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ATTITUDES TOWARD WOMEN MANAGERS.

Characteristics of gender stereotypes and their socialization.

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Introduction

The assessment of attitudes towards women managers can be located within the context of gender studies. These tend to promote greater knowledge and understanding of major issues related to gender with the goal of reducing prejudice and discrimination linked to gender and/or sexual orientation. In the present work some aspects of cognitive processes underlying judgments about women aspiring to management and high-profile professional roles are examined. These professional roles are characterized by high levels of responsibility and power that are traditionally perceived as appropriate for men.

In the present studies the terms “leader” and “manager” are used interchangeably. Although in some situations a distinction between the two terms can be helpful, or even necessary (e. g. research and studies in the field of organizational psychology and/or research and studies realized in organizational contexts), this project stems from the analysis of social psychology’s studies that do not make differences between the roles, functions or the definitions of leader and manager terms.

The issue is approached through social psychology’s established theoretical models, and their recent insights, to have a solid theoretical framework and thus test recently formulated hypothesis. The focus of the research is represented by the way people organize knowledge about the overlap between women and managers and how this knowledge is used in social judgment. These processes are assessed through explicit and implicit measures in several samples.

Chapter 1 describes the theoretical models behind the studies: the most accepted theories about gender and professional roles, and those about the socialization of gender and gender role beliefs between parents and children.

Chapter 2 describes the study conducted to assess the attribution of Competence, Sociability and Morality toward women as manager.

Chapter 3 describes the study testing the coherence between explicit and implicit measures of stereotype content of female managers.

Finally, results about the socialization of beliefs and judgments on women as manager within the family are described in chapter 4. The last section of the present work is devoted to a general discussion about the results of the three studies conducted and the related conclusions. Limitations and future research suggestions are collected in the same section.

CHAPTER 1

ATTITUDES TOWARD WOMEN MANAGERS: A PSICO-SOCIAL APPROACH

The European Union labor market has been heavily hit by the economic crisis and southern countries are those characterized by the most critical situations. Female employment rates in Italy increased slightly in 2014, but the number of employed people is still very low if compared to the European average rates (Istat, 2015). Unexpectedly, data related to management positions go countertendency: the number of women managers has increased, and among the young managers (under 34 years of age) they have even surpassed men. On the other hand, these data deserve to be explored in details. In fact, the Credit Suisse Research Institute has shown that these apparently comforting data are characterized by the fact that women get these positions mostly in services area (e. g. public relations, human resources), and only to a lesser extent in the operating segments and strategy areas (Dawson, Kersely, & Natella, 2014). Therefore, occupations and roles played by these women are only apparently decisive, in line with subtle and hidden discriminatory phenomena described by Whitley and Kite (2009).

Looking at the characteristics of gender stereotypes towards women, it might be surprising that they could damage their professional career. In line with the "women are wonderful" effect (Eagly & Mladinic, 1994), the judgments stereotypically expressed towards women have a more positive general evaluation than those directed towards men. However, also in this case the information should be observed in detail: the problem, in fact, is in the specific contents of the stereotypes about women. The contents of stereotypes toward women are different than those toward managers and this is one of the factors behind biased assessments in job selection processes (Eagly & Karau, 2002; Heilman, 2001): gender stereotypes suggest the impression that women do not have adequate

characteristics to fill high responsibility professional positions (Koenig, Eagly, Mitchell, & Ristikari, 2011). This issue can be explained using two theoretical constructs: the "Think-manager think-male" phenomenon studied by Schein during 70s and the Role Congruity Model (Eagly & Karau, 2002). The starting point is provided by the definition of the Think manager - Think male phenomenon with a special focus on the Stereotypes Content Model (Fiske, Cuddy, Glick, & Xu, 2002). This last theoretical model, one of the most important in the social psychology domain, was recently expanded and enriched and the present work represented an opportunity to assess the merits of the more recent formulation.

An important role is also played by implicit associations among concepts in semantic memory (Gawronski & Bodenhausen, 2006, 2007), concepts related to the topic of interest in several ways. In fact, a number of studies (e. g. Nosek, 2007) showed that explicit expression of an opinion may differs from its implicit cognitive evaluation and that this incongruence may explain some aspects of still unclear phenomena. Information, expectations and the implicit and explicit associations related to social groups are acquired by people during their developmental path through the contact with various agents of socialization (Brown, 1995). Specifically, the present research focused on gender roles socialization within the family. The specific role of each parent in the transmission of implicit and explicit stereotypes related to gender and professional roles was, thus, studied.

1. 1 Stereotypes toward women managers

Schein in the 70's identified a strong gender stereotype prevalent in the United States: managerial positions were described as a male occupation. Managers, of both sexes, perceived that traits associated with managerial success were more likely to be found in men than in women (Schein, 1973, 1975). This belief can induce a cognitive bias that hinders women professional careers because, given this association of ideas, it's likely that

thinking to the role of a manager (Think manager) encourage the recall of stereotypical men (Think male). In this way, a male candidate may be favored in the selection for a managerial position, in promotions and training. This effect was studied again by Schein in 2001 through the assessment of beliefs expressed by male and female managers and students in several countries. The results showed that while women managers and students revealed lower levels of this stereotypical association, men displayed the same stereotypes expressed by managers in the 70's. These findings confirm the results previously obtained on selected samples in the United States, Great Britain and Germany (Schein & Mueller, 1992) and in China and Japan (Schein, Mueller, Lituchy, & Liu, 1996). Results obtained by Sczensny, Bosak, Neff & Schyns (2004) are partially in line with those obtained in these studies. Men of their sample, characterized by participants from Germany, Australia and India, showed a strong adherence to the stereotype in question. The phenomenon was less pronounced among women except for those from Germany. German women, in fact, when asked to imagine a leader they imagined a men, in line with think manager – think male stereotype, and attributed to him task oriented traits. Indian and, especially, Australian women showed a less stereotypical idea of leadership. Therefore, the features considered as essential for success in management, can vary from country to country but these are generally perceived as more likely to be held by men (Schein, 2001).

