentors mistaking their interactions as a sexual invitation, and over 60% of women reporting sexual harassment at the workplace in the form of sexist jokes and unwanted sexual attention. According to Metinyurt et al. (2021), microaggressions are risky because they not only have negative repercussions on the targets and on the witnesses, but they also contribute to a detrimental work environment, impacting

directly on the employees' performance. It is deemed useful to bring the example of black women, who have reported feeling unheard, invisible, and marginalized in professional settings. In this case of a double discrimination, it is noticeable how their racial background and their gender identity carries the stereotype of black women being "*angry*" and "*loud*", and as a consequence it would be acted upon by silencing them when they attempt to speak up in work meetings (Metinyurt et al., 2021). Already in 1995, Greenwald and Banaji analyzed gender microaggression from the socio-psychological standpoint, underscoring the degree to which individuals hold stereotype-congruent cognitive associations, despite their explicit endorsement of gender equality. In 2019, Russell et al. found that such negative stereotype-based cognitions have consequential outcomes on the organization, particularly related to hiring and promoting employees. Their extended research is crucial to the scope of the current research project because it applies implicit reactions to gender bias management at work, reflecting how such bias can exist without being explicitly manifested. It is worth noticing how also Lennartz et al. (2019) focused on unconscious cognition in relation with the behavior towards individuals, highlighting that it leads to marginalization and humiliation, through verbal and nonverbal discriminatory behavior that are uneasy to recognize on some occasions, but are distinguished for their consequential and repetitive behavior. As supported by the authors cited above, microaggressions may be driven by stereotypes that partially shape the way of acting and deciding of the aggressor.

Chapter 2 - From gender stereotyping to gender quotas

2.1. Cultural stereotypes fostering gender bias

In order to explain the evidence on gender discrimination at work, it is important to consider the causes that foster a biased professional environment. It may be suggested that a gender-biased approach towards employees may derive from the idea that women and men are not on the same level in terms of economic and socio-cultural status. For instance, Klasen & Silva (2021) validated a supply-side model showing that women's time in the labor market earnings is lower compared to men, therefore less valuable in the long run. In fact, when the labor market value of women's time is low, women will be more inclined to dedicate themselves to children, family, and domestic work (Klasen & Silva, 2021). These occupations rarely lead to a reduction or reallocation of care burdens or domestic responsibilities, instead they cause a higher work burden for women (Klasen, 2020). Moreover, if parents expect relatively low returns from girls' education, due to women specializing in domestic activities, they will invest relatively less in their education (Klasen & Silva, 2021). Additionally, education-wise, Else-Quest et al. (2010) claimed that countries in which embedded cultural gender stereotypes are weaker have a more homogeneous performance across the two genders in math-related fields. Although it may seem redundant to discuss this well-known stereotype, it is key to recognize that it lays the foundation of several consequent stereotypes that women face at work, especially if working in a financial sector or department. As confirmed by Glover et al. (2017), such stereotypes may cause discrimination when preconceived personal or collective beliefs impact the impartial judgment towards the person. This interference is confirmed by Reuben et al. (2014), who found that male candidates have twice as many chances of being hired for a math-based task than female candidates. Their study draws an understandable path line from the early age of female candidates, when they are still in high school and are told that STEM (i.e., acronym

for Science, Technology, Engineering e Mathematics) subjects may be too hard for them, shifting their focus on other majors. For this reason, men outnumber women in most science- and engineering-related fields at university. Such data may have prompted the ex-President of Harvard University to advance three hypotheses for this underrepresentation of women in science: innate aptitudes, career preferences and gender discrimination (Reuben et al., 2014). Nevertheless, it is possible to argue that the statement on gender endowment differences could highlight a pre-existing stereotype that men are more confident than women, as reported by various scholars among which Antecol & Cobb-Clark (2013). Moreover, according to Reuben et al. (2014), it is difficult to filter through discrimination if we consider preference as a gender-based choice. However, gender should not have an impact on the ability to perform numerical activities, withstanding that there exist psychological and physical differences between men and women. For example, according to Klasen & Silva (2021), the Galor and Weil's economic model differentiating between physical labor ("brawn"), and mental labor ("brain") endorses the theory that men and women are equally endowed with brains, but men have more brawn. Aside this natural divergence, the possibility of choosing mathematical subjects regardless of gender can still determine whether discrimination exists. In their study, Reuben et al. (2014), used a simple mathematics-related task for which there were no sex differences in performance, nonetheless men resulted more likely to be hired for the job than women were. Research in social psychology shows that from a young age, children are taught that the two sexes are bound to present divergences in mathematics achievement (Nosek, 2009), because math is often believed to be more difficult for girls than for equally achieving boys (Riegle-Crumb & Humphries, 2012). On this matter, Carlana (2019) studied whether exposure to stereotypes from mentors could affect students' achievement, through the Gender-Science Implicit Association Test. The results of her research showed that the gender gap in math performance, defined as the score of boys minus

the score of girls, substantially increases when students are assigned to math teachers with stronger gender stereotypes. Therefore, teacher stereotypes induce girls to under-perform in math and self-select into less demanding high-schools, and these effects are at least partially driven by a lower self-confidence on own math ability of girls exposed to gender biased teachers. Stereotypes impair the test performance of girls, who end up failing to achieve their full potential, impacted by biased teachers' lower expectation from stigmatized groups of students or their failure to encourage them to fulfil their potential (Carlana, 2019). Similarly, a study by the Harvard University showed that the school performance of Afro-American male college students was strongly impacted by the stereotypes surrounding their identity. According to Noguera (2003), as adolescents become acquainted with the nature of their identity (gender- and race-wise), they become more active in keeping the identity attributed to them. In fact, Noguera (2003) also showed that black college students that distance themselves from pre-established norms such as not being good at writing essays and learning academic subjects but instead excelling at sports and rapping, are often scrutinized by their peers who would see their behavior as a sign of 'selling out'. The result is often that, to avoid being labelled as different from their expected identity, they engage in behaviors that contribute to their underachievement and marginality, and to be discouraged from challenging themselves towards achieving. The paper by Noguera (2003) provides a good example of how social norms and cultural stereotypes can shape the person's channelization into pre-conceived identities, therefore behaving as they are supposed to rather than how they want.

2.2. From culture to workplace

It is not excluded that gender gaps in education, health, and rights received attention worldwide, but the step of inserting women in certain roles in the labor market still faces barriers (Klasen, 2020). According to Longman & Lafreniere (2012), gender imbalance in

higher ranked positions is the consequence of a male dominating culture. In further detail, Al-Manasra (2013) claimed that the male executives are more inclined to promote male employees for top managerial positions, because they believe that men perform better than women. Such gender-biased approach towards employees' promotion and hiring may derive from the idea that women and men are not on the same level in socio-cultural settings, as previously explained. This leads to an even worse result: individuals are less willing to contribute ideas and show lower self confidence in fields that are not stereotypically associated with their own gender (Bordalo et al., 2018). Such double-edged sword could be both the cause and the consequence of the underestimation of women's skills, as supported by Wyss (2015). Similarly, Carrasco et al. (2015) showed that women are hardly able to get involved in the board's activities without considerable barriers, with the main cause being the gender inequality; in particular, the anachronistic perceptions of their leadership abilities. Hence, women in such circumstances are stuck into believing that they are either incapable or unvalued, and their underrepresentation made the number of male CEOs more prominent (Bucklew et al., 2012; Rhoads & Gu, 2012). In identifying the role and quantitative presence of women at the board of directors, it is relevant to distinguish between the different sizes of firms, and whether they are quoted on the market. For instance, family firms are usually expected to have a larger presence of women on their boards, because they would be directly hired from the owning family (Bettinelli et al., 2018). Therefore, the effective proportioned percentage of women in a top position is higher in family businesses than in quoted companies, but women's reaction to business matters is often passive and they are less engaged than men in participating to the board activities (Bettinelli et al., 2018). However, this complements the view of Gangadharan et al. (2016), who claimed that a statistically behavioral response to women as leaders shows that men contribute importantly less when the group leaders are female. This behavior, called male backlash, can be explained by social

norms, and is core to understanding the repercussions it may have on gender quotas (Kim & Kweon, 2022).

2.3. Gender quotas' effects worldwide

The difficulties encountered in including women in positions of relevance led to legislative impositions aimed at boosting the number of women at board of directors (Salaris, 2020). In fact, the consequent substantial increase of women on corporate boards is often the result of internal and external pressures for diversity (Farrell & Hersch, 2005). However, as the likelihood of a woman to be appointed to a board is negatively correlated with the number of women already in charge, the outcome may be tokenism rather than diversity (Farrell & Hersch, 2005). Torchia et al. (2011) identified that if the minority is formed by two women directors, there are no effects on the level of organizational innovation. In fact, when the number of a minority in a working group is too low, they may be treated as “tokens” (Kishore 2016; Terjesen & Sealy 2016) or symbols representative of their social group rather than individuals actually contributing to the organization, resulting in the tokenism phenomenon. Being a token has three behavioral consequences: visibility, polarization, and assimilation (Torchia et al., 2011). Visibility implies that tokens find themselves being continuously observed, resulting in perceptions of performance pressure. Polarization implies that the dominant group feels threatened or uncomfortable around the minority group, and they therefore narrow down their boundaries by exaggerating the commonality among tokens and the differences with regards to tokens. The majority may thus exclude the minority from informal networks where important socialization takes place, and the latter may consequently experience social isolation. Finally, assimilation implies that tokens are forced into stereotypical categories defined by the dominants and potential differences among members of the minority group are not perceived by the majority group (Torchia et al., 2011). For instance, tokens perceive a barrier when exerting influence on board decisions, because

of the awareness of stereotypes attached to them, therefore making it difficult for them to generate organizational innovation with their reduced contribution in a male-dominated board (Torchia et al., 2011). Applying this concept, it is deducted that, as scholars have also confirmed, having two women directors does not make any difference, because it is not enough to eliminate the evidence of tokenism, as women would be inclined to becoming categorized, stereotyped and ignored by the majority group (Erkut et al., 2008; Konrad et al., 2008). Torchia et al. (2011) concluded that having at least three women directors makes boards more heterogeneous and foments majority-minority interactions, enabling the board to take more efficient decisions. In earnings management, Fan et al. (2019) suggested that the impact of women directors' changes from positive to negative until the threshold of three or more female board member is reached. In fact, three or more women may be more likely to express their views openly when they do not agree with the rest of the board, consistent with previous findings suggesting that the leader's gender may influence women directors' contributions to board decision-making processes (Nielsen & Huse, 2010). Indeed, Nielsen & Huse (2010) found a negative association between male CEO and women's contributions to board decision-making, suggesting that the gender of the leader may be an important factor in determining the level of influence of women directors, and at the same time male directors could show more respect and openness towards views raised by women. Furthermore, homogeneous groups may impede innovation, because substantial cohesion leads to pressure to conform (Miller & Triana, 2009). Paoloni et al. (2019) found that the prominence of literature analyzing women in board of directors promotes board diversity adopted by companies to show a good governance. Having quotas of women on boards may also, however, negatively affect both the performance and the value of the firm (Post & Byron, 2015; Roberson et al., 2017), forcing the replacement of qualified directors with less experienced ones to meet the diversity quota (Breuer, 2016).

2.4. Gender boards in banking sector

According to De Vita & Magliocco (2018), the banking sector is more reluctant than others to accept a significant gender diversity in decision-making positions, because finance is still dominated by cultural constraints and stereotypes such as “*money is dirty*” and women should not be involved, that impedes the rebalancing of roles between genders. Additionally, since the World Bank imposed trade liberalization as a condition in many structural adjustment programs, those were seen as harmful to women because austerity policies led to job losses for women in the public sector (Klasen, 2020). Trade liberalization also increased the care burden for women as the state reduced health and education spending and decreased mobility and care obligations also prevented them from accessing new employment opportunities and shift to marginal poorly remunerated sectors (Klasen, 2020). While it remains unsolved what these trends might mean for progress towards gender equality, the issue of gender diversity in bank boards has aroused the interest of several economists and researchers. It has been questioned whether greater participation of women on the top boards of financial institutions would contain the excessive riskiness and leverage of the financial sector, and prevent major collapses (Del Prete & Stefani, 2020). Concerning the interrelationship between board diversity of banks and risk taking and efficiency, Khatib et al. (2020) found that in financial institutions, high board diversity levels can have a detrimental influence on monitoring effectiveness of boards, and that for bank efficiency, board diversity appears to be associated with lower traditional risk but higher cost efficiency and profit. Furthermore, Adusei (2019) found that female directors exert a detrimentally positive impact on the technical efficiency. Financial institutions with a balanced board diversity seem to have a stronger suit on earnings management (Fan et al., 2019) performance of environmental, social, governance (Birindelli et al., 2018) and welfare performance (Farag & Mallin, 2017). Specifically, Kramaric & Miletic (2017) found that banks’ performance has improved after having 20-40% of women on the management boards. In fact, Liu et al.

(2014) argued that the presence of a woman in the boardroom may not necessarily mean that she is influential because, as a minority, women's voices are only heard once their number reaches a critical quantity (Smith, 2014). As a result, banks with boards composed of a critical mass of women are associated with a lower bank default risk (Yousefet et al. 2021). This leads to the conclusion that there is a discrepancy between the cultural stereotype of women not being tailor-made for the financial world, and the evidence of their positive work in the sector.

Chapter 3 – Italian scenario

3.1. Introduction to gender quotas

A deeper analysis requires the understanding of timing in which certain changes took place, leading to important dependent variables that will be defined in the next chapters. Before delving into the analysis, it is necessary to gain an understanding on the Italian law that regulates gender norms in corporate settings, hence defining the so called ‘gender quotas’ or ‘pink quotas’, as they are commonly known in Italy, and which have been largely investigated by scholars, arising divergent viewpoints. First, as defined by Salaris (2020), the Golfo-Mosca Law does not explicitly distinguish between men and women, but instead uses the terms “*less represented gender*”, with the aim of guaranteeing an effective gender equality where men may be the numerical minority. Second, the technicalities of the law were that the board of directors and the board of auditors, at the first stage, should have been composed at 20% by the least represented gender (2012 target) and, subsequently at 33% (2015 target). This requirement applies for three consecutive terms, and once lapsed, each firm is left free to choose the composition of its corporate board. Third, the law distinguishes itself from other European laws on gender equality, because it is time-limited and planned to officially cease in 2023, leaving listed and unlisted companies the full freedom to decide (Salaris, 2020). Despite the twist of partial free will, one of the most recent reports on the current status of quotas, published in January 2018 by Cerved, entitled “*Women at the top of Italian companies*”, indicated that the number of women CEOs in listed companies is still very low (only 18 at the end of 2017, or 7.9% of the total CEOs); for unlisted companies there was a very slow but gradual increase over time (10.3% against 9.1% in 2008). According to Bianco et al. (2015), in Italy family businesses present a higher presence of female directors when compared to the international scenario; however, this data could be inaccurate as it does not consider the higher number of family firms nationwide compared to

the European scenario. In fact, compared to more market-oriented countries, Italy is an economy based on many small-sized firms, for which banks are the major source of external finance (Del Prete & Stefani, 2020).

3.2. Female presence in the Italian banking sector

The level of female participation within economic contexts may be a reliable indicator of the gender policies progress regarding the role of women in organizations and may also have an influence on other sectors (Campbell & Bohdanowicz, 2018). On the time span that goes from 1995–2010, before the quota law were implemented, the number of women on Italian bank boards increased slowly, but the gender gap for Italian banks was still wide in comparison with other economic sectors nationwide and other European-based banks. In fact, European comparisons for the 2000s show that Italy was among the top countries where women were minimally represented in bank boardrooms (Mateos de Cabo et al., 2012). Additionally, analysis of a more recent quota law period reveals that the situation has not greatly improved across Europe, with Italy in the tail end (Sahay et al., 2017). Consequently, aiming at boosting female participation in banks, gender quotas were introduced in Italy in 2011 for listed companies and banks (Salaris, 2020). Nevertheless, according to Del Prete & Stefani (2020), only listed banks reached the regulatory target of one-third of female representation on boards in 2016, whereas other banks did not significantly improve their gender diversity condition. In fact, 5 years after the law passing, statistics on bank board composition suggested that the percentage of female bank directors was again in the lowest ranks compared with the other European banking systems (Del Prete & Stefani, 2020). Despite the up and down, Ferrari et al. (2018) found a positive trendline between the appointment of female directors and the well-receiving market reaction towards board restructuring after the introduction of the Italian quota law. This means that private clients showed appreciation towards the integration of women to the board of directors, but Salaris et

al. (2020) stated that the banking sector experienced a considerable difference between the number of female bank employees and their representation among bank managers. The theory by Nielsen & Huse (2010) of a minimum of three women in the boardroom for a significant change is confirmed by Meniucci (2021), in showing that the presence of at least three women on the board of directors negatively affects the bank's risk profile. Their study, based on the sample of 387 Italian banks, found that female directors differ from male ones regarding their risk attitude, and this may consequently influence the board's monitoring ability and decision-making process. Although the benefits of such changes are shown, the Italian binding gender quotas did not lead to any relevant change on key-decision roles, as women are more represented in non-executive functions or underrepresented positions, especially in non-listed banks (De Vita & Magliocco, 2018). Was this to change, placing women in high management positions could play a major role in fostering a stable and solid financial system, thereby avoiding the turbulence that can be transmitted to the real economy (Meniucci, 2021). As a consequence, the advancement of women in the banking industry is consistent with the main shareholders' interests, as information regarding gender diversity may contain complementary information useful for evaluating the safety of banks. Hence, in turn, the benefit of female leadership for bank stability may be of interest to regulators in setting future policies to promote gender equality and the advancement of women in business (Meniucci, 2021). Thus, regulators could address the issue of the lack of gender diversity in the corporate governance of banks by supporting greater female participation in board directorship. In line with their previous study, De Vita & Magliocco (2018) analyzed the Italian banking sector, verifying the effects of the Golfo-Mosca Law in the decision-making bodies of the companies. The results showed a clear dichotomy between listed and unlisted banking companies: the former presented a satisfactory increase of the number of women in

the main decision-making bodies (especially in the boards of directors), whereas the latter had a significantly lower score (26% against 11%).