Koenig et al. (2011), analyzed the diffusion of sex roles stereotyping of managerial positions. The authors conducted a meta-analysis grouping the studies for their respective theoretical model and the results showed that, in each theoretical framework, a general trend in perceiving the professional role of managers as masculine is proved. The three paradigms are the Agency-Communion Paradigm (Powell & Butterfield, 1979), the Think manager – Think male paradigm (Schein, 2001), mentioned above, and the Masculinity-Femininity Paradigm (Shinar, 1975). The results confirm that, in the studies conducted in the context of these theoretical models, men are more likely to associate leader's

characteristics to those stereotypically used to describe men, and these are different from those used to describe women. Such associations can have concrete repercussions on women's career, making it slower or foreclosing the access to high responsibility professional positions. On the other hand, the meta-analysis showed another information: an increasing level of androgyny in the characterization of the manager role. This trend emerged gradually over the years of publication of the studies and for all the three theoretical paradigms. Therefore, these differences between the characteristics qualifying men, women and managers seem to change and respond to variations in the related stereotypes (Eagly & Karau, 2002). Signals of this change were also reported by Willemsen (2002) who observed that gender-neutral traits acquired growing importance, despite the author obtained an umpteenth proof that characteristics attributed to managers are similar to those attributed to men. Eagly and Karau (2002) and Koenig et al. (2011) proposed an explanation that calls into question changes of the characteristics of organizational contexts and changes of gender stereotypes. In fact, in some cases, top-down management has shown little efficacy in favor of more democratic management based on team work; a management style that recalls communal characteristics. On the other hand, the increase in the number of women occupying high positions may have provided a new example that fosters a change in gender stereotypes and in the roles prescribed to women (Wood & Eagly, 2010). Despite these evidence, however, the main trend observed by Koenig et al. (2011) indicated a clear association between managerial roles and men. Thus, stereotypes continue to enlarge the amount of challenges that women face in their career path to leading positions, making it tortuous and complicated.

1.1.1 Gender roles

The roots of the Think manager - Think male effect can be understood by considering the notion of gender role (Eagly & Karau, 2002; Eagly, Wood, & Diekmann, 2000): a set of beliefs about the characteristics that differentiate men and women and that made them endowed to play specific roles. The core of gender roles theory is that most of traits, behaviors and standards expected by men and women are related to communal and agentic attributes. The communal characteristics are generally ascribed to women and indicate the tendency to take care of people and the interest in others' well-being. On the other hand, the agentic characteristics indicate traits like assertiveness, control and security and are typically attributed to men. The potentially negative effect of gender roles stereotypes against women is due to the dissimilarity, or lack of fit (Heilman, 1995, 2001), between the content of the stereotype and the stereotypical attributes identified as the key to perform certain professional roles, specifically managerial ones. In fact, to achieve success in these areas the most important features are overlapping with agentic traits.

Moreover, this system of beliefs concur to create expectations - both descriptive and prescriptive – about appropriate people's behavior and attitudes (Rudman & Glick, 2001). The descriptive beliefs are socially shared expectations about the way in which members of a social group should be, while the prescriptive beliefs (or injunctive beliefs) indicate the actions and behaviors that members of specific social groups have to take: people who infringe the expectations are subjected to penalties that can take the form of negative evaluations and social sanctions. Thus, women are the target of two forms of prejudice in their attempts to career advancements: from the descriptive point of view they do not appear to be prepared for managerial roles, while, from a prescriptive point of view, they are punished if they play behaviors attributable to the spectrum of agentic traits. Social sanctions range from negative judgments about the abilities and potential of these

women, regardless of whether they actually possess the qualities required to fill non-traditional roles, to negative expectations about the performance they will carry up, and discriminations (Eagly & Diekmann, 2005).

The way leadership is perceived, therefore, creates difficulties for women not only because of the descriptive aspects that point out the discrepancies between the characteristics that women possess and the role of manager, but also because of its prescriptive aspects. In fact, these prescriptions produce ambiguous expectations about the behavior that women should act having to choose between the agentic spectrum, to fulfill the role of leader, and the communal in order to respect gender roles. In any case, the choice could be interpreted as a violation of the norms.

1.2 The content of stereotypes

Recently, the scientific literature on social judgments showed a convergent interest of several researchers on the dimensions that organize the perception of social groups and their evaluation. These dimensions are named differently, depending on the theoretical framework of the authors. For example, Abele and Wojciszke, (2007) referred to these dimensions using terms like “agency” and “communion”, in line with the work of Eagly and Karau (2002), while Fiske, Xu, Cuddy, & Glick (1999) adopted the terms “warmth” and “competence”. Cuddy, Fiske and Glick (2008) observed that while the characteristics of the dimensions of communion and warmth are almost entirely overlapping, the other two differ for some aspects. Agency refers to the concept of realization of effective action, while Competence has a broader definition: it implies the possession of skills and talents such that it would be possible to start actions. This line of research led to an articulated theory with a strong explanatory and predictive power: the Stereotype Content Model (SCM; Fiske et al., 2002). The model states that all the information about stereotyped

social groups are organized along the two dimensions of Competence and Warmth mentioned above. Thus, every group can be described by its position in this bi-dimensional space. The construct of Competence describes the capability attributed to a social group to succeed in reaching goals and in tasks performance. On the other hand, warmth describe trustworthy intent toward others (*ibidem*; Eckes, 2002).

The strength of this model is due to its capability to describe stereotypes toward many different social groups and in many different culture (Cuddy et al., 2009). This high adaptability derives from the function of the two core dimensions: people need to know the value of others intents (information transmitted by Warmth dimension) and if they are capable to carry out them (information transmitted by Competence traits) (Fiske et al., 2002). Moreover, stereotypes content can be predicted from two key variables: Status and Competition of the target group (*ibidem*; Cuddy et al., 2008). The status of a group describes its power and its position in a social system and is related to the fact that the group owns the capability of obtaining resources and manage them. The role of the status as a predictor of Competence is justified through the correspondence bias: the common assumption that people traits can be inferred by their behaviors and their related outcome (Fiske et al., 1999).

On the other hand, the concept of Competition is linked to the interdependence between social groups, to the contrast between their intents and to their proclivity for competition or cooperation (Cuddy et al., 2008). The perceived Competition of a social group suggests the potential threat represented and, therefore, brings to a low level of Warmth.

Social groups characterized by low Status and low Competition are perceived as warm and not competent, these attributions justify the power allocation in the social system and contribute to maintain the status quo. On the other hand, high status – high competition groups are described as highly competent, a trait that accounts for the group position in the

social system. The first group will be the target of paternalistic prejudice while the latter will be the target of the envy prejudice. Generally, these mixed stereotypes are reserved to certain ethnicities, to women, and elderly people: these groups are characterized by attributions of low level of competence and skillfulness, mitigated by affective reaction as compassion, pity and the tendency to protect them.

Glick and Fiske (1996, 2001) described the sexist prejudice as ambivalent. As the authors stated, it is composed by a benevolent dimension and a hostile one: benevolent sexism is directed to women that respect traditional expectations and they are perceived as not competent but warm. In fact, when people evaluate women in general the paternalistic prejudice furnishes the principal framework (Haddock & Zanna, 1994), women are described with positive adjectives related to the sociability and warmth domain. On the other hand, hostile sexism can be related to envy prejudice: the hostile reaction, in fact, is reserved to counter-stereotypical and non-traditional women (e.g. business women, feminists) perceived as highly competent but cold (Glick & Fiske, 2001).

Finally, low status - high competition groups are perceived as cold and threatening but also not competent because of their inability to gain their goals and to satisfy their own necessities. These groups are commonly rejected and the prejudice toward them is characterized by contempt.