3.3. Challenges of female directors

The banking sector is not a separate case of the poor female presence across top vertical positions and male-identified horizontal positions, as also listed and non-listed companies experience a similar situation, stressing the challenges that women experience in advancing in their careers. Carrasco et al. (2015) showed that women are hardly able to get involved in the board's activities without considerable barriers, with the main cause being the gender inequality, in particular, the anachronistic perceptions of their leadership abilities. Bianco et al. (2015) also found that female directors in family businesses are less educated (a significant number does not have a university degree) than female directors of larger firms with more international imprinting. This suggests two main points: that family firms tend to recruit women directors primarily because of their relationship with the owning family and not their competencies, and that career experience and educational level may be more relevant for non-family firms. Regarding the impact of family-affiliated women on boards, it is observed that with one woman director, there are fewer board meetings, and that generally women are less constant in meeting attendance compared to their male counterpart (Shabbir, 2018). A possible reason behind these results is that before the introduction of quotas, female appointment was mainly driven by family representation on the board rather than by selection based on merit and professional background of candidates (Del Bono & Vuri, 2011). Hence, family-affiliated women with lower education and experience are less engaged than family-affiliated men in running the business and therefore may have been responsible for poorer outcomes in terms of board activity. Moreover, Italian female employees suffer from a wage gap that is mainly explained by their lower positions in the firms' hierarchies, but the gender

wage gap increases along their career also because of lower mobility between enterprises compared to males (Del Bono & Vuri, 2011).

3.4. Consequences on women's employment and career advancement

The fact that women hardly reach the highest positions in the firms' hierarchy, and even at middle management level women are underrepresented causes a direct effect on women's discrimination in the labor market, meaning that whether quotas are in place or not, women are ultimately those who pay the highest price in terms of their career progress. This is further worsened by the fact that although Italian women surpass men in educational level and academic results, it remains more difficult for them to find a job and they are often allocated in lower qualified and lower paid positions (Hassink & Russo, 2010). Italian literature confirms the previously stated argument that women are more likely to be found in low qualified positions, with informal contracts (Bratti et al., 2005) and are less likely to move from a temporary to a permanent contract (Corsini & Guerrazzi, 2007). Even worse, according to Del Boca (2012), Italy is one of the European countries with the lowest employment rate of mothers, which places the country at the bottom row among other European countries. Difficulties in reconciling working life and family care responsibilities place Italian women in a so-called "*glass labyrinth*" (Eagly & Carli, 2007). The resilient mothers that remain at work are often considered less productive than their male colleagues, because of the biased assumption that they are less attached to their job (Pacelli et al., 2013). Consequently, the probability of promotion is much lower for mothers than for fathers, where the opposite is observed (Kunze & Miller, 2014). In order to gain a full picture of women's success in the professional sphere, it is nonetheless crucial to consider the socio-cultural context in which they live. In particular, the importance of family in Italy leads to a series of consequences on women's employment, as they spend an average of 5 hours and 6 minutes a day on unpaid domestic work, which may constrain the time that Italian women can dedicate

to paid work (Brown et al., 2021). Consequently, women may be unable to have a full-time job because of the hardship in conciliating family and household care with external work responsibilities. According to Velluti (2008), labor market participation rates are partially explained by a traditional notion of gender roles implying that men should be the main breadwinners and women the main family caretakers with no equal burden or sharing of family duties. The lack of family-friendly policies in Italy makes it difficult to reconcile household and work responsibilities, with a bias towards unemployed women who are unable to obtain non-wage benefits such as shorter work schedules (Brown et al., 2021). This implies a loss of opportunities in sectors and positions that may require longer hours or stronger commitment, resulting in a discrepancy in gender employment and career success that could shape the overall idea of women as being unadapt for certain job roles. The deduction is that promoting effective and sustainable gender changes is pivotal to change the traditional concepts surrounding gender discrepancies. According to Cavaletto et al. (2019), the picture emerging from empirical analysis is rather complex, but clear: barriers to women's recruitment and career advancements persist in the absence of a constructive dialogue on the issues of reconciliation and flexibility between the parties involved (enterprises, institutions, unions and families).

3.5. Gender quotas causes and effects on the organization

With the aim of balancing gender inequality at work, especially in high-ranking positions, many European countries including Italy have established minimum quotas for female representation on the boards of publicly traded companies (Menicucci et al., 2021). Yet the percentage of females in corporate decision-making bodies is still low (Salaris et al., 2020). However, boards with higher gender diversity may be more careful in decision-making and more open to dialogue (Torchia et al., 2015). According to Pastore (2018), the appointment of women directors has a positive impact on the organization, as it makes board's composition

more diversified regarding values, visions, leadership style and attitudes towards risk. This positive influence on decision-making processes and overall performance is not an obvious consequence of women's presence and should not be intended as a plus that automatically applies whenever women are appointed. In fact, the increased presence of women on the boards by the minimum legal requirement does not guarantee a better performance and does not ensure the entry of women with skills, quality, and experience. Because of the character of the law, it may be argued that Italian gender quotas have a time-limited nature that is consistent with the idea that pink quotas are a measure to shock the system to break up the male-dominated society, and to lead the market to a new, more gender-balanced, equilibrium (Pastore, 2018). However, the researcher admits that the *glass ceiling* is still observable, as the highest executive offices still show very low female representation, and this does not contribute towards a decisive influence on corporate performance. In fact, the other facet of the medal is that by enforcing laws in support of women covering executive roles, their work may be diminished because of a perceived unfair achievement of the role. In other words, the idea that a woman is an executive member of the board is justified by the mere fact that she is a woman, not because she has competences and skills for which she deserves the role. This statement may cause the opposite effect of gender equality, instead enlarging the discrepancy between a fair equal system and the underestimation of women's capabilities. What remains almost unexplored is the effects that female leadership has on the outcome of the organization, as for instance Flabbi et al. (2014) and Ferrari et al. (2016) have researched. In particular, Flabbi et al. (2014) found that female leadership has a positive impact at the top of the female wage distribution and a negative impact at the bottom. Moreover, the impact of female leadership on firm performance increases with the share of female workers, whereas Ferrari et al. (2016) highlight that the share of female directors is associated with a lower variability of stock market prices. In a study on the role of women on the boards of

Norwegian companies (Nielsen & Huse, 2010), with reference to their contribution in decision-making processes and their strategic involvement, the two authors noted the importance (in negative terms) of women's perception as "inadequate" members, a factor that would limit their potential contribution to decision-making processes. According to Pastore (2018), this circumstance requires shifting attention from simple numbers (how many women on boards) to merit (which women on boards) and the possibility of giving visibility and opportunities to excellent and prepared women, able to express added value in terms of skills, style of leadership, management culture and relationship.

3.6. Gender quotas debate in Italy: in favor

Salaris (2020) offers a detailed overview on the pink quotas, defining them as an important tool to rebalance the numerical gap between genders. According to Tettamanzi et al. (2016), the introduction of gender quotas gave a decisive boost to the opening of the boards to women, even though access is mainly concentrated on non-executive roles. Tettamanzi (2016) added that gender quotas could be the vehicle to bring a balanced number of human resources to the firm avoiding gender discrimination, as prejudices on promotions to men and women are influenced by preferences even when candidates are equally qualified. All in all, it is further sustained that when firms are forced to appoint female directors, firm value may increase because the availability of greater average managerial talent from women fosters better corporate decisions. In fact, policymakers are concerned about the relative underrepresentation of women on boards because they believe that gender quotas may help overcome the "*glass ceiling*" that prevents high-skilled women from reaching leadership positions (Bruckmüller & Braun, 2020). It is crucial to consider how steps forward in employing and promoting women to higher hierarchical positions are being made, as Tettamanzi et al. (2016) have found by analyzing the board of director composition of 188 companies listed in the Italian Stock Exchange. Pastore (2018) claimed that the law on

gender quotas has had a positive effect on the female presence on boards of both listed and unlisted companies, exceeding 33% of the overall. According to Consob (2019), at the end of 2017, the percentage of Italian listed and unlisted companies respecting the gender equality, at least as a façade, was respectively of 100% and 63%. This meant that women represented 33.5% of the directors of the 237 listed companies, scoring a rise of 9.3% as compared to 2016.

3.7. Gender quotas debate in Italy: in opposition

A potential institutional pressure could be seen as a threat rather than an opportunity, as supported by the following authors. The report by Cerved (2018), while affirming that the highest number of women CEOs in unlisted companies should be linked to demographic trends, assumes that the Golfo-Mosca Law may have had indirect effects on unlisted companies. Despite the introduction of the Golfo-Mosca Law in 2011, a study by Pastore & Tommaso (2016) on the presence of women on the boards of Italian listed companies found that the number of women CEOs has declined from 3.2% in 2013 to 2.6% in 2015. The authors claim that the quotas, by themselves, are not sufficient to increase the number of women in top positions of the companies, stating that further elements such as cultural change and knowledge of female potential should be seen as essential to achieve an optimal board functioning. Consequently, the underrepresentation of women in top executive positions despite their equal (or superior) ability could however mean that gender quotas are not efficient in supplying the basic demand of an equal board based on merit. This optic, that prioritizes beneficial effects on firm performance, is blind to the repercussions that this gender changes within the organization could have on the perception of women's work and value as professionals. To prove this point, Huse (2011) states that there is often an availability problem, as if numerous firms are required to add several women to their boards, but qualified women are in short supply, the risk is that of having the same women on many

boards. This idea that high-skilled women are a limited edition underlines the gender discrimination for which women are less capable than men, and led to the terminology “*golden skirts*”, introduced by Huse (2011). The term “*golden skirts*” assumes a negative connotation, and according to Huse (2011), international press critics have skeptically observed the development of this elite group of prominent women that is replacing the “*old boys’ network*”. Gender quotas opponents have expressed disappointment at such coercive measures on the grounds that their enforcement allegedly shows a failure of the spontaneous forces of women. Quotas have been described as a proof of women’s “*inability to manage on their own*” (De Vita & Magliocco, 2018). Tettamanzi et al. (2016) aimed at examining the evolution before and after the introduction of the Golfo-Mosca Law, with a quantitative analysis by sector highlighting the number of women as board members and women covering executive roles. It should also be considered that this factor can vary based upon the type of firm, transcending the industry. For instance, it was revealed that this law represents a challenge for family firms, since it might compel them to increase the number of women to a level greater than the number of female family members suitable to be directors (Tettamanzi et al., 2016). A case study conducted in Norway and analyzed by Bøhren & Staubo (2014) showed that in the nation pioneer of pink quotas, family firms feel less threatened by the applicable regulation stipulating at least 40% of each gender in firm’s board composition. In fact, Bøhren & Staubo (2014) studied the response of Norwegian firms to this law and found that half of their sample companies preferred to circumvent the law by re-organizing the firm nature, instead of complying with the law through board restructuring. On the downside, the women that occupy positions of power have no real possibility of exercising it, and overall female CEOs represent 7.9% of Italian listed companies, meaning their presence has increased by a slow 2.5% since 2014 (Pastore, 2018). The conclusive strong statement of this

argument is that, as highlighted by Solimene et al. (2017), the Golfo-Mosca Law was effective in increasing the number of women on boards, but not their real power.

Chapter 4 – The Experimental Study

4.1. Rationale

Before delving into the topic of gender bias in the banking sector, it is deemed relevant to provide an overview on the reasoning behind this specific choice, justifying the selection of the sector and the interest in expanding the knowledge on gender inequality. According to Del Prete & Stefani (2020), Italy deserves special attention because from the 2000s to today, the country has been among the European Union countries where women are among the least represented in bank boardrooms. In fact, while a gender-equal organizational design has been explored much more thoroughly for non-financial firms, in the banking field there has been a suggestion of a beneficial effect of women's involvement in boardrooms, but the evidence of its effects on performance is overall still non-unanimous, hence further research is needed (Kumar & Zattoni, 2016).

4.2. Hypothesis

The literature review evaluated in this paper led to three core hypothesis that could emerge from the analysis of the participants' results of the implicit (unconscious) section and the explicit (conscious) section of the experiment.

As largely shown by previous scholars, micro aggressions at work can manifest themselves in various forms, such as ignoring a female colleague contributing an idea during a meeting merely based on her gender (Beltran et al., 2021), and marginalization or humiliation through verbal and nonverbal recurrent discriminatory behavior (Lennartz et al., 2019). These attitudes could persist regardless of externalizing a proactive and positive attitude towards female colleagues. Therefore, the following hypothesis was formulated:

H1: Existence of a dissociation between explicit and implicit measures of gender bias. The existence of such dissociation would be indexed by either low or no correlation between implicit and explicit scores.

Hypothesis 1 is the backbone of this research, as it questions whether visible behavior matches intrinsic thoughts and feelings. In fact, it is not uncommon for individuals to marry concepts related to non-discriminatory actions for the mere purpose of being compliant with the trend. This can be relevant on topics of gender as well as on age, body weight, religion, ethnicity, and skin color (as showed in the research on black college students). When the attitude of acceptance takes place, it shows the effort to eliminate – or at least reduce – a discriminatory culture, perhaps not to be pointed out as a sexist or racist by others. It would then be implied that an individual playing by those rules has high chances on scoring a low gender bias outcome in the explicit quantitative test. If on one hand this result could be seen as an absence of gender bias, on the other hand the intimate predisposition towards an equal integration of women in the workplace would not be verified. In order to have a more objective measure that considers tacit discrimination towards the minority target group, the outcome should balance both the explicit and implicit score. In short, this first hypothesis highlights the fact that the two scores may present a discrepancy, meaning that participants tend to externalize a positive acceptance towards women (absence of a gender bias), but they do not value women at the pair of men, especially in a work setting (presence of a gender bias). Hence, hypothesis 1 is aimed at testing whether there exists a dissociation between implicit and explicit gender bias.

Further, the literature suggested that Italian women achieved a higher education level compared to their male counterpart (Hassink & Russo, 2010), that married women with children would present a lower employment rate (Del Boca, 2012), and that personality traits play an important role in employees' employment and promotion (Antecol & Cobb-Clark, 2013). For such reasons, the second hypothesis aims at exploring whether explicit and implicit bias are affected by individual and personality characteristics. Hence, the following hypotheses are hereby formulated:

***H2a:** Positive correlation between age and implicit and explicit indices of gender bias.*

***H2b:** Higher explicit and implicit gender bias in male participants as compared to female ones.*

***H2c:** Higher implicit gender bias as compared to the explicit one in female participants.*

***H2d:** Higher implicit and explicit gender bias in participants with children as compared to those without children.*

***H2e:** Positive correlation between the Conscientiousness scale (HEXACO) and implicit and explicit gender bias.*

***H2f:** Negative correlation between the Openness to experience scale (HEXACO) and implicit and explicit gender bias.*

Hypothesis 2 emerges from a correlational analysis, attempting to understand the phenomenon of gender bias on personal characteristics such as age, education, social status, cultural background, and gender itself. The aim of considering those variables is to have a complete picture of the reasoning behind gender bias. For instance, the expected positive relationship between participants' age and gender bias, may be influenced by the socio-cultural setting in which they grew up. Similarly, mothers could be more prone to finding themselves fit into a strong association between family and home, compared to women without children. Such statements do not intend to imply the nature of a bias or to exert discrimination, as that would be a paradox of this research. Instead, they are representative of possible association between certain individual characteristics and the extent to which people display gender bias (either implicit and/or explicit). Understanding what influences discrimination at work is hereby implemented in an optic of elimination of gender bias. Furthermore, the personality variable is inserted to test whether the existence of a gender bias, both implicit or explicit, is associated with specific personality facets, as those individual characteristics often contribute to shape attitudes and behaviors. The HEXACO

model, which will be explained in detail in the methodology, is useful to capture behavioral traits considering certain choices as influenced by the individual's personality. In this respect, only two facets of personality were hypothesized to show an association with the extent to which people display some form – implicit or explicit – gender bias, as no specific prediction were expected for other measures.