On the other hand, positive attributions on both Warmth and Competence dimensions are generally dedicated to the ingroup and to the groups who dominate in the social system (*cultural default*). Therefore, the Stereotype Content Model states that stereotypes emerge from the structure of the social system in which social groups are located and depend on groups relations: Competence is related to the power and the status of a group, while Warmth is determined by their tendency to cooperate or compete with others.

The different attributions of Warmth and Competence to social groups foster different specific emotional and behavioral responses towards them (Cuddy et al., 2004; Fiske et al., 2002). The groups characterized by mixed stereotypes arouse envy and compassion, as stated before (Cuddy et al., 2008). High status – high competition groups are target of envious affective reactions due to the fact that subjects highly competent that gain success seem to steal something from the perceiver and imply his/her lack of ability. Low status – low competition groups provoke pity and sympathy because their failure are attributed to causes that are out of their control, so they depend on others unintentionally. This is the case of elderly people, mentally, and physically disable people. Only groups perceived as non competitive are target of these affective reaction. On the other hand, low status – high competitive groups provoke contempt, angry, and hate. In fact, these groups are perceived as threatening and parasitic because their condition is attributed to their volition to violate the norms of the social system and exploit ingroup resources (e.g. welfare recipients, homeless); in extreme conditions, these groups, can be dehumanized (Harris & Fiske, 2006). Finally, high status – low competitive groups, as the ingroup or the allies, obtain admiration. The lack of threat that characterize them, together with their high level of Competence and the related success make their condition something to aspire to.

The diverse configurations of stereotype contents are also related to specific behavioral responses (Cuddy et al., 2008). The authors describe four types of behavioral patterns: active or passive facilitation and active or passive harm. The difference between active and passive behavior is linked to the amount of intensity and to the intentionality of the behavior, while the distinction between facilitation and harm is linked to the valence of the behavior and the intention to act in favor or against someone. Active facilitation is generally directed toward those outgroup that are target of the paternalistic stereotype, because of their perceived Warmth. On the other hand, they provoke passive harm - that can be shown through the avoidance of these groups - because of the negative trait given

by their low level of Competence. The outgroup subject to an envy stereotype are the target of active harm and passive facilitation. Their high level of competence attract harmful behavior when the target group is perceived as capable to change the status quo and, consequently, is perceived as a threat for the social system. Active or passive harm is enacted towards social groups characterized by emotional responses of contempt, while opposite behaviors are reserved to warm and competent groups.

1.2.1 The dimensions of Warmth: Sociability and Morality

Recently, Leach, Ellemers & Barreto (2007), in the context of the studies on personality traits, stated that Warmth may be composed by two sub-dimensions: Sociability and Morality (see also: Wojciszke, 2005). Traits as sincerity, trustworthiness, and honesty describe Morality, while kindness and friendliness are related to Sociability. Their hypothesis has been verified: the authors, through confirmatory factor analysis observed that in a number of different occasions the tri-factorial model fits the data better than the two-dimensional model both in the perception of ingroup and outgroup. The authors proved that the two dimensions are conceptually distinct, even if linked to the super-ordinate dimension of Warmth, and have different roles in the perception of others at an individual but also at a group level.

Brambilla, Rusconi, Sacchi, & Cherubini (2011) confirmed the result obtained by Leach et al. (2007) analyzing the role of morality in the context of information gathering and impression formation toward ethnic groups. Morality is here defined as the correctness attributed to a group, while Sociability is defined as the tendency to cooperate and to establish relationships with others. The given definition of these traits suggests that a group or an individual can be sincere and honest without being sociable at the same time, and vice versa. Results proved that the two sub-dimensions of Warmth are actually

separated and Morality plays a very important role in the process of information gathering to form a global evaluation of a group. Morality, in fact, is the first element of interest for a perceiver that looks for information about it, since it is believed to suggest the value of others intentions (Brambilla, Sacchi, Rusconi, Cherubini, & Yzerbyt, 2012; Goodwin, Piazza, & Rozin, 2014).

Brambilla, Sacchi, Pagliaro, & Ellemers (2013), moreover, showed how Morality traits attributed to a target group are essential to predict behavioral responses toward it. Similarly to what Cuddy et al. (2008) showed in their work, the authors found out that high level of Morality were associated to a greater tendency to interact with the group and that this relation was mediated by the risk for ingroup security that an outgroup can represent.

1.3 Implicit associations toward women managers

Gender stereotypes and prejudice, together with prescriptions of gender roles, are well known by everyone but not always endorsed (Devine, 1989). Through the contact with persons of many different social groups, the development of cognitive ability during life, and the growth of the experience it is possible that individuals elaborate a system of personal beliefs that diverge from the stereotypes acquired through socialization.

Regarding gender discrimination, many political actions have been enacted to foster gender equality and, in some cases and to a certain extent, something has changed for women. Horizontal segregation, the phenomenon characterized by the concentration of women and men in specific and diverse professional fields (Rosti, 2006), has decreased but other form of discrimination are still working as stated before. These data could seem incongruous if compared to many researches reporting an attenuation of the acceptance of stereotypical beliefs. However, many of these works use explicit measures to assess the how much stereotypical and personal believes overlap and - both for the proclivity to

furnish a positive image of themselves, and/or for an objective difficulty or impossibility of introspection, or also for an actual attempt to contrast a prejudicial attitude - participants can answer in a way that differs from their implicit cognitive processing (Gawronski & Bodenhausen, 2006).

In many cases, implicit measures proved to be useful to explain why people act differently from what may be expected from their explicit statements. For example, Latu et al. (2011) observed that participants tended to reward more men than women in a professional context. This result was inconsistent with the data obtained from explicit assessment of gender attitudes. In fact, all participants overtly shared a positive opinion of the women working in professional contexts. Further information were obtained assessing implicit attitudes through the Successful Manager IAT (SM-IAT): male participants showed the tendency to systematically associate successful manager traits more to men than to women. It is therefore important to consider the use implicit measures to enrich and complete the gather of information that can be obtained through explicit measures administration in the attempt to predict behavior from attitudes.

The fact that people can accidentally enact more or less overt discriminatory behavior and express evaluations biased by stereotypic believes can be explained by the fact that these contents are stored in the social actors' minds and can be accessed implicitly. Thus they can influence cognitive processes in a uncontrolled way every time the cognitive system goes short of resources (Devine, 1989). Many different theoretical models distinguish between diverse psychological processes that can account for the differences between the implicit and explicit cognition. Gawronski and Bodenhausen (2006, 2007) proposed the Associative-Propositional Evaluation Model (APE) which describes the interplay between two processes, the associative process and the propositional process, as the basis of evaluation. The construct generally referred to as implicit attitude is a spontaneous reaction determined by associations automatically activated when a perceiver

encounters a relevant stimulus. This does not require lot of cognitive resources and it may occur whether the subject shares it or not, or considers it true and accurate or not. The same architecture of cognition may be use to describe stereotyping as well. Simply knowing certain stereotypes can lead to reactions biased by the content of the stereotype even if it is considered inappropriate or false. On the other hand, explicit attitudes are linked to the propositional process: this is characterized by inferences derived from many propositional information that the subject considers pertinent for the production of a judgment and it requires a greater amount of cognitive resources. In this case, the subject considers valid and truthful the judgment and in line with his/her beliefs. Therefore, a judgment can be derived from the automatic process but this depend on the fact that the subject recognizes it as a valid source of information and on the evaluation of the implication that this process involves.

Then, the differences between the two process can account for the dissimilarities between implicit associations possessed by people and their beliefs and explicit judgments. The two processes are assessed through different measures. Explicit measures, such as questionnaires, assess the product of cognitive propositional processes that underlie personal beliefs. However, these measure can furnish results distorted by social desirability bias. These could be presented together with implicit measures that let to evaluate automatic associations between concepts to obtain further information about people cognition.

1.3.1 Implicit association about gender

The processes described above are applicable to gender stereotypes: the knowledge of these stereotypes can be linked to stereotypical automatic associations between gender-related concepts (gender – competencies, gender – traits, etc.) that may be or may be not

accepted at an explicit level but that can influence, however, behaviors and judgments. Many different research assessed sexist stereotypical associations through implicit measures, the effect that these association can have on behavior, and the relation between the information assessed through implicit and explicit measures. For example, Rudman and Kilianski (2000) studied attitudes towards female authority. Their results showed that the association between high level of authority and men and low level of authority and women is related to negative attitudes toward female authority and the results were similar for assessment realized through both explicit and implicit measures. The authors concluded that the negative judgments toward female authority were determined by an implicit association between men and authority and by the belief that men are naturally endowed with characteristics that make them suitable for specific roles. The same research showed that there was not a correlation between the result obtained through implicit and explicit assessment measures, so even subjects who show explicit egalitarian beliefs can possess implicit stereotypical associations between gender and authority.

Gender roles contents described by Eagly et al.(2000) were studied through implicit assessment measures and the results confirmed that subjects possess implicit associations between communal and agentic traits and gender. Rudman and Glick (2001), observed that people who possess implicit associations in line with stereotypical gender roles tend to perceive women as inexperienced and unpleasant when they have to be evaluated for high-responsibility professional position, specifically in the case of feminized management positions. Therefore, these associations influence the judgment toward women who act counter-stereotypically and violate prescriptions.

Implicit measures can be also used to assess the occupational gender stereotypes. White and White (2006), demonstrated the implicit tendency to associate men with engineer and accountant professions and women with teaching. The results obtained through the Implicit Association Test (IAT; Greenwald, MacGhee, & Schwartz, 1998)

were different from those obtained through the questionnaire: the results obtained through the explicit measure, in fact, showed that participants tended to consider the accountant profession as a gender-neutral profession. The authors concluded that the assessment of implicit cognitive processes is important because it contributes to explain the reason why people who show explicit egalitarian attitudes toward women in professional context, on the other hand, react differently to men and women for different professional roles.

Stereotypical implicit associations can influence judgment toward a subject representative of a group but these associations can also affect the individual who possesses them and even his/her choices for the future. For example, implicit gender stereotypes related to inclination toward science and mathematics in women highly identified with the prescribed gender roles influence negatively their performance and their aspiration to pursue scientific professional career (Kiefer & Sekaquaptewa, 2007). These contents are acquired through the socialization processes that characterize individuals development and their experiences in the social world. Therefore, it is important to study this process of transmission incorporating also the subjects involved in it.

1.4 Socialization of gender attitudes

Gender socialization is the process through which children become part of their social system, by learning and respecting norms and expectation related to their sex, and become acquainted with gender roles (Brown, 1995). The agents of socialization, directly and indirectly, furnish to individuals the notions that allow them to comprehend the social context, to act within it, and to communicate with others. The principal socialization agencies are family, peer group, institutions, and mass media and together they contribute the diffusion of stereotype contents and prejudice related to social groups in general, and to social groups differentiated by gender (Allport, 1954; Bussey & Bandura, 1999). The

present work focused on the role played by family: the way parent's personal beliefs, at an implicit and at an explicit level, can influence the acquisition of gender stereotypes of their children.

Several research show that the influence played by parents on their children in the development of intergroup attitudes and values in general is unquestionable (Degner & Dalege, 2013; Gniewosz & Noack, 2015; O'Bryan, Fischebein, & Ritchey, 2004; Steinberg, 2001). Similarly, gender attitudes of parents are related to those developed by their children. Parents' gender beliefs influence those possessed by children since the first year of age (Hoffman & Kloska, 1995) and gender schema held by parents are related with cognitions about gender of their children (Tenenbaum & Leaper, 2002). For example, in scientific literature can be found many studies demonstrating the role of parents in influencing children gender roles attitudes (i.e. Halpern & Perry-Jenkins, 2016) and children's future roles (e.g. Croft, Schmader, Block, & Scott Baron, 2014). Other example of research studying the influence of parents on gender related attitude are those focused on the transmission of gender stereotypes about women and girl performance in math under stereotypes threat, in the transmission of negative attitude toward math to daughters and in the influence on daughters' proclivity in choosing STEM fields for future profession (e.g. Gunderson, Ramirez, Levine, Beilock, 2012; Shapiro & Williams, 2012; Tomasetto, Alparone, Cadinu, 2011; Tomasetto, Mirisola, Galdi, Cadinu, 2015).

Generally, in families characterized by high level of sexism, children develop an acquaintance of traditional gender roles earlier than children raised in families in which parents are more egalitarian (Fagot & Leinbach, 1995; Fulcher, Sutfin, & Patterson, 2007). Mothers' benevolent sexism is transmitted to their daughters and this affect negatively daughters' objectives and academic performances (Montañés et al., 2012). An important function could also be played by implicit gender stereotypes held by parents. Children's

acquaintance of explicit gender stereotypes are related to implicit stereotypes held by their fathers (Carraro, Castelli, Matteoli, Pascoletti, & Gawronski, 2011).

These outcomes can be due to both attitudes and opinions overtly expressed and to the observation of particular behavior acted by parents. When fathers show a greater participation in parenting - even in those aspects traditionally ascribed to mothers – children show less adherence to gender stereotypes (Deutsch, Servis, & Payne, 2001). Thus, parents can convey attitudes and attitudes content through their own behavior. Actions openly directed towards or against an outgroup and/or action that shape the context in which children live (i.e., furnishing toys stereotypically related to children's gender, assigning different domestic works to boys and girls) can transmit precise messages and influence the attitudes of children themselves (Witt, 1997). For example, Rudman (2004) affirmed that even early preverbal experiences can influence implicit attitudes, including gender attitudes.

Moreover, explicit judgments and evaluations declared by individuals can differ from the implicit ones and, even if parents openly express a positive attitude toward a social group, indirectly they can vehicle a different message to their children. For example, in Castelli, Zogmaister, and Tomelleri (2009) research it is detected a low or non-significant relation between racial stereotypes of parents and children between 3 and 6 years of age in case of assessment through explicit measure. At the same time, the relation between their implicit association is significant.