In view of the claim that the Golfo-Mosca Law was effective in increasing the number of women on boards, but not their real power (Solimene et al., 2017), and that quotas were seen as a tool showing the inability of women to achieve significant results by themselves (De Vita & Magliocco, 2018), the last hypothesis was formulated as follows:

***H3:** There exists an inverse relationship between the extent to which organizations adhere to policies aimed at decreasing gender bias in the workplace and the implicit and explicit scores of gender bias.*

Hypothesis 3 channels hypothesis 2 in the fact that it narrows down the assumption, focusing on a specific variable that has largely been dealt with through the literature review. Gender quotas, as it has emerged from the debate, have received both consensus and disappointment from scholars, because of the unsustainable way in which they are enforced. As highlighted by Pastore & Tommaso (2016), the focus should not be on the increased number of women in corporate boards, but on ensuring that the appointment relies on the board's genuine intention to become gender diverse and more effective in decision-making rather than a tool to enhance corporate reputation and image. Since gender quotas have penetrated several policies applied to financial institutions, the imposition of a minimum number of women is extended across the hierarchical scale and not only to top positions. Moreover, the existence of indices that classify or list companies based on their gender scoring – which consider different corporate criteria – has created a tangible contest in which banks are promoting initiatives related to

gender equality to earn a place on particularly well-reputed indices. Taking this critical viewpoint into consideration makes room for a more complete analysis. Therefore, this third hypothesis assumes that with the higher adherence to gender quotas or presence in gender-related classifications, the tolerance towards the effective acceptance of women decreases. In other words, with the increase of a hyped corporate culture of diversity and inclusion, an increase of gender bias is showed, and vice versa. The veiled biased could be found in the devaluation of women's work because of the conception that they were hired due to their gender and not to their real potential, causing a paradoxical inverse effect.

4.3. Methodology

4.3.1. Subjects

Participants were recruited upon the requirement of being bank employees, narrowing the bank selection considering a few relevant criteria established a priori: bank size, bank number of branches nationwide, bank number of employees, and bank widespread presence in the city of Rome. Based on Banca d'Italia's data (2020), 6 out of the main banks were identified as well-fitting for this research project. For privacy reasons, they will be referred to as Bank 1, Bank 2, Bank 3, Bank 4, Bank 5 and Bank 6. The total amount of subjects recruited was 57 (age: $m = 38.98 \pm 11.38$ s.d.): 25 from Bank 1 (43,9% of the total dataset), 9 from Bank 2 (15,8%), 10 from Bank 3 (17,5%), 8 from Bank 4 (14%), 2 from Bank 5 (3,5%), and 1 from Bank 6 (1,8%). All participants responded to the test after giving consent to the utilization their personal data for academic purposes, with the guarantee that the reputation of their bank would not be impacted by their test score. In fact, full individual anonymity coupled with privacy on the banks' gender bias level were stressed from the first approach to the participant. Moreover, participants were informed of their right to interrupt the test at any time, in case they feel uncomfortable. They were recruited through various channels, including social media (i.e., Linkedin and Facebook) and direct and indirect contact. The chosen bank employees have been asked to provide demographic information such as age,

education, nationality, social status, number of children under care (if any) and gender, and professional information such as the bank institution they work for, seniority in years, role title, contract type and average number of weekly working days. Such information was asked to gain a more precise understanding on the participants, to be able to find useful variables and identify biases according to several parameters. This is not only crucial in order to conduct an unbiased analysis, but it is also a suggestion from previous scholars who have investigated similar topics. For instance, according to Moudud-Ul-Huq (2020), their study on the effect of managerial ownership on bank value was limited because it omitted some instrumental variables, and therefore they suggest that further research can be conducted using a wider set of data and variables, to view the actual scenario in a full picture. This suggestion was indeed implemented in the current study, gaining macro categories of information to allow an optimal yet flexible statistical analysis. Therefore, the education level of the subjects was distributed as follows: 7% of participants spent 13 years in education (i.e., high school diploma), 10,5% spent 15 years in education (i.e., earned a bachelor's degree), the majority (71,9%) spent 18 years in education (i.e., earned a master's degree), and the remaining 10,5% spent 21 years in education (i.e., earned additional post-graduate education, e.g., PhD or other post-graduate degrees). The age categories were: 47,4% of participants were between 23 and 35 years old, 26,3% between 36 and 45 years old, 12,3% between 46 and 55 years old, and 14% between 56 and 65 years old. The marital status of the subjects was distributed as follows: 29,8% were single, 7% in a relationship, 19,3% were cohabiting with their partner, 38,6% was married and 5,3% was either divorced or separated. The percentage of participants without children was 57,9%, versus 42,1% with children.

In terms of job position, the distribution was: 1,8% worked in the Anti-Money Laundering division, 1,8% in Business Development, 3,5% in Private Banking, 3,5% in Informatics, 3,5% in Compliance, 3,5% in Investments, 3,5% in the Head Office, 5,3% in Risk

Management, 5,3% in Human Resources, 7% in Marketing, 7% in Corporate, 17,5% in Retail, and 36,8% in the Commercial division. Finally, the adherence of genders was quite homogeneous, with the percentage of male participants being 47,4% and female participants 52,6% of the dataset.

4.3.2. Procedure

The experimental procedure was composed by two parts. First, participants took part to and Implicit Association Test (i.e., IAT), aimed at measuring the implicit level of gender bias. In the second part of the experiment, participants were asked to provide a series of demographical and work-related information (i.e., described in the Participants' Section, see also Annex 1), then they were required to answer to three questionnaires; two questionnaires were aimed at investigating the explicit level of gender bias, whereas the third was aimed at gaining a non-clinical personality assessment of the study participants. The order of the experimental tasks was established to avoid sequence effects, is to say any potential intentional or non-intentional error or manipulation attempt of the responses, which is the reason why the implicit test was the first one to appear on the screen. The novelty of bringing together the explicit and implicit method to investigate the presence of a tacit non-manifested gender bias could be a crucial tool towards the elimination of gender discrimination at work. In fact, it has been researched that when both implicit and explicit measures are incorporated in a model, the dual-construct model is a superior fit than a single-construct model (Bar-Anan & Vianello, 2018). Empirical studies also claimed that implicit and explicit attitudes are differentially correlated with certain behaviors, and those implicit measures predict behaviors in ways that may be independent from explicit measures (Fung et al., 2022). Taken together, research suggested that implicit and explicit attitudes are best understood as separate but related constructs, and the best predictor of human behaviors is achieved by combining both

type of measures, which explains the choice of both tests regardless of the limited use of this approach in previous literature.

4.3.3. Implicit association Test (IAT)

In order to measure individual levels of gender bias, an Implicit Association Task was used. This type of task has been employed and validated in previous studies, and the reasoning behind the inclusion of this measure lies in experimental evidence suggesting that an implicit measure of gender bias explains some variability in attitudes that self-report measures do not (Crescentini et al., 2014; LaBouff et al., 2010). Indeed, relative to self-report questionnaires and scales used to directly measure explicit attitudes, implicit tests such as the IAT are more difficult to control or to fake and do not require self-reflection or the intent to self-evaluate on the part of the respondent (Greenwald et al., 1998; Greenwald & Farnham, 2000). Indeed, the IAT is an experimental task which has been massively used in the psychological literature to measure the strength of automatic concept-attribute associations (Calluso et al., 2020; Greenwald et al., 1998, 2003; Greenwald & Farnham, 2000; LaBouff et al., 2010, 2012; Schnabel et al., 2008). The main assumption of the IAT is that strongly associated concept-attribute pairs are easier to classify together (i.e., by pressing the same response key) than are weakly associated pairs, thus resulting in shorter reaction times and higher accuracy rates.

Additionally, with specific reference to the investigation of implicit gender bias, it is worth noticing that this Implicit Association Task for gender bias has been employed and validated by the Harvard University to measure the level of gender bias in several work settings. At the beginning of the test, participants were instructed to read the instructions and their privacy rights and to confirm by clicking on the space bar. The Implicit Association Task (IAT) consists of seven blocks, lasting about 10 minutes, in which a series of stimulus words appear at the center of the screen and must be associated with the stimulus categories shown on the

upper left or right corner of the screen by pressing two corresponding response keys (i.e., key “E” and key “I”, for left and right side, respectively). Participants were instructed to categorize a series of words (see Figure 1). In the first block, they are presented with words belonging to either the “family” or “career” category. In the second block, they are presented with words belonging to either the “female” or “male” category. The third and fourth block present words belonging to either “family” or “career” (e.g., “home” and “office”), to be paired up with either the “male” or “female” cluster (e.g., “he” or “woman”). In these two blocks, subjects are specifically asked to respond using the same key to the categories of “family” and “female” on the one hand, and “career” and “male” on the other, displayed respectively at the top left and at the top right of the screen. In the fifth block, subjects are presented again with words categorization belonging to either “career” or “family”, however, in this block the association between the category and the response key is inverted as compared to the first block (i.e., family right vs. career left). Finally, in the sixth and the seventh block participants are asked to categorize word belonging to both “family” vs. “career” clusters, and “male” vs. “female” clusters, according to the new association between categories and response keys. Hence, here participants are asked to respond using the same response key for “career” and “female” on the one hand, and “family” and “male” on the other, displayed respectively at the top left and at the top right of the screen (see Annex 2 for a comprehensive list of the words used in the experimental setting).

A second version of the task was created by reversing the association between stimuli category and response button across all the seven blocks of the task, in order to ensure that no right/left-side facilitation affected the overall results. Hence, the first version was administered to half of the participants, while the other half took part to the second version.

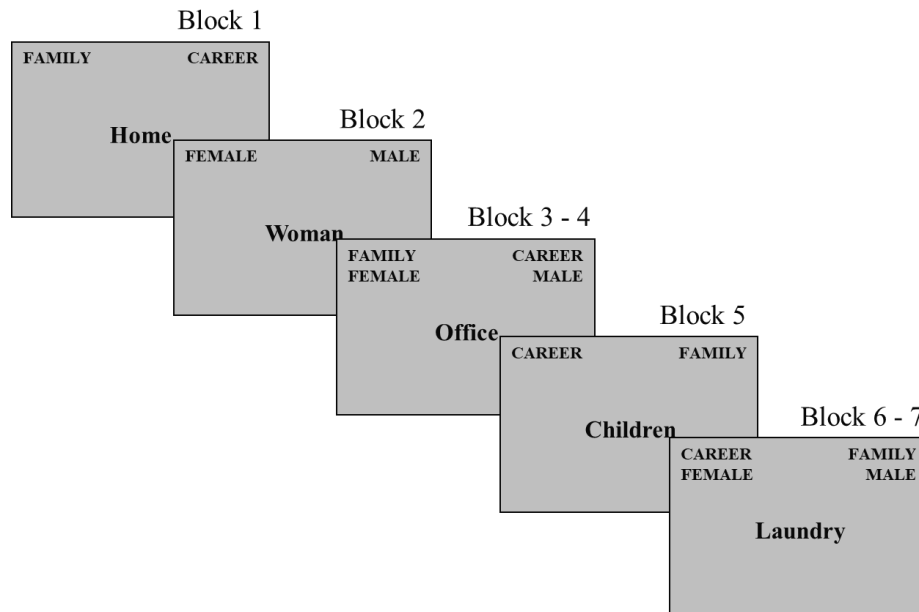


Figure 1. Implicit Association Test (IAT). The task consists of seven blocks in which a series of stimulus words appear at the center of the screen and must be associated with the stimulus categories shown on the upper left or right corner of the screen by pressing two corresponding response keys.

4.3.4. Questionnaire

In the second part of the experiment, participants were asked to fill two questionnaires aimed at evaluating their explicit attitudes/biases toward gender, and a third questionnaire for the non-clinical evaluation of personality.

The first questionnaire was the Gender Role Stereotype Scale (GRSS; Mills et al., 2012). This scale consisted in a total of 14 statements aimed at evaluating the individual's associations of gender with chores that are often stigmatized as being feminine only or masculine only (see annex 3). In particular, the test presented a series of sentences in a mixed order, so that items 1, 2, 4, 5, 6, 10, and 13 were written to reflect male gender role stereotypes, whereas items 3, 7, 8, 9, 11, 12, and 14 were written to reflect female gender role stereotypes. Participants were asked to rate how likely they were to perform the action described in the sentences on a 5-point Likert scale, where 1 means “extremely unlikely” and 5 means “extremely likely”.

The second test (see annex 4) was the Social Roles Questionnaire (SRQ; Baber & Tucker, 2006), and consisted in a total of 13 statements belonging to two subscales, the gender transcendent and the gender linked subscale. Baber & Tucker (2006) refined the 41-item SRQ instrument, maintaining its reliability and validity through a principal components' analysis with varimax rotation of gender transcendent and general/child subscales. The first factor – Gender Transcendent – assessed the extent to which participants think about gender in non-dichotomous ways and consisted of 5 reverse-coded items (i.e., items 1–5). The second factor – Gender Linked – consists of 8 items that assessed participants' beliefs about whether certain roles are associated with a particular gender (i.e., items 6-13). The disposition of the statements was strategically structured so that stereotypes were presented in a mixed order, with 5 eigenvalues and the percentage of variance explained by the factor, and cumulative variance calculated upon the participants' responses. Participants were asked to rate the extent to which they agreed with the statement of the 13 items on a 5-points Likert scale ranging from 1 to 5, where 1 means “not at all” and 5 means “completely”.

The last test was the HEXACO model (Ashton and Lee 2009; Lee and Ashton 2004), based upon De Vries's (2013) shortened version consisting in 24 items split into the following 6 broad domain sub-scales (see Annex 5): Honesty-humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness, and Openness to experience. This version has been adopted mainly for timing reasons, still maintaining the important features related to the criteria associated with anti-social or self-serving behaviors, such as workplace and academic delinquency, criminal choices, sexual harassment, egoism, narcissism, status-driven risk-taking, Machiavellianism, and psychopathy (De Vries et al., 2013). According to De Vries (2013), the advantages of using a shorter test, which still ensures reliability and utility, are: an increment in validity and an optimal representation of personality constructs in the shortest time possible. In depth, honesty and humility, coupled with socio-political attitudes, have

been found to be described by two broadly independent dimensions, one referring to conservation and abiding to social conventions, and the other referring to the hierarchical orientation in the social sphere (De Vries's, 2013). Out of the HEXACO personality dimensions, especially Openness to Experience and Honesty-Humility are claimed to be relevant in the explanation of these two dimensions. Specifically, Openness to Experience has been found to be negatively related to Social Conformity, whereas Honesty-Humility has been found to be negatively related to Hierarchy Orientation, such as self-enhancement (De Vries's, 2013).

4.3.5. Parameter extraction of the Implicit Association Test (IAT)

The presence of an implicit bias towards females is verified through the calculation of reaction time and percentage of correct answers – establishing that there is only one correct answer – in associating stimulus referred to women with words related to the home setting and stimulus referred to men with words related to the workplace (congruent condition) versus the reverse association (incongruent condition). Usually, the implicit association effect is analyzed using two separate analyses (i.e., one on the reaction time and one on accuracy), but in order to obtain a single variable that considers both the speed and the accuracy of the answers, the established procedure for this research foresees the assembly of both features to estimate the D-score index able to guarantee the correctness of the accuracy and the variability of reaction timings. The D-score has been validated in literature (Calluso et al., 2020; Crescentini et al., 2014; Cattaneo et al., 2011; Greenwald et al., 2003) for its precise algorithmic procedure that in this instance utilizes data from blocks 3, 4, 6 and 7. The first step is the removal of answers with long timing (> 10000 milliseconds) and too short timing (< 300 milliseconds). The second step integrates errors, which have been corrected replacing the latency of wrong answers with the average of the block plus 600 milliseconds as a penalty. Therefore, the average reaction time has been calculated for each of the 4 blocks

indicated, as well as the aggregated standard deviation, resulting into two quotients as follows:

$$(1) \ q^1 = \frac{B_6^{avg} - B_3^{avg}}{SD_{3-6}^{pooled}}$$

$$(2) \ q^2 = \frac{B_7^{avg} - B_4^{avg}}{SD_{4-7}^{pooled}}$$

Finally, the D-score has been calculated as the average of the two quotients:

$$(1) \ D \ score = \frac{q^1 + q^2}{2}$$

This leads to an index that roughly varies between -1 and $+1$, where $+1$ corresponds to the presence of a bias towards women at work, is to say a strong association between women and family; 0 indicates the absence of any implicit association; and finally, -1 indicates the presence of a bias towards men at work, is to say a strong association between men and family.

4.3.6. Statistical testing

A series of descriptive statistics were computed in order to better describe data gathered for the sample of participants. Afterwards, the indices obtained from the analysis of the IAT, the explicit tests and the personality measure have been converted into z-scores before conducting the statistical analysis. This procedure allowed the execution of the comparative analysis between the explicit and implicit index, generating a homogeneous range of values.

In order to test hypothesis 1, a series of Pearson correlations was computed between the D-score (implicit bias) and the total score of the two explicit tests, with the aim of verifying the presence of an association or dissociation between the implicit and explicit dimension of the gender bias. The Pearson correlation was therefore employed to test the existing relationship between the implicit measure of gender bias (i.e., IAT D-score) and the explicit ones (i.e., SRQ and GRSS scales). Additionally, the coefficient of determination was computed in order to establish how much of the variance was explained by the correlational effect.