Socialization experiences in the family context during childhood deserve interest because they are related to professional career decision of children and, by extension, to occupational segregation (Eccles, Jacobs, & Harold, 1990; Fox & Lawless, 2003; Lawson, Crouter, & McHale, 2015). An important role is surely played by gender role stereotypes held by parents, but other factors are also important: children in traditional families, as those in which mothers are employed in professions stereotypically associated to women or

families in which father is the only breadwinner, tend to prefer professional fields linked to stereotypical gender roles (Lawson et al., 2015). Fulcher et al. (2007), showed that families in which parents are more egalitarian about gender roles and in which parenting were equally distributed between mother and father are those in which children showed a lower tendency in categorizing jobs and career aspirations according to stereotypical occupation rules. On the contrary, children raised in families characterized by a traditional separation of parenting roles showed the tendency to prefer for themselves professions stereotypically associated with their gender and to attribute low level of importance to professions stereotypically related to the other gender.

More recently, Croft et al. (2014) realized a study on the effect of implicit and explicit gender role beliefs held by parents and the division of housework between parents on their children gender role beliefs and children occupational interest for the future. The results show that low level of gender stereotype toward work of daughters were predicted by their father's implicit association toward gender roles and their father involvement in housework. Explicit beliefs about gender role possessed by mothers were predictive of gender roles beliefs held by children.

However, this proved relation must be observed by considering several moderating factors. One of these factor is the age of children. In fact, many variables can change with the passing of the time: cognitive capabilities, social capabilities, group contact, and the interaction with new socialization agency such as the peer group and teachers that during adolescence acquire greater importance and furnish new information (Nesdale, 2004). Because of these experiences, parental influence can fade and it could be possible to observe differences in attitudes expressed by children. Other causes for the deviations from parental attitudes are the normative change in the parents-children relationship and the process of separation that characterize adolescence (Jaspers, Lubbers, & de Vries, 2008; Steinberg, 2001).

On the other hand, the role played by the sex of parents and those of children seems to be ambivalent; there are no overwhelming evidences that mother-daughter or father-son dyads are characterized by a higher similarity between their stereotypes compared to mixed dyads (Degner & Dalege, 2013). These outcome could be due to the fact that an important role is played, instead, by the identification with the parents: children who identify more strongly with one of the parents tend to share his/her attitudes (Sinclair, Dunn, & Lowery, 2005). Thus, some researchers focused their attention on the like-sex effect but the results are not univocal. There are not clear evidences that one of the two parents is more influent than the other in gender role and stereotypes transmission. For example, Kulik (2002) observed a like-sex effect: fathers stereotypes influenced those of their sons. On the other hand, Lawson et al. (2015) found that sons were more influenced by their mothers. Carraro et al. (2011), again, found out a significant relation between fathers' implicit gender stereotype and those of their sons. Otherwise, Crespi (2004) observed that explicit gender attitudes of mothers and fathers were predictive of gender attitudes of their children, both female and male.

These evidences suggest that family context is fundamental for the acquisition of gender roles, gender stereotypes and for the development of interests toward future occupations. On the other hand, while some data are available about relations between parents and children attitudes during childhood, little information are available about the relation between implicit attitudes held by parents and their adolescent children. For this age group a contribute is provided by Sherman, Chassin, Presson, Seo & Macy (2009): their research was focused on the transmission of attitudes toward smoking and the results show a significant relation between implicit attitudes held by parents and children. The author of the present work is not aware of any research focused on the transmission of stereotypes toward managerial position and gender within the family, so this work is an attempt to shed some light also on this particular case.

1.5 Research overview

Despite some progress in favor of women in the labor market, especially for what concern the horizontal segregation, some forms of discrimination are still ongoing and they contribute to make women's career development more difficult. The present work aimed at analyzing some aspect of the background of this phenomenon such as the features of the stereotypes toward women as managers and the implicit association between management positions and gender. In fact, the first two study were dedicated to these two aspects.

Specifically, the first study explored the content of the stereotype toward women in managerial position by referring to the Stereotype Content Model (Fiske et al., 2002) and the recent insights about the sub-dimensions of Warmth – Morality and Sociability – described by Leach et al. (2007) and Brambilla et al. (2011). In the first study it was verified if the three cited dimensions were adequate to characterize the content of stereotypes toward the target group. The distinction between the two sub-dimensions, in fact, is proved to describe appropriately the dimensions of impression formation about unknown social groups in hypothetical immigration scenario (Brambilla et al., 2012) or in in-group and out-group evaluation, as showed by Leach et al. (2007). On the other hand, fewer information are available about the adequacy of the distinction between Morality and Sociability in describing the stereotype toward women managers. The first study, thus, aimed at fill this gap.

The second study was planned to verify if explicit and implicit cognitive process about women manager were more or less in line with traditional gender roles. Specifically, it was hypothesized that at the explicit level women managers are positively judged both because of an actual change in attitudes toward the target group, as suggested by Koenig et al. (2011), and because of distortions in responses due to their social desirability. On the

other hand, more traditional associations should be held at an implicit level, as suggested by Latu et al. (2011) and Rudman and Kilianski (2000) results.

Finally, the third study was focused on the transmission of implicit and explicit gender role beliefs within the family. The existence of a relationship between explicit gender attitudes between parents and children is supported by a number of studies (e.g. Halpern & Perry-Jenkins, 2016). On the other hand, fewer information are detectable about the relations between parents and children in adolescence and, specifically, on attitudes toward women in leading professional position. In order to fill this gap, in the third study explicit and implicit measures were used to assess the cognitive processes about women managers in parents and children. Data about socio-demographic information and the division of paid work and housework were also collected and analyzed.

CHAPTER 2

Study 1 – CONTENT OF STEREOTYPES TOWARD WOMEN MANAGERS

The first study was rooted on fundamental dimensions of stereotypes described by Fiske et al. (2002) in their SCM. The primary aim of the study was to test the possibility that a tri-factorial solution – such as that proposed by Leach et al. (2007), separating Sociability and Morality within the super-ordinate dimension of Warmth – was useful to describe the stereotype toward women managers. The authors cited above explored these dimensions in the context of ingroup perception, while Brambilla et al. (2011; 2012) used them in the context of impression formation toward ethnic groups. The present study, therefore, represented the possibility to further test this tri-factorial model using a different social group.

Moreover, in the context of the first study the relations between the contents of the stereotypes and Status and Competition attributed to women managers were analyzed. Differences in traits attributions toward the target group due to gender of the respondents were also explored.

2.1 Pilot study

In order to realize the first study, the national and international scientific literature focused on the content of stereotypes toward managers and leaders was analyzed. However, the research selected for the purpose were not completely adequate: in fact, these gathered together the features of the ideal leader in sample of managers or the traits attributed to leaders in context that were different than the Italian one. Moreover, the target group of the present research was peculiar: it is composite, women *and* managers, and the

characteristics attributed to the two social groups that create it are opposite, as stated before.

In the context of the SCM by Fiske et al. (2002), it can be noticed that the characteristics stereotypically ascribed to men are also those attributed to people with high status (Competence), while the characteristics traditionally ascribed to women are overlapping with Warmth traits. These factors suggested the need for a pilot study to assess the way in which people linked the idea of managers and women with the stereotypes' dimensions of Competence, Morality and Sociability.

2.1.1 Method

Participants

99 adults resident in the town of Palermo voluntarily participated in the study (48 male, 51 female, Age mean = 32.1, *SD* = 10.6)

Measures and procedure

Participants were asked to attribute a score for every couple of opposite adjectives presented in the questionnaire to managers social group and women social group through a scale ranging from 1 (Much more "A adjective" than "B adjective") to 7 (Much more "B adjective" than "A adjective"). Their anonymity was assured together with the confidentiality of their data. The list of adjectives were constructed through the study of Brambilla et al. (2012) and Leach et al. (2007) research. The traits for the study of the three dimensions of stereotypes were selected between those used by the cited authors.

In order to select further adjectives useful to describe managers and that, at same time, were functional to the assessment of Competence, Morality and Sociability, Brodbeck et al. (2000); Chung-Herrera and Lankau (2005); Johnson, Murphy, Zewdie, and Reichard (2008) and Schein (2001) research were used. Finally, information about the age and qualification were collected.

Each group of adjectives showed a good reliability for both the target groups: Manager Competence Cronbach's $\alpha = 0.88$, Sociability Cronbach's $\alpha = 0.83$, Morality Cronbach's $\alpha = 0.85$; Women Competence Cronbach's $\alpha = 0.89$, Sociability Cronbach's $\alpha = 0.79$, Morality Cronbach's $\alpha = 0.83$.

2.1.2 Results

Attribution of Competence, Sociability and Morality to target groups

Scores were coded such that higher scores corresponded to higher level of the content of stereotype attributed to women and managers. The mean score reported by the participants for every dimension attributed to target groups are presented in Table 1.

Table 1. Mean score for every dimension attributed to managers and women

	Manager				Women			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Competence	2.43	7	4.97	1.10	1.43	7	4.88	1.22
Sociability	1.50	6.38	4.21	0.97	2	6.88	4.78	0.97
Morality	1.63	6	3.88	1.06	1.75	6.38	4.34	1.06

Comparing the results for each dimension, there were significant differences between the level of Sociability attributed to women and managers ($t(94) = -4.49, p \leq .001$) and between the level of Morality attributed to women and managers ($t(88) = -3.23, p = .002$), with women described as more sociable and moral than managers. On the other hand, there were no significant differences between the level of Competence attributed to the target groups ($t(96) = .726, p = .506$).

The differences between male and female participants were not significant both for women (Competence $t(96) = -1.474, p = .144$; Sociability $t(96) = -.338, p = .736$; Morality $t(94) = -1.404, p = .164$) and managers (Competence $t(96) = 1.129, p = .262$; Sociability $t(94) = -.897, p = .372$; Morality $t(90) = -.512, p = .610$). Similarly, the ANOVAs showed that no difference due to level of qualification was detectable for both target groups except for Morality attributed to women (Women: Competence $F(3, 94) = .591, p = .622$; Sociability $F(3, 94) = 1.513, p = .216$; Morality $F(3, 92) = 2.939, p = .037$; Manager: Competence $F(3, 94) = .004, p = .998$; Sociability $F(3, 92) = .443, p = .723$; Morality $F(3, 88) = .599, p = .617$). Specifically, Hochberg's GT2 test revealed that people who possess university degree attributed, in average, greater level of Morality to women compared to people who possess middle school degree ($p = .023$).

Item – total correlations

In order to identify the terms to use in the items of the principal study, item – total correlations were calculated for each sub – scale (Table 2, 3, and 4). The coefficients were used as a further information about the traits to employ to create the items. Specifically, there were not selected adjectives with too high coefficients ($> .70$) in order to avoid redundancy or adjectives with very low coefficients ($< .30$).

Table 2. Item – total correlations for Competence sub-scale

Competence		
	Manager	Women
Competenti (Leach et al., 2007; Schein, 2001)*	0,600	0,699
Intelligenti (Leach et al., 2007; Chung-Herrera & Lankau, 2005)*	0,632	0,757
Abili (Leach et al., 2007; Chung-Herrera & Lankau)*	0,748	0,634
Qualificati/e (Chung-Herrera & Lankau, 2005)	0,653	0,766
Preparati/e (Schein, 2001)*	0,624	0,663
Capaci (Schein, 2001)	0,752	0,696
Specializzati/e (Schein, 2001, Brodbeck et al., 2000)	0,741	0,631

Note. Only the positive polarity of the adjectives is presented in the table.*Term selected for the formulation of the items to use in the principal study

Table 3. Item – total correlation for Sociability sub-scale

Sociability		
	Manager	Women
Piacevoli (Leach et al., 2007)*	0,483	0,523
Amichevoli (Leach et al., 2007)*	0,529	0,583
Calorosi/e (Leach et al., 2007)*	0,477	0,616
Simpatici/e (Johnson et al., 2008)	0,566	0,603
Gradevoli (Chung-Herrera & Lankau, 2005)	0,670	0,662
Gentili (Chung-Herrera & Lankau, 2005)*	0,535	0,419
Miti (Chung-Herrera & Lankau, 2005)	0,582	0,187
Sensibili (Johnson et al., 2008)	0,569	0,477

Note. Only the positive polarity of the adjectives is presented in the table.*Term selected for the formulation of the items to use in the principal study

Table 4. Item – total correlations for Morality sub-scale

Morality		
	Manager	Women
Onesti/e (Leach et al., 2007)*	0,582	0,585
Sinceri/e (Leach et al., 2007)*	0,559	0,392
Affidabili (Leach et al., 2007)*	0,417	0,699
Corretti/e (Brodbeck et al., 2000)	0,653	0,533

Leali (Brodbeck et al., 2000)	0,701	0,663
Equi/e (Brodbeck et al., 2000)	0,660	0,570
Incorruttibili (Johnson et al., 2008)*	0,464	0,542
Morali (Brodbeck et al., 2000)	0,618	0,504

Note. Only the positive polarity of the adjectives is presented in the table.*Term selected for the formulation of the items to use in the principal study

2.1.3 Discussion

The present pilot study was realized in order to obtain information to create a group of items to assess the attribution of traits described by the SCM (Fiske et al., 2002) and Leach et al. (2007) - Competence, Sociability and Morality – to women managers. Specifically, the pilot study was designed to collect information about the direction of the attribution of traits to the social group of women and to the social group of managers.