In order to test the second set of hypotheses, in a second step, some additional analyses were conducted to investigate the relationship between implicit and explicit measures of bias and individual characteristics such as age, gender, and whether or not participants had children. To this aim, a Pearson correlation between the implicit (D-score) and explicit (GRSS, SRQ) and the age of participants was computed (i.e., H2a). Following, a repeated measures ANOVA with the 2-levels between factor gender (F, M) and the 3-level within factor type of bias (D-score, GRSS, SRQ) was conducted to test hypotheses H2b and H2c. Finally, a repeated measures ANOVA with the 2-levels between factor children (Yes, No) and the 3-level within factor type of bias (D-score, GRSS, SRQ) was employed to test H2d. Then, it was verified if the relationship between personality traits and measures of explicit and implicit gender bias exists, and this investigation was again conducted by computing a series of Persons correlations (i.e., H2e and H2f).

With respect to hypothesis 3, as a first step, an exploratory analysis of the level of implicit and explicit gender bias across the different banks composing the sample was conducted. To this aim, two banks were excluded from the analyses because one of them included only one participant to the study, whereas the other only comprised two participants, hence, the subsample was not large enough to be included. Therefore, the final analysis entailed 4 banks and a total of 54 participants. A repeated measures ANOVA with the 4-levels between factor bank (Bank 1, Bank 2, Bank 3 and Bank 4) and the 3-level within factor type of bias (D-score, GRSS, SRQ) was conducted to investigate possible differences across them.

As a final step, in line with hypothesis 3, the relationship between the adherence to gender quotas and the existence of implicit and explicit gender bias was tested. To this aim, all the 6 banks belonging to the sample were categorized according to the Bloomberg Gender Equality Index (B-GEI). Within such list are included publicly traded companies that meet the criteria and have a GEI score above a global threshold established by Bloomberg to reflect a high

level of disclosure and overall performance across five dimensions: i.e., Leadership and talent pipeline; ii., Equal pay and gender pay parity; iii., Inclusive culture; iv., Anti-sexual harassment policies; v., External brand. Hence, the inclusion in the Bloomberg index is here considered as a criterion of virtuosity in terms of gender equality. Three of the banks in the sample were included in the Bloomberg GEI (for a total of 25 participants out of 57), whereas the remaining three were not included (for a total of 32 participants out of 57). Hence, a repeated measures ANOVA with a 2-levels between factor B-GEI (Included, Excluded) and the 3-level within factor type of bias (D-score, SRQ, GRSS) was conducted to investigate whether belonging to the B-GEI had an impact upon implicit and explicit measures of gender bias.

4.4. Results

The results of the descriptive statistics computed across the various indices in the sample are reported in Table 1.

Table 1. Means and standard deviation across the main measures employed in the study.

	Average	Standard Deviation
D-score	0.45	0.32
GRSS -Masculine	12.53	3.75
GRSS -Feminine	14.16	4.80
GRSS -Total	26.68	6.03
SRQ - Gender Transcendent	7.53	2.93
SRQ - Gender Linked	18.79	7.71
SRQ - Total	26.32	9.56
HEXACO – Honesty/Humility	8.65	2.13
HEXACO - Emotionality	11.56	2.09
HEXACO – eXtraversion	7.84	2.38
HEXACO - Agreeableness	12.65	2.11
HEXACO – Conscientiousness	8.82	2.39
HEXACO – Openness to experience	9.00	2.09

H1. As a first step in the statistical testing, a series of Persons' correlations were computed to test hypothesis 1, namely the dissociation between implicit and explicit indices of gender bias. The results of the Persons correlation between the implicit and explicit measures

revealed no statistically significant correlations between the D-score and the scores obtained in the scales and subscales of the Gender Role Stereotype Scale (GRSS: $r = 0.08$, $p = 0.57$; GP-M: $r = -0.11$, $p = 0.40$; GB-F: $r = 0.19$, $p = 0.16$; Figure 2).

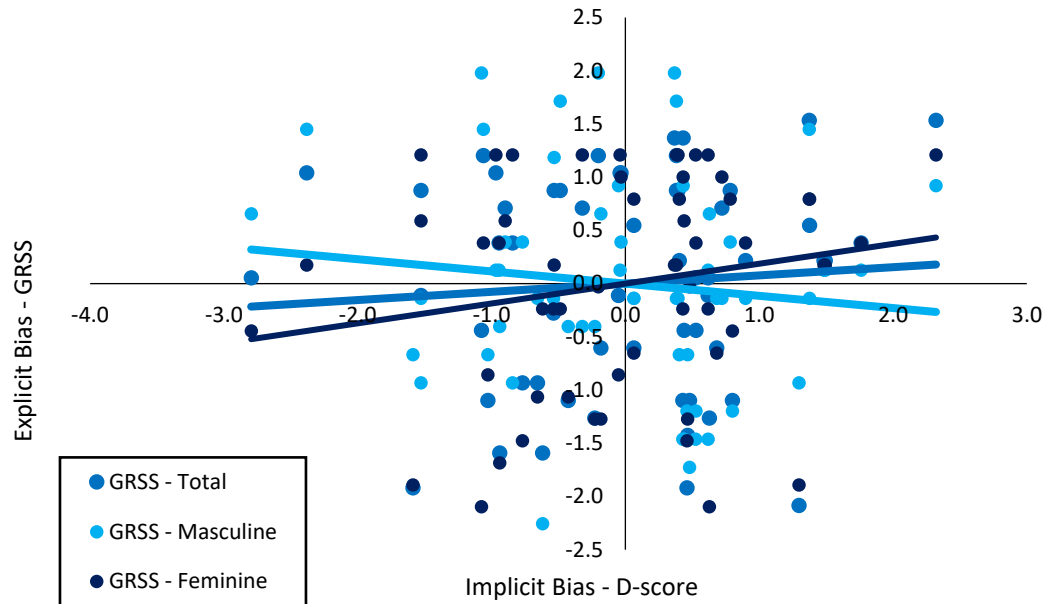


Figure 2. Scatterplot graph of correlation between D-score (i.e., implicit bias) and GRSS (i.e., explicit bias).

Conversely, the scale and subscales of the Social Role Questionnaire all showed a statistically significant positive correlation (SRQ: $r = 0.32$, $p = 0.02$; SRQ-GT: $r = 0.27$, $p = 0.05$; SRQ-GL: $r = 0.29$, $p = 0.03$; Figure 3). Hence, in order to investigate how much variability of one of the variables (i.e., D-Score) can be explained by its relationship with the other related variable (i.e., SQR). The results showed that the explained variance ranges between 7% and 10% (SRQ: $R^2 = 0.10$, SRQ-GT: $R^2 = 0.07$; SRQ-GL: $R^2 = 0.08$). Hence, hypothesis 1 was confirmed.

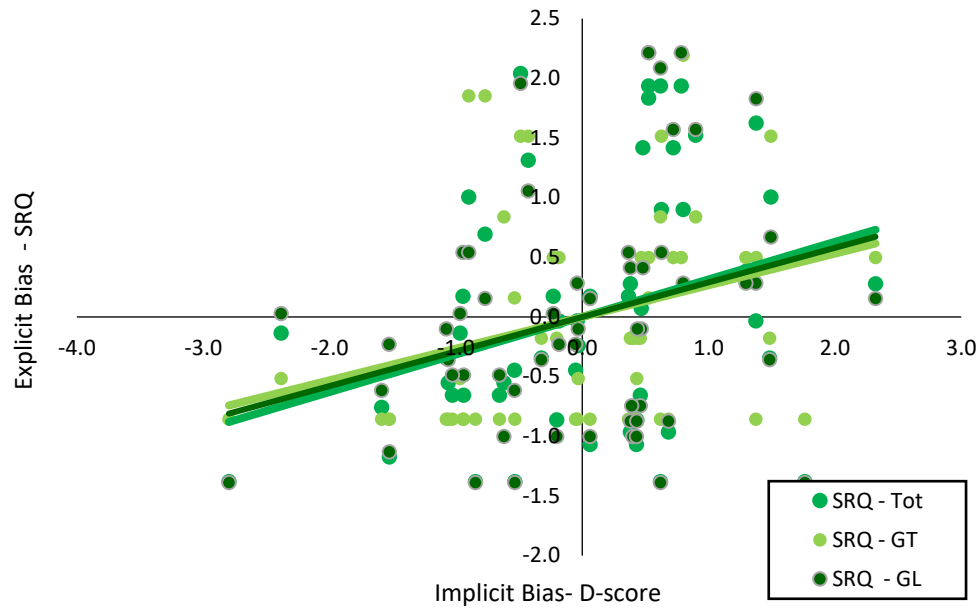


Figure 3. Scatterplot graph of correlation between D-score (i.e., implicit bias) and SQR (i.e., explicit bias).

As a second step, the set of Hypotheses 2 was tested, namely the relationship between implicit and explicit gender bias and individual characteristics.

H2a. The Pearson correlation between age and the three measures of gender bias revealed no statistically significant correlation (SRQ: $r = 0.03$, $p = 0.84$; D-score: $r = 0.13$, $p = 0.34$; Figure 4), however, a weak trend toward a negative correlation was only observed between age and the Gender Role Stereotype Scale (GRSS: $r = -0.22$, $p = 0.10$; Figure 4). Hence, this hypothesis was not confirmed by statistical testing.

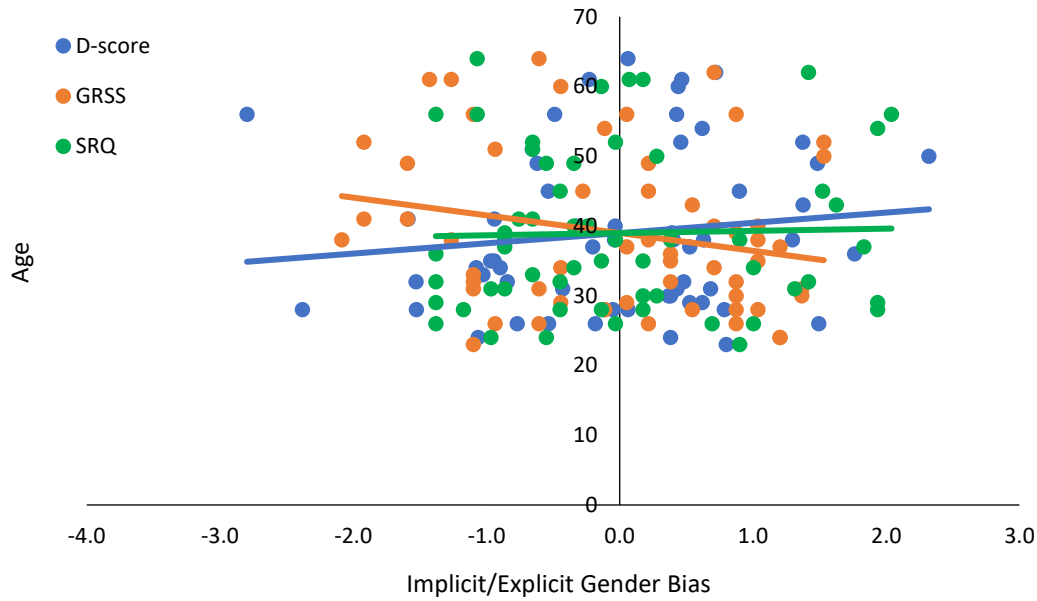


Figure 4. Scatterplot graph of correlation between D-score (i.e., implicit bias), GRSS and SRQ (i.e., explicit bias) in relation with participants' age.

H2b-c. With respect to the effect of gender, the results of the repeated measures ANOVA with the 2-levels between factor gender (F, M) and the 3-level within factor type of bias (D-score, GRSS, SRQ), revealed a statistically significant main effect of the gender ($F_{1,55} = 10.80$, $p < 0.001$, Power ($\beta-1$) = 0.90), indicating the female participants showed an overall higher gender bias as compared to male participants. The main effect of the type of bias was found non-significant ($F_{1,55} = 0.05$, $p = 0.95$, Power ($\beta-1$) = 0.06), while the gender by type interaction was statistically significant ($F_{2,110} = 17.21$, $p < 0.001$, Power ($\beta-1$) = 1.00). The post-hoc analysis, Fisher corrected for multiple testing, revealed that female participants showed a higher score in the GRSS scale as compared to male ($p < 0.001$), while no differences were observed between male and female participants in the SRQ scores ($p = 0.39$) nor the D-score ($p = 0.32$); additionally, the GRSS score of Female participants was also higher than the SRQ score ($p < 0.001$) as well as the D-score ($p < 0.001$), while all the other comparisons held non-significant results (see Figure 5). Overall, the results disconfirmed

hypothesis 2b, as male participants did not display higher gender bias a compared to the female counterpart. As for hypothesis 2c, results showed the opposite result, as the level of explicit bias appeared to be higher compared to the implicit one in female participants.

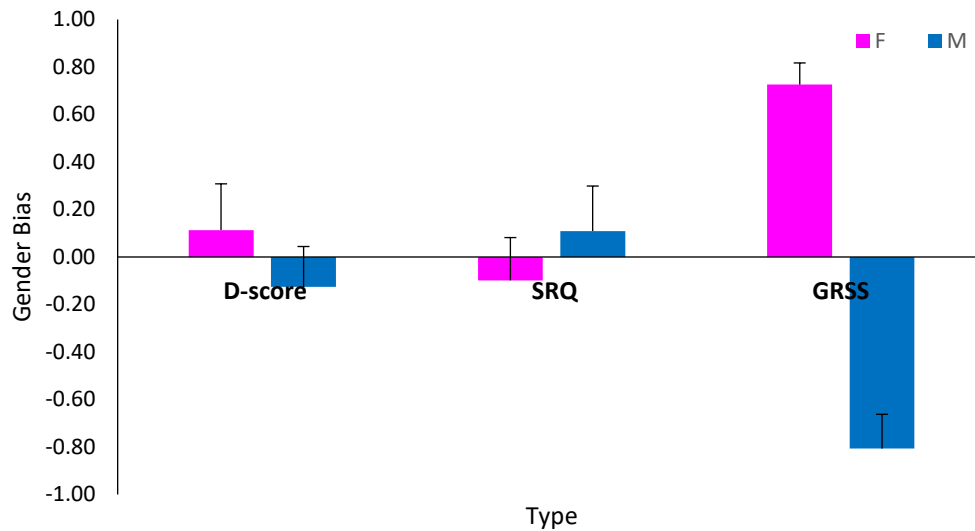


Figure 5. Results of the repeated measures ANOVA with the 2-levels between factor gender (F, M) and the 3-level within factor type of bias (D-score, GRSS, SRQ).

H2d. With respect to impact of the presence of children in the household, the results of the repeated measures ANOVA with the 2-levels between factor children (Yes, No) and the 3-level within factor type of bias (D-score, GRSS, SRQ), the results indicated that none of the effects was statistically significant (Children: $F_{1,55} = 1.48$, $p = 0.22$, Power ($\beta-1$) = 0.22; Type: $F_{1,55} = 0.02$, $p = 0.97$, Power ($\beta-1$) = 0.05; Children by Type: $F_{2,110} = 1.00$, $p = 0.37$, Power ($\beta-1$) = 0.22) hence indicating that the presence of children did not impact upon implicit nor explicit measures of gender bias.

H2e-f. Finally, the relationship between the implicit and explicit gender bias, and a series of personality traits was investigated by means of a series of Pearson's correlations. The results are show in the Table 2 below. No statistically significant correlations were found between the GRSS scale and the HEXACO personality facets (Figure 6a). As for the Social Role Questionnaire, statistically significant correlations were found only with the Extraversion

scale ($r = 0.40$, $p < 0.01$) and the Conscientiousness scale ($r = 0.45$, $p < 0.01$), as shown in Figure 6b. Finally, the D-score showed a statistically significant correlation only with the Conscientiousness scale ($r = 0.31$, $p < 0.05$; Figure 6c). Hypothesis 2e was hence confirmed, while hypothesis 2f was not.

Table 2. Results of the Pearson's correlations between the implicit (i.e., D-score) and explicit (i.e., GRSS, SRQ) and the personality facets (i.e., HEXACO).