The attributions made by the participants about the two target groups were partially in line with expectations suggested by the Think manager-Think male phenomenon described by Schein (2001). Participants, in fact, showed the tendency to ascribe more Sociability and Morality to women than to managers. On the other hand, no significant difference is detected for the attribution of Competence. Factors as gender of the respondents and their qualification did not influenced such attributions, with a minor exception.

These result could be explained as the tendency to describe women as more warm than managers, while this difference is not found for the attribution of Competence. A possible explanation could be related to the fact that an explicit measure that requires to attribute traits to an overtly protected social group as women are, and the social norms that condemn the explicit expression of negative prejudices and stereotypes, can produce a bias in the responses (Fazio & Olson, 2003).

2.2 Study 1

According to Leach et al. (2007), Warmth dimension is composed by Sociability and Morality. Aim of the present study was to understand if this distinction is appropriate to describe women managers. Secondary aim of the study was to assess the level of Status and Competition attributed by participants to the target group and to assess differences between men and women stereotypes. Status and Competition were also studied as predictors of the levels of Warmth and Competence of women managers.

Specific hypothesis were:

- a) Participants attribute to women traits that make them suitable for managerial roles;
- b) Women are more favorable than men toward women managers;
- c) Women managers are described as a high status and high competitive group;
- d) A high Status attributed to the target group is predictive of high level of Competence attribution;
- e) High level of Competition attributed to the target group is predictive of low level of Warmth.

2.2.1 Method

Participants

Six hundred and sixty adults (327 male, 333 female, Mean age = 36.40, $SD = 13.98$) voluntarily took part to the study completing the questionnaire.

Measure and procedure:

Participants were recruited in one of the principal shopping mall in the city of Palermo and were asked to complete an anonymous questionnaire. They were submitted to 19 items that were designed to assess how much women are perceived to be competent, sociable, and moral to perform managerial roles. Participants were asked to indicate the degree of agreement with the statements through a 5 points Likert scale (1 = Not at all; 5 = Extremely). Four items were dedicated to the assessment of the level of Competence attributed to women in managerial roles. Five items were dedicated to the assessment of the level of Sociability of women in managerial roles. In this case the items affirmed that women were too sociable to perform managerial roles, except one which affirmed the opposite. Four items were dedicated to the assessment of the level of Morality of women in managerial role. Specifically, these items affirmed that women are too moral to perform managerial roles.

The terms for these items were choose taking into account the result of the pilot study and the formulation of items of questionnaires toward women managers (e. g. Women As Manager Scale, Manganelli et al., 2012). As affirmed in the pilot study, the selection of the attributes to use for the elaboration of the items was guided by the results of item-scale correlation analysis. The formulation of the final items, similarly, was guided by the results of attribution related to Warmth, Sociability and Morality toward Women and Managers. Traits used by Leach et al. (2007) were also maintained.

Finally, three items assessed the attribution of Status to women managers and three assessed the attribution of Competition. The last six items were those used by Fiske et al. (2002) and translated in Italian.

2.2.2 Results

Exploratory Factor Analysis and Reliability

With the purpose to study the factorial structure of the questionnaire an Exploratory Factor Analysis (EFA) was conducted using R 3.2.5 software, package JGR - Java GUI for R (Helbig, 2015). In order to select the number of factors to retain in the analysis a Principal Component Analysis and a Parallel Analysis were performed. Results suggested 3 components as the best solution (Figure 1).

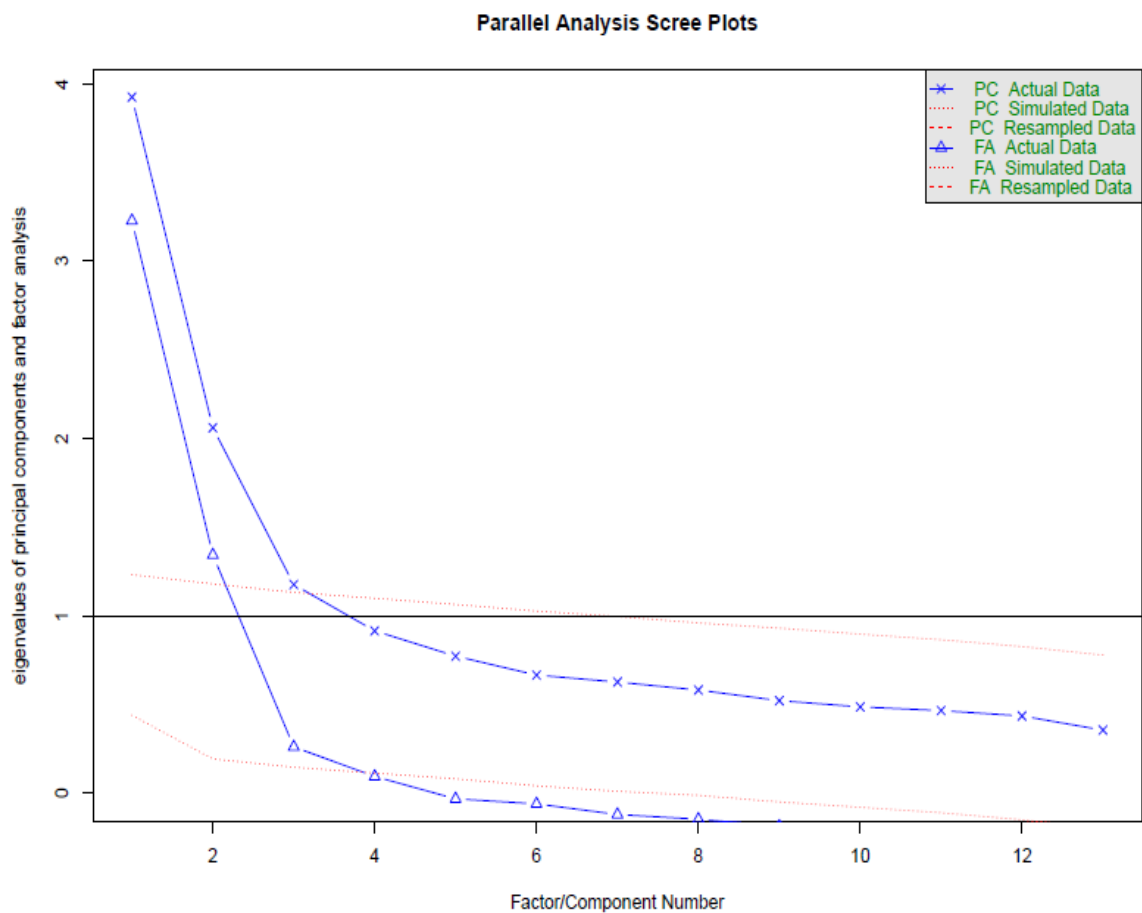


Figure 1

The result of EFA supported the three-factor solution, which accounted for 41% of variance, but do not suggest a clear separation between Sociability and Morality.

Following Costello & Osborne (2005) recommendation, Principal axis Factoring and promax rotation were performed, factor loadings after rotation are presented in Table 5. Using a significant factor criterion of .40, only one item was found to load on more than one factor.