Gender Bias		Personality Measures					
		HEXACO -H	HEXACO -E	HEXACO -X	HEXACO -A	HEXACO -C	HEXACO -O
GRSS - Masculine	r	-0.06	-0.16	0.06	-0.05	-0.21	-0.08
	p	0.67	0.23	0.66	0.72	0.12	0.57
GRSS - Feminine	r	-0.18	-0.12	-0.20	-0.16	-0.05	-0.02
	p	0.18	0.39	0.14	0.22	0.71	0.87
GRSS - Total	r	-0.18	-0.19	-0.12	-0.16	-0.17	-0.07
	p	0.18	0.15	0.37	0.23	0.21	0.63
SRQ – Gender Transcendence	r	0.14	0.25	.310*	0.00	0.35	0.04
	p	0.31	0.06	0.02	0.99	0.01	0.77
SRQ – Gender Linked	r	0.21	0.13	0.38	0.02	0.42	0.12
	p	0.12	0.34	0.00	0.90	0.00	0.39
SRQ - Total	r	0.21	0.18	0.40	0.01	0.45	0.11
	p	0.12	0.18	0.00	0.92	0.00	0.43
D-score	r	0.01	-0.21	0.25	0.12	0.31	-0.03
	p	0.93	0.12	0.06	0.39	0.02	0.81

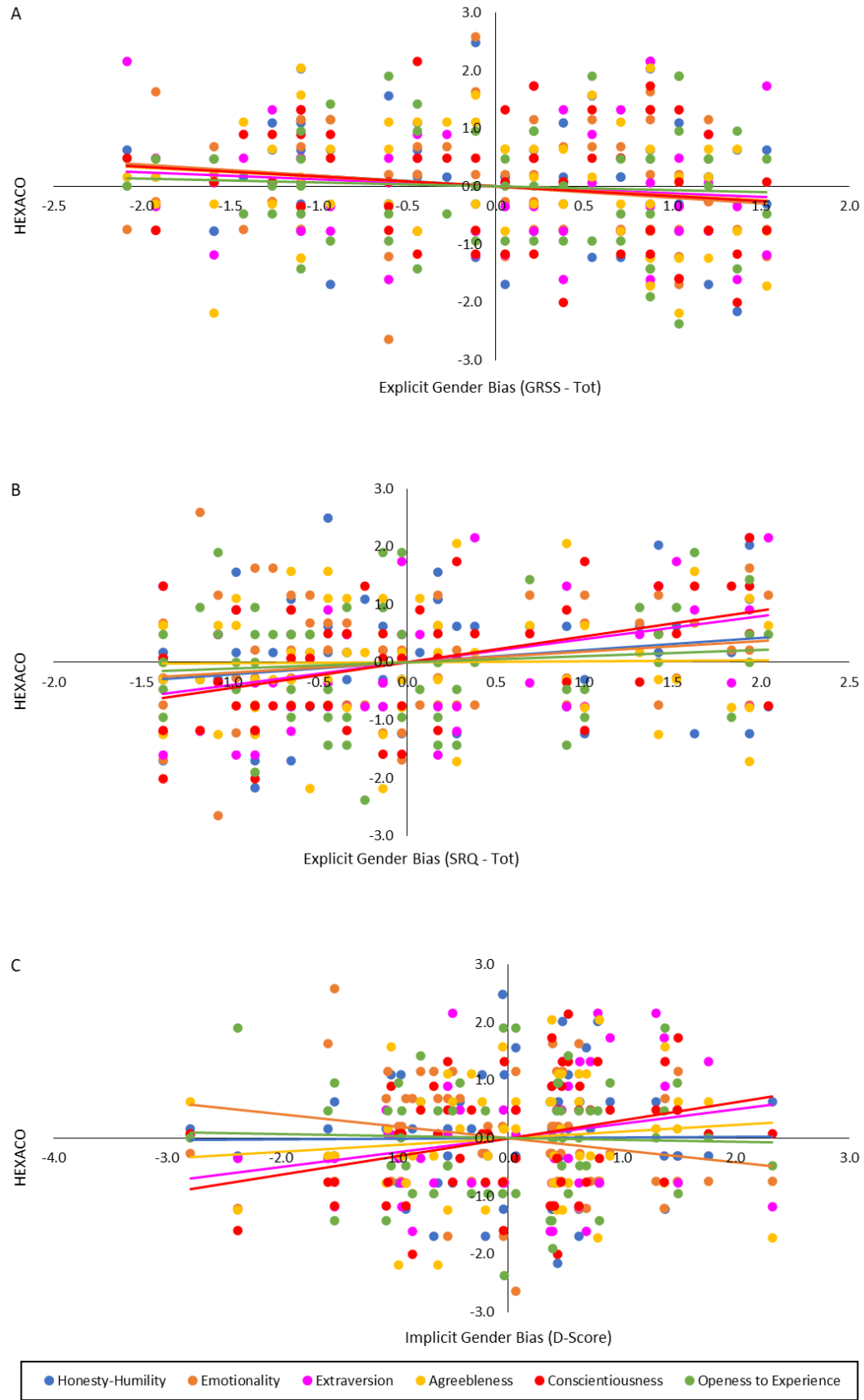


Figure 6. Scatterplot set of tables showing the correlation between the HEXACO and the explicit gender bias measured with the GRSS (A); the correlation between the HEXACO and the explicit gender bias measured with the SRQ (B); the HEXACO and the implicit gender bias measured by the D-score (C).

H3. The first analysis was aimed at exploring the existence of differences across the 4 banks included in the analysis in terms of explicit and implicit gender bias (i.e., Hypothesis 3a), by means of a repeated measures ANOVA with the 4-levels between factor bank (Bank 1, Bank 2, Bank 3 and Bank 4) and the 3-level within factor type of bias (D-score, GRSS, SRQ). The results indicated that only the main effect of the bank was statistically significant ($F_{3,50} = 3.11$, $p = 0.03$, Power ($\beta-1$) = 0.69; Figure 7). The post-hoc analysis, Fisher corrected for multiple testing, revealed that Bank 1 was characterized by a lower gender bias (regardless of whether explicit or implicit) as compared to both Bank 2 ($p = 0.02$) and Bank 3 ($p = 0.04$), while no difference was observed with Bank 4 ($p = 0.73$); further, Bank 4 showed a lower bias as compared to Bank 2 ($p = 0.04$), while the difference with Bank 3 was only marginally significant ($p = 0.06$); all the other comparisons were found non-significant. On the other hand, the main effect of type of bias ($F_{3,50} = 0.01$, $p = 0.99$, Power ($\beta-1$) = 0.05) and the bank by type interaction ($F_{6,100} = 0.86$, $p = 0.52$, Power ($\beta-1$) = 0.32) were found non-significant.

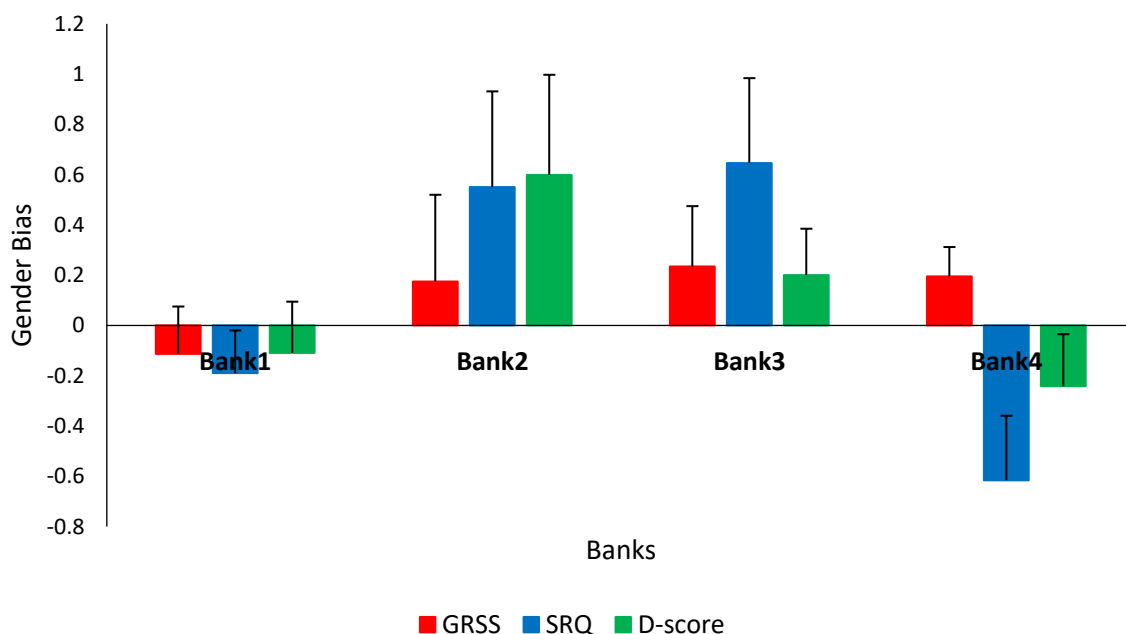


Figure 7. Results of the repeated measures ANOVA with the 4-levels between factor bank (Bank 1, Bank 2, Bank 3 and Bank 4) and the 3-level within factor type of bias (D-score, GRSSGB, SRQ).

The final analysis, aimed at directly testing hypothesis 3, was conducted to analyze whether banks included (or not) in the Bloomberg Gender Equality Index displayed different levels of implicit and explicit gender bias. This was tested using a repeated measures ANOVA with a 2-level between factor B-GEI (Included, Excluded) and the 3-level within factor type of bias (D-score, SRQ, GRSS). The main effect of B-GEI was found statistically significant ($F_{1,55} = 4.53$, $p = 0.04$, Power ($\beta-1$) = 0.55), hence indicating that banks included in the B-GEI displayed a significantly higher level of gender bias (cross the three indices of implicit and explicit bias, i.e., D-score, SRQ, GRSS) compared to banks excluded from such index (see Figure 8). Conversely, the main effect of type of bias ($F_{2,55} = 0.00$, $p = 0.99$, Power ($\beta-1$) = 0.05) and the interaction ($F_{2,110} = 0.01$, $p = 0.99$, Power ($\beta-1$) = 0.05) did not yield statistically significant results (Figure 8). Hence, hypothesis 3 was confirmed by the statistical testing.

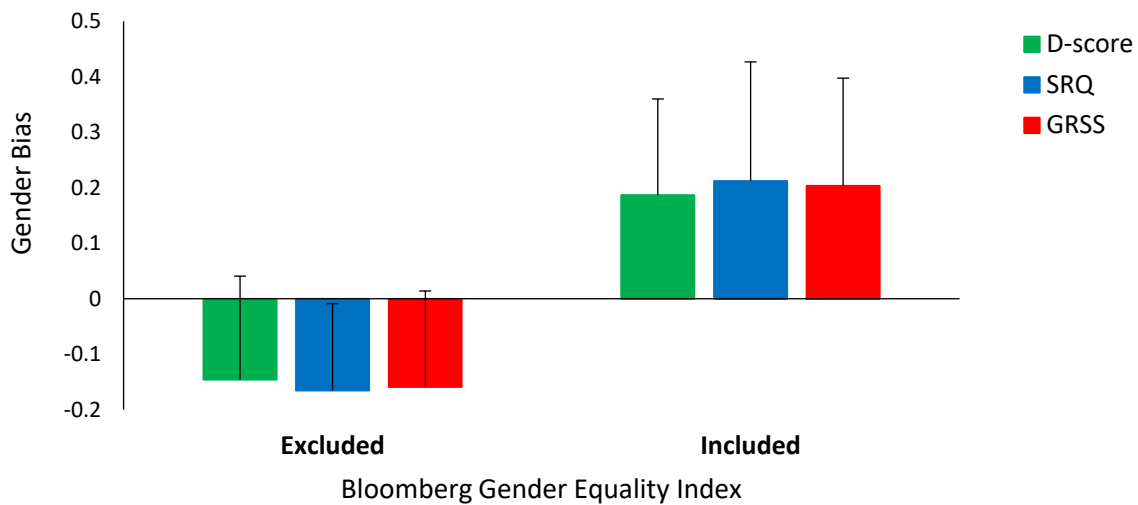


Figure 8. Results of the repeated measures ANOVA with the 2-level between factor B-GEI (Included, Excluded) and the 3-level within factor type of bias (D-score, SRQ, GRSS).

4.5. Discussion

The main result of this study concerns the relation between the implicit and explicit bias. In line with hypothesis 1, the Pearson analysis showed that there is either no significant

correlation or low correlation (i.e., explaining only 7-10% of the variance) between the two dimensions. This important data reveals that the mere evaluation of explicit gender bias is not sufficient to conclude the presence or absence of a discrimination towards female workers. Conversely, this data stresses the relevance of the implicit dimension, especially when considering the implementation of laws regulating the career advancement of women. It is in fact important to state that bias can be rooted in the subconscious of individuals, highlighting the necessity of investigating in depth without limiting the research to a superficial analysis. Implicit behaviors of gender bias management at work reflect how such bias can exist without being explicitly manifested, as Lennartz et al. (2019) analyzed in the unconscious negative attitudes that often lead to marginalization and humiliation, whether through verbal or nonverbal discriminatory behavior, and how uneasy it can be to recognize on some occasions. In fact, considering the results indicated, the participants' answers to the GRSS test are not congruent with the implicit bias. Although on one hand the average of responses showed a low gender bias, is to say the lack of statistical evidence of gender discrimination, the divergence with the implicit bias was instead evident. On the other hand, the scale and subscales of the Social Role Questionnaire all showed a statistically significant positive correlation with the D-score, which indicates that there exist an association between implicit measures of gender bias and explicit scores in the SRQ. Nevertheless, the calculation of the coefficient of determination (R^2), showed that the variance explained by such significant correlation only accounts for 7-10% of the overall variance. Hence, this result indicates that despite the significant association obtained, a large part of implicit gender bias remains unaccounted for when employing explicit tools to measure the existence of such bias. In other words, these results showed that in order to recognize and act upon gender bias in the workplace, measuring only explicit components is not enough to obtain a clear picture of the situation; indeed, as shown here, the implicit attitudes against women in the workplace are

not – or only marginally – captured by such explicit tools, thus, the evaluation of gender bias cannot disregard an implicit evaluation of gender biases and attitudes.

Further, hypothesis 2 suggested the influence of individual characteristics, such as gender, age, family situation (social status and children) and personality facets on the implicit and explicit results of gender bias. In light of the results, the individual characteristics that showed relevance were the parameters of gender and two HEXACO personality traits. However, the absence of a correlation with age (H2a), despite the well-spread age variety within the dataset, is by itself an interesting result, as it is often a determinant factor in the evaluation in the presence of gender stereotypes. Despite hypothesis 2b and 2c were not verified, the result of the analysis exploring the effect of gender on implicit and explicit gender bias appear quite interesting. Indeed, the result showed that there is a predisposition by female participants to be more gender biased. Although this may seem a contradiction, the analysis tested that female participant showed an overall higher gender bias as compared to male participants, especially quite relevant in the implicit measure. The discrepancy between the two sets of participants was not determinant to cluster the female group as preponderant in terms of gender bias, but this data is analyzed in an optic of social norms and rules that do have an impact on the way women perceive themselves in society. Specifically, it can be explained by the self-fulfilling prophecy (Merton, 1948), where the underlying mechanism is that a false concept becomes true by association, therefore translating a bias into a belief (Park & Punaram, 2020). This interpretation is also supported by evidences emerging withing the field of investigation of stigma, which has reliably shown that, as a consequence of prolonged exposition to prejudice and negative beliefs, often stigmatized groups f individuals end up in assimilating and adopting those negative thoughts within their own identity, a phenomenon known as “*self-stigma*” (Corrigan & Watson, 2002). Moreover, the implicit results diverged from the explicit results of the SRQ, where the opposite phenomena

emerged. Indeed, women's explicit approach towards gender roles and stereotypes is better in terms of equality than the approach of men. Those demonstrate a higher propensity towards gender transcendent questions (average = 8.4) and especially gender linked (average = 18.9). Such juxtaposition also confirms hypothesis 1, indicating that a discrepancy between implicit and explicit results is indeed predictable. Conversely, the GRSS test showed that women have a considerable higher gender bias than men, which could be explained as the willingness of both men and women to perform actions that are typically associated with the female gender. In other words, the unilateral interchangeability of gender roles is demonstrated in the fact that men showed likeness to perform actions that are typically associated with women, such as "doing house chores" for instance; but so did women. This could also raise the question on whether women could play a big role in the responsibility held for the so called "*glass ceiling*", in fitting into a cluster that does not necessarily represent them. Therefore, the social phenomenon of invisible barriers that women face in climbing the career ladder (Bruckmüller & Braun, 2020) could be the consequence of a stereotype to which women contribute with their self-association to certain socially accepted roles seen as matching their gender type. Overall, the most relevant result of this set was the gender by type interaction, which revealed a higher score of female participants in the Gender Bias scale as compared to male ($p < 0.001$), where the GRSS score of female participants was higher than the SRQ score ($p < 0.001$) as well as the D-score ($p < 0.001$). Importantly, the different trend or results observed between the SRQ and GRSS, can also be explained by the very nature of the scales themselves. Indeed, while the SRQ evaluates a more abstract dimension of gender bias, asking questions that are specifically related to the individual perception of roles in society, the GRSS asked participants to rate the likelihood of performing certain male/female stereotyped chores. In this latter case, it is not the representation of gender roles to be tested; in other words, one may have quite a gender free representation of social roles, but be still

more likely (or not) to perform certain actions; for example, a female may be less likely to “mow the lawn” only because such task requires higher level of physical strength, not because of a stereotyped vision of gender roles. Furthermore, the absence of a statistically significant result in individuals with and without children reveals that gender bias is indeed a phenomenon that is independent from other external factors rather than personal features. In fact, the personality traits that do have an impact on gender bias were: eXtraversion ($r = 0.40$) and Conscientiousness ($r = 0.45$) in relation with the SRQ, and Conscientiousness in relation with the D-score ($r = 0.31$). Extraversion and Consciousness are personality traits respectively associated with reward processing and goal prioritization, and bear on individual differences in financial risk-taking (Smillie, 2013). The fact that both traits influence the explicit measure of SRQ suggests that subjects with a highlighted trait of Extraversion and Consciousness tended to be more biased in questions related to both gender-linked and gender-transcendent topics. The positive correlation between Extraversion and the SRQ was a surprising result, as usually individuals with this trait tend to be more socially open and accepting. However, the indication is that explicit measures can be limited in evaluating people’s personality, as there can be a difference between one’s perception of the self and one’s real personality. In other words, precise researches like the current one cannot exclude that individuals’ personality traits may not match their true personality but are instead a self-evaluation rather than a reflection. For what concerns Consciousness instead, it is not surprising that individuals with this trait present a higher gender bias, as they are by nature more rigid and prone to conforming to social norms. In fact, it is expected that the trait of Consciousness is also correlated to the implicit measure, showing that subjects with a predominance in this trait are more inclined to show a gender bias in implicit behaviors.

In fact, implicit behaviors can be indicators of a real organizational change, for instance as the macro hypothesis 3 suggested in analyzing the differences between the banks’

performance in the single measure and overall, and then investigating for a potential contradiction of well-performers. Confirming the statement by Pastore & Tommaso (2016), who claimed that it is not sufficient to increase the number of women in top positions of the companies without considering the importance of cultural change and knowledge of female potential, hypothesis 3 was validated in this research. Indeed, by employing women based on their gender, the priority is shifted on beneficial effects (i.e., an increase in firm's reputation) rather than on the real firm's performance. Further, this vision is blind to the repercussions that this gender changes within the organization could have on the perception of women's work and value as professionals. In the worst cases, the consequences on targets may be sexual harassment (Batoool et al., 2020), and marginalization and humiliation (Lennartz et al., 2019). This has a direct impact on employees' psychological and personal health, leading to a variety of negative organizational outcomes, such as higher turnover rates and lower levels of organizational commitment (Dalton et al., 2014), and a detrimental work environment and performance (Russel et al., 2019; Metinyurt et al., 2021). It is clear that, from an external viewpoint, the company may seem well balanced in terms of gender difference, but internally the issues are several and hard to monitor and eliminate. Both women and men are negatively impacted by organizational sexism when it comes to job satisfaction and perception of the professional climate (Settles et al., 2013). This once again relates to the matter of gender discrimination as being a societal problem rather than a women-only issue, and to the importance of distinguishing such bias based on its implicit or explicit measure. Overall, the third hypothesis' objective was to measure the relationship between the two measures in the banking sector, analyzing the available dataset in a multi-faced comparison among the banks. In the first analysis aimed at testing hypothesis 3a to find whether there exists a difference across the banks, Bank 1 had the lowest overall gender bias, whereas Bank 2 and Bank 3 showed the highest results across the implicit measure and the two explicit sub-measures.

Bank 4 showed a negative result in the SRQ and in the D-score, but a positive result in the GRSS, only second to Bank 1 for its average performance. Hypothesis 3a analyzed in an explorative optic the presence of divergences and similarities across the 4 banks to test the ground for a further in-depth analysis able to justify the divergence within the dataset. For this reason, it was deemed important to present hypothesis 3b as a follow-up to hypothesis 3a, evaluating the hypothesis from a more specific angle. The analysis tailored on all 6 banks verified whether a discrepancy between the statistically significant results could depend on external factors such as the imposition of gender quotas on a corporate level. It was found that all 6 banks are at least quoted in the Borsa di Milano, signifying that they were obliged to comply with the Golfo-Mosca Law. As a consequence of this factor, it was not possible to perform a horizontal comparison among the banks in search for statistical differences. However, a viable analysis was to examine whether all banks seemingly performed according to parameters established by one of the most relevant indices on gender equality: the Bloomberg Gender Equality Index (B-GEI). The Bloomberg GEI released the results referred to the 2021 statistics, which comprehended a limited number of organizations that stood out for their gender equality, based on the 5 parameters indicated in the statistical testing. Although it was not possible to identify the mentioned banks based on a classification of merit in a listed order, it was instead possible to distinguish those that appeared on the list from those who did not. It was found that Bank 2, Banks 3 and Bank 4 reached a level of gender equality worth mentioning inside the Bloomberg GEI. Conversely, Bank 1, Bank 5 and Bank 6 were not claimed as sustainable and well-performing in terms of gender equality, at least not over the threshold imposed by the index. Withholding the reliability of the index, it was considered necessary to proceed with a cross-functional analysis to evaluate the performance of the mentioned banks on the three tasks of this research. The results demonstrated a strong divergence between the GEI and the three measures (i.e., D-score,

SRQ and GRSS): banks which were excluded from the index presented the lowest average results in all three dimensions, whereas the three GEI-mentioned banks presented the highest average results in all three dimensions. The conclusion was that a trend in the organizational culture is not sufficient to implement a rooted sustainable change within employees' perception of female colleagues. Moreover, working settings that are boosted for their attention towards topics related to gender balance are not necessarily clear of the behaviors of role stereotyping, microaggressions and biased behaviors. Instead, this analysis revealed that those are the settings in which attitudes of this nature are fomented and higher compared to settings that do not take as many gender initiatives. In other words, the mere implementation of policies aimed at balancing the presence of woman in the workplace, without a real change in cultural and societal values, may even have a detrimental effect of strengthening the idea that women are only holding certain positions in light of such policies (i.e., gender quotas), rather than because they are capable or deserving such roles in the workplace.

Chapter 5 – Conclusion

5.1. Conclusion

The foundation of this research has been that bias is a social condition that has the power to negatively affect people and organizations (Ferrari et al., 2016). It also has an impact on victims' mental health (Batool, 2020), career progress (Hassink & Russo, 2010), job satisfaction and professional environment (Settles et al., 2013). The current study allowed to highlight how gender bias characterizes an implicit dimension that is dissociated from the explicit one, stressing how behaviors of stereotyping, tacit segregation, underestimation, and social ostracism can often find a fertile path in a workplace. Despite an inclusive behavior that fully integrates female colleagues, subordinates or superiors, it has been demonstrated that it can be a façade to comply with upgraded norms and trends, meanwhile brooding feelings of implicit sexism towards the female counterpart. This is further worsened by the tensions spreading in a male-dominated sector such as the financial banking institutions, where the imposition of a minimum percentage of women can interfere with the balance and the wellbeing of the work setting. In fact, the second most conclusive result, which was considered as an achievement of this analysis, was the denouement that the adhesion to policies and the classification in indices promoting gender equality can be detrimental to the perception of female workers. In particular, the presence of women who have been appointed as leaders only because there was a requirement to meet gender quotas can backfire and cause the reverse effect on the perception of women's work and performance overall. For this reason, it is important to consider the implicit dimension on the evaluation of socio-politic initiatives that stimulate the participation of female workers without taking into account the perception that those campaigns may have on their practical work. The line between an implicit gender bias and an explicit manifestation is often thin, but nonetheless significant in an optic of valorization of human capital within the organization. Additionally, the analysis

deepened into other variables that could impact on the implicit and explicit sub-measures, with the aim of observing the whole picture as fairly as possible. Consequently, it was demonstrated how gender itself showed a divergence in the explicit definition of roles in tasks (SRQ) that subjects would or would not be willing to perform. An additional variable that played a role in the implicit and explicit measures was the personality traits, specifically Conscientiousness and Extraversion in the GRSS, and Conscientiousness only in the implicit measure. In conclusion, this study aimed at highlighting the importance of distinguishing between the implicit and explicit dimension in analyzing their mismatch, and at understanding what other variables take place in defining the presence of a bias.

5.2. Limitations and Future Research

Based on this analysis, there is ground to further explore some topics and issues emerged. First and foremost, the dataset can be expanded to a larger group of subjects that presents less homogeneity in the division in which they work, in order to have a more complete picture of potential stigma within the job role. The so called '*role strain*', as Simpson (2005) defined it, is also a negative psychological experience among men who enter occupations that are non-traditional for their gender, other than impacting on women's ability to succeed (Kaiser, 2014). Second, it would be of interest to obtain a higher number of responses from parents, to verify a potential difference between the implicit and explicit gender bias in fathers versus mothers, and another potential divergence between women with children and women without children. Third, it can be worth enlarging the overall dataset to include non-quoted banks as well, in order to verify with further details the hypothesis 3 testing the inverse relationship between the adherence to gender quotas and the level of bias showed in light of the tests' results. By reinforcing the tie to hypothesis 3, this would be more complete with a parallel analysis of banks that are not obligated to comply with gender quotas. Finally, a broader set

of subjects would also allow to test the non-significant variables such as age for instance, which has the potential to be a relevant factor in gender bias results.

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Annexes

Annex 1 – General Information

Quanti anni ha?

- 20-25
- 26-30
- 31-35
- 36-40
- 41-50
- 51-60
- 61-70

Massimo titolo di studio conseguito:

- licenza elementare
- licenza media
- diploma
- laurea triennale
- laurea magistrale /o magistrale a ciclo unico
- dottorato/altri titoli post laurea

Presso quale banca è impiegat*?

Con quale genere si identifica?

- a) Femmina
- b) Maschio
- c) Non binario

Qual è il suo background culturale?

- a) Italiano
- b) Europeo (non Italiano)
- c) Africano
- d) Asiatico
- f) Altro (specificare) ____

Qual è il suo titolo di lavoro?

In che divisione lavora?

Da quanto tempo occupa la sua posizione attuale?

Ha figli?

- a) Sì
- b) No

Lavora part time o full time?

- a) Full time (>40 ore settimanali)
- b) Part time (<40 ore settimanali)

Quanti giorni a settimana lavora in media?

- a) 0-1
- b) 1-2
- c) 2-3
- d) 3-4
- e) >4

Annex 2 – Implicit Association Test (IAT) Trial List

In the following table, the list of items employed within the Implicit association test is reported. The following list is referred to Version 1 of the task; Version 2 was obtained by reverting the association between the response categories and the response keys (i.e., right vs. left). Across the seven blocks of the task, stimuli were presented in a randomized order.

Task	Congruence	Block	Words	Type	Condition	Accuracy
Version1	Congruent	1	Casa	Practice	Family	e
Version1	Congruent	1	Bucato	Practice	Family	e
Version1	Congruent	1	Cucina	Practice	Family	e
Version1	Congruent	1	Figli	Practice	Family	e
Version1	Congruent	1	Parenti	Practice	Family	e
Version1	Congruent	1	Matrimonio	Practice	Family	e
Version1	Congruent	1	Giardino	Practice	Family	e
Version1	Congruent	1	Casa	Practice	Family	e
Version1	Congruent	1	Bucato	Practice	Family	e
Version1	Congruent	1	Cucina	Practice	Family	e
Version1	Congruent	1	Figli	Practice	Family	e
Version1	Congruent	1	Parenti	Practice	Family	e
Version1	Congruent	1	Matrimonio	Practice	Family	e
Version1	Congruent	1	Giardino	Practice	Family	e
Version1	Congruent	1	Bambini	Practice	Family	e
Version1	Congruent	1	Valigetta	Practice	Career	i
Version1	Congruent	1	Ufficio	Practice	Career	i
Version1	Congruent	1	Professione	Practice	Career	i
Version1	Congruent	1	Lavoro	Practice	Career	i
Version1	Congruent	1	Dipendente	Practice	Career	i
Version1	Congruent	1	Salario	Practice	Career	i
Version1	Congruent	1	Manager	Practice	Career	i
Version1	Congruent	1	Valigetta	Practice	Career	i
Version1	Congruent	1	Ufficio	Practice	Career	i
Version1	Congruent	1	Professione	Practice	Career	i
Version1	Congruent	1	Lavoro	Practice	Career	i
Version1	Congruent	1	Dipendente	Practice	Career	i
Version1	Congruent	1	Salario	Practice	Career	i
Version1	Congruent	1	Manager	Practice	Career	i
Version1	Congruent	1	Impiego	Practice	Career	i
Version1	Congruent	2	Ragazza	Practice	Female	e
Version1	Congruent	2	Signora	Practice	Female	e
Version1	Congruent	2	Donna	Practice	Female	e
Version1	Congruent	2	Lei	Practice	Female	e
Version1	Congruent	2	Ragazza	Practice	Female	e
Version1	Congruent	2	Signora	Practice	Female	e
Version1	Congruent	2	Donna	Practice	Female	e
Version1	Congruent	2	Lei	Practice	Female	e

Task	Congruence	Block	Words	Type	Condition	Accuracy
Version1	Congruent	2	Ragazza	Practice	Female	e
Version1	Congruent	2	Signora	Practice	Female	e
Version1	Congruent	2	Donna	Practice	Female	e
Version1	Congruent	2	Lei	Practice	Female	e
Version1	Congruent	2	Ragazza	Practice	Female	e
Version1	Congruent	2	Signora	Practice	Female	e
Version1	Congruent	2	Donna	Practice	Female	e
Version1	Congruent	2	Signore	Practice	Male	i
Version1	Congruent	2	Uomo	Practice	Male	i
Version1	Congruent	2	Ragazzo	Practice	Male	i
Version1	Congruent	2	Lui	Practice	Male	i
Version1	Congruent	2	Signore	Practice	Male	i
Version1	Congruent	2	Uomo	Practice	Male	i
Version1	Congruent	2	Ragazzo	Practice	Male	i
Version1	Congruent	2	Lui	Practice	Male	i
Version1	Congruent	2	Signore	Practice	Male	i
Version1	Congruent	2	Uomo	Practice	Male	i
Version1	Congruent	2	Ragazzo	Practice	Male	i
Version1	Congruent	2	Lui	Practice	Male	i
Version1	Congruent	2	Signore	Practice	Male	i
Version1	Congruent	2	Uomo	Practice	Male	i
Version1	Congruent	2	Ragazzo	Practice	Male	i
Version1	Congruent	3	Casa	Practice	Family	e
Version1	Congruent	3	Bucato	Practice	Family	e
Version1	Congruent	3	Cucina	Practice	Family	e
Version1	Congruent	3	Figli	Practice	Family	e
Version1	Congruent	3	Matrimonio	Practice	Family	e
Version1	Congruent	3	Ufficio	Practice	Career	i
Version1	Congruent	3	Professione	Practice	Career	i
Version1	Congruent	3	Lavoro	Practice	Career	i
Version1	Congruent	3	Salario	Practice	Career	i
Version1	Congruent	3	Manager	Practice	Career	i
Version1	Congruent	3	Ragazza	Practice	Female	e
Version1	Congruent	3	Signora	Practice	Female	e
Version1	Congruent	3	Donna	Practice	Female	e
Version1	Congruent	3	Lei	Practice	Female	e
Version1	Congruent	3	Donna	Practice	Female	e
Version1	Congruent	3	Signore	Practice	Male	i
Version1	Congruent	3	Uomo	Practice	Male	i
Version1	Congruent	3	Ragazzo	Practice	Male	i
Version1	Congruent	3	Lui	Practice	Male	i
Version1	Congruent	3	Uomo	Practice	Male	i
Version1	Congruent	4	Casa	Test	Family	e
Version1	Congruent	4	Bucato	Test	Family	e
Version1	Congruent	4	Cucina	Test	Family	e

Task	Congruence	Block	Words	Type	Condition	Accuracy
Version1	Congruent	4	Figli	Test	Family	e
Version1	Congruent	4	Parenti	Test	Family	e
Version1	Congruent	4	Matrimonio	Test	Family	e
Version1	Congruent	4	Giardino	Test	Family	e
Version1	Congruent	4	Casa	Test	Family	e
Version1	Congruent	4	Bucato	Test	Family	e
Version1	Congruent	4	Cucina	Test	Family	e
Version1	Congruent	4	Valigetta	Test	Career	i
Version1	Congruent	4	Ufficio	Test	Career	i
Version1	Congruent	4	Professione	Test	Career	i
Version1	Congruent	4	Lavoro	Test	Career	i
Version1	Congruent	4	Dipendente	Test	Career	i
Version1	Congruent	4	Salario	Test	Career	i
Version1	Congruent	4	Manager	Test	Career	i
Version1	Congruent	4	Valigetta	Test	Career	i
Version1	Congruent	4	Ufficio	Test	Career	i
Version1	Congruent	4	Professione	Test	Career	i
Version1	Congruent	4	Ragazza	Test	Female	e
Version1	Congruent	4	Signora	Test	Female	e
Version1	Congruent	4	Donna	Test	Female	e
Version1	Congruent	4	Lei	Test	Female	e
Version1	Congruent	4	Ragazza	Test	Female	e
Version1	Congruent	4	Signora	Test	Female	e
Version1	Congruent	4	Donna	Test	Female	e
Version1	Congruent	4	Lei	Test	Female	e
Version1	Congruent	4	Ragazza	Test	Female	e
Version1	Congruent	4	Donna	Test	Female	e
Version1	Congruent	4	Signore	Test	Male	i
Version1	Congruent	4	Uomo	Test	Male	i
Version1	Congruent	4	Ragazzo	Test	Male	i
Version1	Congruent	4	Lui	Test	Male	i
Version1	Congruent	4	Signore	Test	Male	i
Version1	Congruent	4	Uomo	Test	Male	i
Version1	Congruent	4	Ragazzo	Test	Male	i
Version1	Congruent	4	Lui	Test	Male	i
Version1	Congruent	4	Signore	Test	Male	i
Version1	Congruent	4	Uomo	Test	Male	i
Version1	Incongruent	5	Casa	Practice	Family	i
Version1	Incongruent	5	Bucato	Practice	Family	i
Version1	Incongruent	5	Cucina	Practice	Family	i
Version1	Incongruent	5	Figli	Practice	Family	i
Version1	Incongruent	5	Parenti	Practice	Family	i
Version1	Incongruent	5	Matrimonio	Practice	Family	i
Version1	Incongruent	5	Giardino	Practice	Family	i
Version1	Incongruent	5	Casa	Practice	Family	i

Task	Congruence	Block	Words	Type	Condition	Accuracy
Version1	Incongruent	5	Bucato	Practice	Family	i
Version1	Incongruent	5	Cucina	Practice	Family	i
Version1	Incongruent	5	Figli	Practice	Family	i
Version1	Incongruent	5	Parenti	Practice	Family	i
Version1	Incongruent	5	Matrimonio	Practice	Family	i
Version1	Incongruent	5	Giardino	Practice	Family	i
Version1	Incongruent	5	Bambini	Practice	Family	i
Version1	Incongruent	5	Valigetta	Practice	Career	e
Version1	Incongruent	5	Ufficio	Practice	Career	e
Version1	Incongruent	5	Professione	Practice	Career	e
Version1	Incongruent	5	Lavoro	Practice	Career	e
Version1	Incongruent	5	Dipendente	Practice	Career	e
Version1	Incongruent	5	Salario	Practice	Career	e
Version1	Incongruent	5	Manager	Practice	Career	e
Version1	Incongruent	5	Valigetta	Practice	Career	e
Version1	Incongruent	5	Ufficio	Practice	Career	e
Version1	Incongruent	5	Professione	Practice	Career	e
Version1	Incongruent	5	Lavoro	Practice	Career	e
Version1	Incongruent	5	Dipendente	Practice	Career	e
Version1	Incongruent	5	Salario	Practice	Career	e
Version1	Incongruent	5	Manager	Practice	Career	e
Version1	Incongruent	5	Impiego	Practice	Career	e
Version1	Incongruent	6	Casa	Practice	Family	i
Version1	Incongruent	6	Bucato	Practice	Family	i
Version1	Incongruent	6	Cucina	Practice	Family	i
Version1	Incongruent	6	Figli	Practice	Family	i
Version1	Incongruent	6	Matrimonio	Practice	Family	i
Version1	Incongruent	6	Ufficio	Practice	Career	e
Version1	Incongruent	6	Professione	Practice	Career	e
Version1	Incongruent	6	Lavoro	Practice	Career	e
Version1	Incongruent	6	Salario	Practice	Career	e
Version1	Incongruent	6	Manager	Practice	Career	e
Version1	Incongruent	6	Ragazza	Practice	Female	e
Version1	Incongruent	6	Signora	Practice	Female	e
Version1	Incongruent	6	Donna	Practice	Female	e
Version1	Incongruent	6	Lei	Practice	Female	e
Version1	Incongruent	6	Donna	Practice	Female	e
Version1	Incongruent	6	Signore	Practice	Male	i
Version1	Incongruent	6	Uomo	Practice	Male	i
Version1	Incongruent	6	Ragazzo	Practice	Male	i
Version1	Incongruent	6	Lui	Practice	Male	i
Version1	Incongruent	6	Uomo	Practice	Male	i
Version1	Incongruent	7	Casa	Test	Family	i
Version1	Incongruent	7	Bucato	Test	Family	i
Version1	Incongruent	7	Cucina	Test	Family	i

Task	Congruence	Block	Words	Type	Condition	Accuracy
Version1	Incongruent	7	Figli	Test	Family	i
Version1	Incongruent	7	Parenti	Test	Family	i
Version1	Incongruent	7	Matrimonio	Test	Family	i
Version1	Incongruent	7	Giardino	Test	Family	i
Version1	Incongruent	7	Casa	Test	Family	i
Version1	Incongruent	7	Bucato	Test	Family	i
Version1	Incongruent	7	Cucina	Test	Family	i
Version1	Incongruent	7	Valigetta	Test	Career	e
Version1	Incongruent	7	Ufficio	Test	Career	e
Version1	Incongruent	7	Professione	Test	Career	e
Version1	Incongruent	7	Lavoro	Test	Career	e
Version1	Incongruent	7	Dipendente	Test	Career	e
Version1	Incongruent	7	Salario	Test	Career	e
Version1	Incongruent	7	Manager	Test	Career	e
Version1	Incongruent	7	Valigetta	Test	Career	e
Version1	Incongruent	7	Ufficio	Test	Career	e
Version1	Incongruent	7	Professione	Test	Career	e
Version1	Incongruent	7	Ragazza	Test	Female	e
Version1	Incongruent	7	Signora	Test	Female	e
Version1	Incongruent	7	Donna	Test	Female	e
Version1	Incongruent	7	Lei	Test	Female	e
Version1	Incongruent	7	Ragazza	Test	Female	e
Version1	Incongruent	7	Signora	Test	Female	e
Version1	Incongruent	7	Donna	Test	Female	e
Version1	Incongruent	7	Lei	Test	Female	e
Version1	Incongruent	7	Ragazza	Test	Female	e
Version1	Incongruent	7	Donna	Test	Female	e
Version1	Incongruent	7	Signore	Test	Male	i
Version1	Incongruent	7	Uomo	Test	Male	i
Version1	Incongruent	7	Ragazzo	Test	Male	i
Version1	Incongruent	7	Lui	Test	Male	i
Version1	Incongruent	7	Signore	Test	Male	i
Version1	Incongruent	7	Uomo	Test	Male	i
Version1	Incongruent	7	Ragazzo	Test	Male	i
Version1	Incongruent	7	Lui	Test	Male	i
Version1	Incongruent	7	Signore	Test	Male	i
Version1	Incongruent	7	Uomo	Test	Male	i

Annex 3 - GRSS

Esprimi il tuo livello di accordo con ogni frase su una scala da 1 a 5 dove 1 significa "fortemente in disaccordo" e 5 significa "fortemente d'accordo".

Quanto è probabile che tu esegua le seguenti azioni?

1. Falciare il prato.
2. Guidare l'auto, quando sia l'uomo che la donna sono in viaggio.
3. Preparare i pasti.
4. Fare una proposta di matrimonio.
5. Eseguire la manutenzione di base dei veicoli, come il cambio dell'olio.
6. Gestire questioni finanziarie, come pagare le bollette.
7. Fare le pulizie domestiche.
8. Lavare, piegare e riporre il bucato.
9. Acquistare generi alimentari.
10. Guadagnare la maggior parte dei soldi per sostenere la famiglia.
11. Incartare i regali (ad es. regali di compleanno o in occasione delle festività).
12. Decorare la casa.
13. Spalare la neve per pulire vialetti e marciapiedi.
14. Restare a casa con un bambino ammalato.

Annex 4 - SRQ

Esprimi il tuo livello di accordo con ogni frase su una scala da 1 a 5 dove 1 significa "fortemente in disaccordo" e 5 significa "fortemente d'accordo".

1. Le persone possono essere sia aggressive che accoglienti indipendentemente dal sesso.
2. Le persone dovrebbero essere trattate allo stesso modo indipendentemente dal sesso.
3. La libertà che viene data ai bambini dovrebbe essere determinata dall'età e dal livello di maturità e non dal sesso.
4. I compiti in casa non dovrebbero essere assegnati in base al sesso.
5. Dovremmo smettere di pensare se le persone sono maschi o femmine e concentrarsi su altre caratteristiche.
6. Per questa domanda selezionare il numero 3 (neutro).
7. La principale responsabilità di un padre è provvedere finanziariamente ai suoi figli.
8. Gli uomini sono più sessuali delle donne.
9. Alcuni tipi di lavoro non sono appropriati per le donne.
10. Le madri dovrebbero prendere la maggior parte delle decisioni su come crescono i bambini.
11. Le madri dovrebbero lavorare solo se necessario.
12. Le ragazze dovrebbero essere protette e sorvegliate più dei ragazzi.
13. Solo alcuni tipi di lavoro sono appropriati sia per gli uomini che per le donne.
14. Per molti lavori importanti, è meglio scegliere uomini anziché donne.

Annex 5 – HEXACO 24-items Brief Version

Per ciascuna delle seguenti affermazioni, si prega di indicare il suo grado di accordo, utilizzando la seguente scala: 5 = Completamente d'accordo; 4 = Molto d'accordo; 3 = Né d'accordo né in disaccordo; 2 = Molto in disaccordo; 1 = Completamente in disaccordo. Non esistono risposte giuste o sbagliate. Quello che ci interessa è la sua personale opinione ed esperienza.

1. Posso osservare un quadro a lungo
2. Mi assicuro che le cose siano al posto giusto.
3. Rimango ostile a qualcuno che si è comportato male con me.
4. A nessuno piace parlare con me.
5. Ho paura di provare dolore.
6. Trovo difficile mentire.
7. Penso che la scienza sia noiosa.
8. Rimando compiti complicati il più a lungo possibile.
9. Mi esprimo spesso in modo critico.
10. Mi relaziono facilmente agli sconosciuti.
11. Mi preoccupo meno rispetto agli altri.
12. Vorrei capire come fare un sacco di soldi in modo disonesto.
13. Ho una vivida immaginazione.
14. Lavoro in modo molto preciso.
15. Tendo ad essere facilmente d'accordo con gli altri.
16. Mi piace interagire con gli altri.
17. Riesco a superare facilmente le difficoltà da solo.
18. Vorrei essere famos*.
19. Mi piacciono le persone con idee strane.
20. Spesso faccio le cose senza pensarci davvero.
21. Anche quando vengo trattat* male, rimango calm*.
22. Raramente sono allegr*.
23. Mi viene da piangere durante i film tristi o romantici.
24. Ho diritto a un trattamento speciale.

Summary

Literature Review

Gender discrimination within organizations: an overview

Gender discrimination in the workplace is a consequence of different phenomena, such as the gender pay gap, the lack of women's career progress, gender stereotyping in higher managerial positions, sexual harassment, and job insecurity (Batoool, 2020). Gender bias leads to the following types of gender segregation: educational, horizontal occupational, vertical/hierarchical occupational, pay segregation, and segregation in values and preferences (Vokić et al., 2016). All these forms of discrimination can take the form of explicit and implicit gender bias, which are not mutually exclusive, and do present interesting dynamics worth exploring. For instance, stereotypes identifying women as being less keen to achievement and less power-oriented (Schuh et al., 2014), and more conservative in decision-making processes (Baixauli-Soler et al., 2015) can take both implicit (unconscious) and explicit (conscious) forms, impacting the overall organization. In fact, a false concept becomes true by association, therefore translating a bias into a belief (Park & Punaram, 2020), and as they affect women's performance and reduce their motivation to succeed, they generate vulnerability and anxiety in female leaders (Walker & Aritz, 2015). The consequences on the organizations are detrimental: a higher turnover rates and lower commitment (Dalton et al., 2014), job dissatisfaction and negative perception of the professional climate (Settles et al., 2013). Moreover, the observable "*glass ceiling*" impedes a sustainable influence of women on corporate performance (Pastore, 2018), imposing invisible barriers that women face in climbing the career ladder (Bruckmüller & Braun, 2020). It has been argued that such skewed representation of women in managerial positions is due to "*the sticky floor*" (Briel et al., 2022), which has been recently discussed along the "*glass cliff*" (Carton, 2022) – referring to the non-supportive context that many women face when they do break into a position of leadership. Further, difficulties in reconciling working life

and family care responsibilities place several women in a so-called “*glass labyrinth*” (Eagly & Carli, 2007). Either way, the effect is a vicious circle in which women are mostly kept in lower paying positions and encounter greater difficulties in being promoted to high-ranked jobs. Indeed, women are disproportionately represented in lower-status and non-executive positions (Fernandez & Mors, 2008), and overall, less likely to apply for male-dominated jobs, unless female applicants have more “masculine” traits, as independence, self-confidence, impassiveness and assertiveness (Antecol & Cobb-Clark, 2013).

Socio-cultural impact on gender discrimination

Carrasco et al. (2015) showed that women are hardly able to get involved in the board’s activities without considerable barriers, with the main cause being the gender inequality, in particular, the anachronistic perceptions of their leadership abilities. The effect of such perceptions is often negative, as it may determine the underperformance of the stereotyped group, as shown by Noguera, 2003 in a famous study on the school performance of Afro-American male college students, in which it was showed that prejudiced students’ identity determined the engagement in behaviors that contribute to their underachievement and marginality (Noguera, 2003). Similarly, Carlana (2019) studied whether exposure to stereotypes from mentors could affect students’ achievement; through a Gender-Science Implicit Association Test, it was found that stereotypes impair the test performance of girls, as a result of biased teachers’ lower expectation of them. Translating this concept within the work environment, often male executives are more inclined to promote male employees for top managerial positions, because they believe that men perform better than women (Al-Manasra, 2013). This in turn leads woman to be less willing to contribute ideas and show lower self confidence in fields that are not stereotypically associated with their own gender (Bordalo et al., 2018). Such double-edged sword could be both the cause and the consequence of the underestimation of women’s skills (Wyss, 2015), further leading to a

“*male backlash*”, which can be explained by social norms (Kim & Kweon, 2022), and can lead to biased statistically behavioral response towards women (Gangadharan et al., 2016).

Banking sector focus

The banking sector is more reluctant than others to accept a significant gender diversity in decision-making positions (De Vita & Magliocco, 2018), although the level of female participation may be a reliable indicator of organizations’ progress and may influence other sectors (Campbell & Bohdanowicz, 2018). On the upside, financial institutions with a balanced board diversity seem to have a stronger suit on earnings management (Fan et al., 2019), environmental, social, governance (Birindelli et al., 2018), and welfare performance (Frag and Mallin, 2017) and lower bank default risk (Yousef et al. 2021). On the downside, the mere presence of a woman in the boardroom may not necessarily translates in power or influence (Liu et al., 2014); indeed, it has been showed that women’s voices are only heard once their number reaches a critical threshold (Smith, 2014) –identified as three (Torchia et al., 2011; Meniucci, 2021).

Gender quotas – pros and cons

On the time span that goes from 1995–2010, before the quota law were implemented, the number of women on Italian bank boards increased slowly, but the gender gap for Italian banks was still wide in comparison with other economic sectors nationwide and other European-based banks. Aiming at boosting female participation in banks, gender quotas were introduced in Italy in 2011 for listed companies and banks (Salaris, 2020). In fact, the consequent substantial increase of women on corporate boards is often the result of internal and external pressures for diversity (Farrell & Hersch, 2005), as homogeneous groups may impede innovation (Miller and Triana, 2009). Overall, the Italian binding gender quotas did not lead to any relevant change on key-decision roles, as women are more represented in non-executive functions or underrepresented positions, especially in non-listed banks (De Vita &

Magliocco, 2018). A clear dichotomy between listed and unlisted banking companies showed that the former presented a satisfactory increase of the number of women in the main decision-making bodies, whereas the latter had a significantly lower score (26% against 11%; De Vita & Magliocco, 2018). A Cerved (2018) report indicated that the number of women CEOs in listed Italian companies is still very low (only 7.9%). According to Consob (2019), at the end of 2017, the percentage of Italian listed and unlisted companies respecting the gender equality, at least as a façade, was respectively of 100% and 63%, hence representing 33.5% of the directors of the 237 listed companies (9.3% more than 2016). Conversely, Cerved (2018) assumes that the Golfo-Mosca Law may have had indirect effects on unlisted companies, as from the introduction of the law in 2011, the number of women CEOs has declined from 3.2% in 2013 to 2.6% in 2015 (Pastore & Tommaso, 2016). More importantly, it is necessary to shift attention from simple numbers (how many women) to merit (which women), and the possibility of giving visibility and opportunities to capable women (Pastore, 2018). In fact, while the introduction of gender quotas boosted the opening of the boards to women, access is still mainly concentrated on non-executive roles (Tettamanzi, 2016), and the women in power positions have no real possibility of exercising it (Pastore, 2018), hence making quotas the proof of women's *"inability to manage on their own"* (De Vita & Magliocco, 2018).

Consequences of gender bias and gender quotas

Gender discrimination can lead to more severe consequences, such as sexual harassment and micro aggressions taking place at work, which represent major issues that women face, and that can stain them with regressed trauma (Batool et al., 2020). Several important psychological and personal consequences for female employees indicate that perceived gender discrimination is associated with a variety of negative organizational outcomes, such as higher turnover rates and lower levels of organizational commitment (Dalton et al., 2014).

It is important to recognize that both women and men are negatively impacted by organizational sexism, concluding that gender discrimination is a societal problem rather than a women-only issue. Further, microaggressions devalue women and dismiss many of their accomplishments, thereby limiting women's effectiveness, and contributing to a detrimental work environment, impacting directly on overall employees' performance (Metinyurt et al., 2021). Lennartz et al. (2019) focused on unconscious cognition in relation with the behavior towards individuals, highlighting that it leads to marginalization and humiliation, through verbal and nonverbal discriminatory behaviors that are often uneasy to recognize, but are distinguished for their consequential and repetitive behavior. The fact that women hardly reach the highest positions in the firms' hierarchy, and their underrepresentation even in middle management, causes a direct effect on women's discrimination in the labor market, meaning that whether quotas are in place or not, women are ultimately those who pay the highest price in terms of career progress. This is further worsened by the fact that although Italian women surpass men in educational level and academic results, it remains more difficult for them to find a job and they are often allocated in lower qualified and lower paid positions (Hassink & Russo, 2010), with informal contracts (Bratti et al., 2005) and are less likely to move from a temporary to a permanent contract (Corsini & Guerrazzi, 2007). According to Cavaletto et al. (2019), the picture emerging from empirical analysis is rather complex, but clear: barriers to women's recruitment and career advancements persist in the absence of a constructive dialogue on the issues of reconciliation and flexibility between the parties involved (enterprises, institutions, unions, families).

Experimental study

Hypothesis

Three core sets of hypotheses emerged from the literature review:

H1: *Existence of a dissociation between explicit and implicit measures of gender bias. The existence of such dissociation would be indexed by either low or no correlation between implicit and explicit scores.*

H2a: *Positive correlation between age and implicit and explicit indices of gender bias.*

H2b: *Higher explicit and implicit gender bias in male participants as compared to female ones.*

H2c: *Higher implicit gender bias as compared to explicit one in female participants.*

H2d: *Higher implicit and explicit gender bias in participant with children as compared to those without children.*

H2e: *Positive correlation between the Conscientiousness scale (HEXACO) and implicit and explicit gender bias.*

H2f: *Negative correlation between the Openness to experience scale (HEXACO) and implicit and explicit gender bias.*

H3: *There exists an inverse relationship between the extent to which organizations adhere to policies aimed at decreasing gender bias in the workplace and the implicit and explicit scores of gender bias.*

Hypothesis 1 aims at testing whether there exists a dissociation between implicit and explicit gender bias, highlighting that implicit and explicit scores may present a discrepancy, meaning that participants may tend to externalize a positive acceptance towards women (absence of a gender bias), but they do not value women at the pair of a man, especially in a work setting (presence of a gender bias). Hypothesis 2 attempts to understand the phenomenon of gender bias on personal characteristics such as age, family status, gender and personality characteristics. Hypothesis 3 focuses on a specific variable that has largely been dealt with through the literature review: gender quotas. This hypothesis assumes that with the higher

adherence to gender quotas or presence in gender-related classifications, the tolerance towards the effective acceptance of women decreases, causing a paradoxical inverse effect.

Methodology

Participants were recruited upon the requirement of being bank employees of six out of the main banks extended on the territory of metropolitan Rome. For privacy reasons, they will be referred to as Bank 1, Bank 2, Bank 3, Bank 4, Bank 5 and Bank 6. The total amount of subjects recruited was 57 (age: $m = 38.98 \pm 11.38$ s.d.): 25 from Bank 1 (43,9% of the total dataset), 9 from Bank 2 (15,8%), 10 from Bank 3 (17,5%), 8 from Bank 4 (14%), 2 from Bank 5 (3,5%), and 1 from Bank 6 (1,8%). The majority (71,9%) spent 18 years in education (i.e., earned a master's degree), were aged between 23 and 35 years old (47,4%), were married (38,6%) and did not have children (57,9%). The adherence of genders was quite homogeneous, with the percentage of male participants being 47,4% and female participants 52,6% of the dataset.

The experimental procedure was composed as follows:

1. Implicit Association Test (i.e., IAT), to test the implicit level of gender bias.
2. Demographical and work-related information section.
3. Gender Role Stereotype Scale (i.e., GRSS) and
4. Social Role Questionnaire (i.e., SRQ), to test explicit gender bias.
5. HEXACO, for the non-clinical assessment of personality.

The novelty of bringing together the explicit and implicit variables to investigate the presence of a tacit non-manifested gender bias could be a crucial tool towards the elimination of gender discrimination at work. In fact, it has been highlighted that when both implicit and explicit measures are incorporated in a model, the dual-construct model is a superior fit than a single-construct model (Bar-Anan & Vianello, 2018), predicting behaviors in ways that may be independent from explicit measures (Fung et al., 2022). The usage of the IAT lies in

experimental evidence suggesting that an implicit measure of gender bias explains some variability in attitudes that self-report measures do not (Crescentini et al., 2014; LaBouff et al., 2010), as answers are more difficult to control and do not require the respondent's intent to self-evaluate (Greenwald et al., 1998; 2000). This Implicit Association Task (IAT) consists of seven blocks, lasting about 10 minutes, in which a series of stimulus words appear at the center of the screen and must be associated with the stimulus categories shown on the upper left or right corner of the screen by pressing two corresponding response keys (i.e., key "E" and key "I", for left and right side, respectively), categorizing a series of words belonging to either the "family" vs. "career", or the "female" vs. "male" categories. The presence of an implicit gender bias is determined when a shorter number of reaction times and higher number of errors in categorization are observed in associating stimuli in the "female" category with those in the "family" category, and "male" related words with "career" words (congruent condition) as compared to the reverse association (incongruent condition). In order to obtain a single variable that considers both the speed and the accuracy of the answers, the procedure for this research foresees the assembly of both features to estimate the D-score index– validated in literature (Calluso et al., 2020; Crescentini et al., 2014; Cattaneo et al., 2011; Greenwald et al., 2003) – can guarantee the correctness of the accuracy and the variability of reaction timings (see the main text for calculations' details). The D-score results in an index roughly varying between -1 and +1, where +1 corresponds to the presence of a bias towards women at work, is to say a strong association between women and family; 0 indicates the absence of any implicit association; and finally, -1 indicates the presence of a bias towards men at work, is to say a strong association between men and family.

In the second part of the experiment, participants were asked to fill two questionnaires aimed at evaluating their explicit attitudes/biases toward gender (i.e., Gender Role Stereotype Scale - GRSS; Mills et al., 2012 and Social Roles Questionnaire - SRQ; Baber & Tucker, 2006),

and a third questionnaire for the non-clinical evaluation of personality (i.e., HEXACO; Ashton & Lee, 2009; Lee & Ashton, 2004, based upon De Vries, 2013).

Afterwards, the indices obtained from the analysis of the IAT, the explicit tests and the personality measure have been converted into z-scores before conducting the statistical analysis, to allow the execution of the comparative analysis between the explicit and implicit index, generating a homogeneous range of values.

To test hypothesis 1, a series of Pearson correlations was computed between the D-score (implicit bias) and the total score of the two explicit tests, with the aim of verifying the presence of an association or dissociation between the implicit and explicit dimension of the gender bias. The Pearson correlation was therefore employed to test the existing relationship between the implicit measure of gender bias (i.e., IAT D-score) and the explicit ones (i.e., SRQ and GRSS scales). Additionally, the coefficient of determination was computed in order to establish how much of the variance was explained by the correlational effect.

In order to test the set of hypotheses 2, some additional analyses were conducted to investigate the relationship between implicit and explicit measures of bias and individual characteristics such as age, gender, and whether participants had children. To this aim, a Pearson correlation between the implicit (D-score) and explicit (GRSS, SRQ) and the age of participants was computed (H2a). Following, a repeated measures ANOVA with the 2-levels between factor gender (F, M) and the 3-level within factor type of bias (D-score, GRSS, SRQ) (H2b-c). Finally, a repeated measures ANOVA with the 2-levels between factor children (Yes, No) and the 3-level within factor type of bias (D-score, GRSS, SRQ) (H2d). Then, it was verified if the relationship between personality traits and measures of explicit and implicit gender bias exists, and this investigation was again conducted by computing a series of Persons correlations (H2e-f).

To test hypothesis 3, as a first step an exploratory analysis was conducted to investigate the level of implicit and explicit gender bias across the different banks composing the sample. To this aim, two banks were excluded from the analyses because of insufficient subjects' pool; therefore, the analysis entailed 4 banks and a total of 54 participants. A repeated measures ANOVA with the 4-levels between factor bank (Bank 1, Bank 2, Bank 3 and Bank 4) and the 3-level within factor type of bias (D-score, GRSS, SRQ) was conducted to investigate possible differences across them.

Finally, to directly test hypothesis 3, the relationship between the adherence to gender quotas and the existence of implicit and explicit gender bias was tested. To this aim, all the 6 banks belonging to the sample were categorized according to the Bloomberg Gender Equality Index (B-GEI). Within such list are included publicly traded companies that meet the criteria and have a GEI score above a global threshold established by Bloomberg to reflect a high level of disclosure and overall performance across five dimensions: i., Leadership and talent pipeline; ii., Equal pay and gender pay parity; iii., Inclusive culture; iv., Anti-sexual harassment policies; v., External brand. Hence, the inclusion in the Bloomberg index is here considered as a criterion of virtuosity in terms of gender equality. Three of the banks in the sample were included in the Bloomberg GEI (for a total of 25 participants out of 57), whereas the remaining three were not included (for a total of 32 participants out of 57). Hence, a repeated measures ANOVA with a 2-levels between factor B-GEI (Included, Excluded) and the 3-level within factor type of bias (D-score, SRQ, GRSS) was conducted to investigate whether belonging to the B-GEI had an impact upon implicit and explicit measures of gender bias.

Results

H1. No statistically significant correlations was found between the D-score and the scores obtained in the scales and subscales of the Gender Role Stereotype Scale (GRSS: $r = 0.08$, $p = 0.57$; GP-M: $r = -0.11$, $p = 0.40$; GB-F: $r = 0.19$, $p = 0.16$). Conversely, the scale and

subscales of the Social Role Questionnaire all showed a significant correlation (SRQ: $r = 0.32$, $p = 0.02$; SRQ-GT: $r = 0.27$, $p = 0.05$; SRQ-GL: $r = 0.29$, $p = 0.03$). Despite the statistical significance, the coefficient of determination showed that only 7-10% of the variance was explained by the correlational effect between the two measures.

H2. Non statistically significant correlation was found between age and the three measures of gender bias (SRQ: $r = 0.03$, $p = 0.84$; D-score: $r = 0.13$, $p = 0.34$), however, a weak trend toward a negative correlation was only observed between age and the Gender Role Stereotype Scale (GRSS: $r = -0.22$, $p = 0.10$). With respect to the effect of gender, the results of the repeated measures ANOVA gender (F, M) by type of bias (D-score, GRSS, SRQ), revealed a statistically significant main effect of the gender ($F_{1,55} = 10.80$, $p < 0.001$, Power ($\beta-1$) = 0.90), indicating the female participants showed an overall higher gender bias as compared to male participants. The main effect of the type of bias was found non-significant ($F_{1,55} = 0.05$, $p = 0.95$, Power ($\beta-1$) = 0.06), whereas the gender by type interaction was statistically significant ($F_{2,110} = 17.21$, $p < 0.001$, Power ($\beta-1$) = 1.00). The post-hoc analysis revealed that female participants showed a higher score in the GRSS scale as compared to male ($p < 0.001$), while no differences were observed between male and female participants in the SRQ scores nor the D-score; additionally, the GRSS score of female participants was also higher than the SRQ score ($p < 0.001$) as well as the D-score ($p < 0.001$), while all the other comparisons were non-significant. With respect to impact of the presence of children in the household, the results of the repeated measures ANOVA children (Yes, No) by type of bias (D-score, GRSS, SRQ) indicated that none of the effects was statistically significant (Children: $F_{1,55} = 1.48$, $p = 0.22$, Power ($\beta-1$) = 0.22; Type: $F_{1,55} = 0.02$, $p = 0.97$, Power ($\beta-1$) = 0.05; Children by Type: $F_{2,110} = 1.00$, $p = 0.37$, Power ($\beta-1$) = 0.22) hence indicating that the presence of children did not impact upon gender bias. Finally, with respect to the personality facets, statistically significant correlations were found only between the SRQ and

the eXtraversion ($r = 0.40$, $p < 0.01$) and Conscientiousness scale ($r = 0.45$, $p < 0.01$), and between the D-score and the Conscientiousness scale ($r = 0.31$, $p < 0.05$).

H3. The results of the repeated measures ANOVA bank (Bank 1, Bank 2, Bank 3 and Bank 4) by type of bias (D-score, GRSS, SRQ) revealed only a statistically significant main effect of Bank ($F_{3,50} = 3.11$, $p = 0.03$, Power ($\beta-1$) = 0.69). The post-hoc inspection revealed that Bank 1 was characterized by a lower gender bias (regardless of whether explicit or implicit) as compared to both Bank 2 ($p = 0.02$) and Bank 3 ($p = 0.04$), while no difference was observed with Bank 4 ($p = 0.73$); further, Bank 4 showed a lower bias as compared to Bank 2 ($p = 0.04$), while the difference with Bank 3 was only marginally significant ($p = 0.06$); all the other comparisons were found non-significant. The final analysis was aimed at testing whether banks included (or not) in the Bloomberg Gender Equality Index displayed different levels of implicit and explicit gender bias, using a repeated measures ANOVA B-GEI (Included, Excluded) by type of bias (D-score, SRQ, GRSS). The main effect of B-GEI was found statistically significant ($F_{1,55} = 4.53$, $p = 0.04$, Power ($\beta-1$) = 0.55), hence indicating that banks included in the B-GEI displayed a significantly higher level of gender bias (cross the three indices of implicit and explicit bias, i.e., D-score, SRQ, GRSS) compared to banks excluded from such index.

Discussion

The fact that the participants' answers to the GRSS test are not congruent with the implicit bias, shows an evident divergence between the implicit and the explicit measure. The variance of 7-10% of the overall variance, indicated that a large part of implicit gender bias remains unaccounted for when employing explicit tools to measure the existence of such bias. Therefore, in order to recognize and act upon gender bias in the workplace, measuring only explicit components is not enough to obtain a clear picture of the situation. In light of the results concerning hypothesis 2, the individual characteristics that showed relevance were the

parameters of gender and two HEXACO personality traits (Consciousness and eXtraversion). For what concerns Consciousness, it is not surprising that individuals with this trait present a higher gender bias, as they are by nature more rigid and prone to conforming to social norms, hence more inclined to show a gender bias. The positive correlation found between explicit gender bias and eXtraversion was unexpected and will be further investigated. A worth-mentioning result was the impact of gender on the increase of the bias, as the result showed that there is a slight predisposition by female participants to be more gender biased. This result can be explained by the self-fulfilling prophecy (Merton, 1948) and by the tendency, described in the literature, to internalize prejudice and stigma on the part of the affected group (i.e., self-stigma; Corrigan et al., 2002), and further raise the question on whether women could play a big role in the responsibility held for the so called “*glass ceiling*”, in fitting into a cluster that does not necessarily represent them. Importantly, the different trend observed between the SRQ and GRSS, can also be explained by the inherent differences across the two measures, as the SRQ evaluates a more abstract dimension of gender bias related to the individual perception of roles in society, the GRSS asked participants to rate the likelihood of performing certain male/female stereotyped chores.

Confirming the statement by Pastore and Tommaso (2016), who claimed that it is not sufficient to increase the number of women in top positions of the companies without considering the importance of cultural change and knowledge of female potential, hypothesis 3 was validated in this research. Overall, the third hypothesis’ objective was investigating the impact of external factors such as the imposition of gender quotas and conformity to gender-equality policies. It was found that all six banks were obliged to comply with the Golfo-Mosca Law; however, only three of them were listed in the Bloomberg Gender Equality Index (B-GEI). The Bloomberg GEI includes a limited number of organizations that stood out for their gender equality, based on five dimensions: i., Leadership and talent pipeline; ii.,

Equal pay and gender pay parity; iii., Inclusive culture; iv., Anti-sexual harassment policies; v., External brand. The results demonstrated a strong divergence between the implicit and explicit measures of gender bias of banks included vs. excluded from the Bloomberg index. Banks which were excluded from the index presented the lowest average gender bias, whereas the three GEI-mentioned banks presented the highest average results in all three dimensions. This analysis revealed that the mere implementation of policies aimed at balancing the presence of woman in the workplace, without a real change in cultural and societal values, may even have a detrimental effect of strengthening the idea that women are only holding certain positions in light of such policies (i.e., gender quotas), rather than because they are capable or deserving.

Main take-aways

The current study allowed to highlight how gender bias comprises an implicit dimension that is dissociated from the explicit one, stressing how behaviors of stereotyping, tacit segregation, underestimation, and social ostracism can often find a fertile path in a workplace. Despite an inclusive behavior that fully integrates female colleagues, subordinates or superiors, it has been demonstrated that it can be a façade to comply with upgraded norms and trends, meanwhile brooding feelings of implicit sexism towards the female counterpart. The insignificant correlation between the implicit and explicit measure stresses the relevance of the intrinsic dimension, highlighting the necessity of investigating in depth without limiting the research to a superficial analysis. In relation to this, the second most conclusive result was the denouement that the adhesion to policies and the classification in indices promoting gender equality can be detrimental to the perception of female workers. In particular, the presence of women who have been appointed as leaders only because there was a requirement to meet gender quotas can backfire and cause the reverse effect on the perception of women's work and performance overall. It has been considered how the line

between an implicit gender bias and an explicit manifestation is often thin, but nonetheless significant in an optic of valorization of human capital within the organization. The conclusion was that a trend in the organizational culture is not sufficient to implement a rooted sustainable change within employees' perception of female colleagues. The full picture of the conclusion defined a suggestion for future research, where the dataset can be expanded to a larger group of subjects; preferably with more heterogeneity role-wise, to test the '*role strain*' (Simpson, 2005). Moreover, it would be beneficial to obtain a higher number of responses from parents, to verify a potential difference between the implicit and explicit gender bias in fathers versus mothers, and another potential divergence between women with children and women without children. Lastly, it can be worth enlarging the overall dataset to include non-quoted banks as well, in order to verify how the adherence to gender quotas impacts banks' level of gender bias.