Table 5. Factor loadings after promax rotation for Stereotype Contents Model Women Managers

Item	Factor Loading		
	<i>1</i>	<i>2</i>	<i>3</i>
13 - R. Le donne sono troppo gentili per ricoprire ruoli gestionali	0.69	-0.03	0.13
11 - R. Le donne sono troppo sincere per essere adatte a ricoprire ruoli gestionali	0.66	-0.11	0.20
8 - R. Le donne tendono ad essere incorruttibili e questo le rende inadatte al successo nel campo degli affari	0.65	-0.08	0.01
5 - R. Le donne evitano di risultare spiacevoli nei loro rapporti interpersonali e ciò non le rende adatte a ricoprire ruoli manageriali	0.59	0.05	-0.10
4 - R. Il manager, per poter svolgere il suo lavoro, deve essere capace di una freddezza che le donne non hanno	0.51	0.20	-0.18
6- R. Una donna manager non sarebbe in grado di mettere da parte la propria moralità, nemmeno se ciò fosse necessario per la sopravvivenza dell'azienda	0.50	-0.03	-0.11
1 - R. Le donne sono troppo amichevoli per riuscire a dirigere dei collaboratori in modo efficace	0.50	0.06	-0.04

9. Le donne sono abbastanza intelligenti da riuscire a raggiungere posizioni di vertice nelle organizzazioni per le quali lavorano	-0.04	0.84	-0.05
3. Le donne sono in grado di acquisire le competenze necessarie per raggiungere e mantenere posizioni lavorative di grande responsabilità	0.04	0.73	-0.06
12. Le donne sono sufficientemente preparate per ottenere ruoli manageriali	-0.03	0.70	0.05
7. Le donne sono abili quanto gli uomini nel campo degli affari	0.06	0.68	0.03
2. Una donna manager è capace di agire in modo disonesto qualora sia necessario per il successo dell'azienda	0.06	-0.13	0.52
10. Una donna che vuole gestire con successo un'azienda è capace di imporre le sue decisioni anche a costo di risultare scortese	-0.01	0.37	0.39

Note. Factor loading above .40 are in bold. Item 3 is an adaptation from item 6 of Women As Manager Scale (WAMS; Manganelli et al., 2012)

The first factor extracted gets together the items linked to Morality and Sociability and merged them into a single Warmth factor, it accounted for 19% of variance. On the other hand, all the items linked to Competence loaded on the second factor and it accounted for 18% of variance. Finally, the third factor extracted was loaded by items suggesting that women are low in Warmth enough to act as a manager and put together an item linked to Morality and an item linked to Sociability, it accounted only for 4% of variance. The relation between factors are presented through a path diagram (Figure 2).

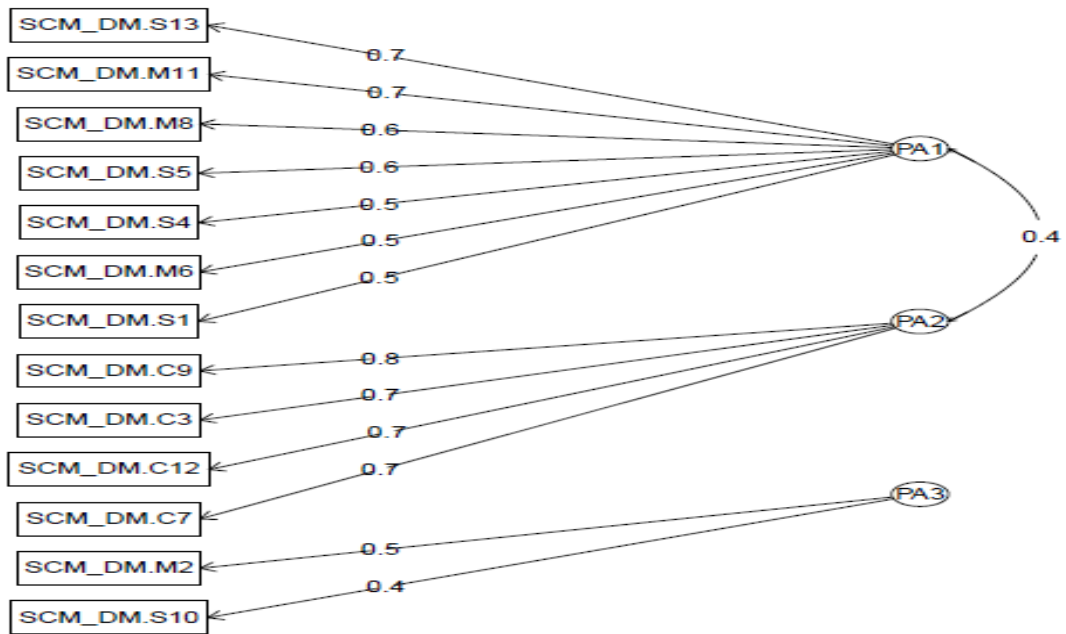


Figure 2

Reliability of the sub-scales was assessed through Cronbach's α . The two principal factor related to the main dimensions of the Stereotype Content Model had good reliability: Warmth Cronbach's $\alpha = 0.79$ and Competence Cronbach's $\alpha = 0.83$. Regarding the remaining items, since only one of it loaded uniquely on a third factor and the other loaded on two factors they were dropped from the other analysis.

Attribution toward women in the role of manager

The scores were coded such that higher score were indicative of attribution of traits useful to perform managerial roles. Following the indication emerged from the results of the EFA and Cronbach's α , scores were calculated separately for the two principal dimension: Warmth and Competence. The descriptive statistics are presented in Table 6.

Table 6. Descriptive statistics of the main variables

Variables	N	Min	Max	Mean	SD	Skewness	Kurtosis
Competence	651	1,25	5	4.18	0.82	-0,97	0,43
Warmth	647	1	5	3.84	0.80	-0,60	-0,21
Status	648	1	5	3.77	0.79	-0,28	-0,22
Competition	651	1	5	1.88	1.02	0,99	0,01

On average, participants attributed to women managers greater level of Competence than traits linked to Warmth, $t(639) = 8.97, p < .001$. Further separate t tests confirmed the existence of differences in the attribution of Warmth and Competence related to gender of the respondents. On average, male respondents attributed to women in managerial position lower level of Competence ($M = 3.90; SD = 0.88; N = 324$) than female respondents ($M = 4,45; SD = 0.66; N = 327$), $t(649) = -9.19, p < .001$. Similarly, male participants attributed to women lower level of Warmth to perform managerial role ($M = 3.71; SD = 0.78; N = 321$) respect to female respondents ($M = 3.96; SD = 0.81, N = 326$), $t(645) = -3.85, p < .001$.

Status and Competition as predictors

The relation between traits and the Status and Competition attributed to women managers were studied through two different linear regressions. As expected, Status was related to Competence attributed to women managers, the model was significant $R^2 = .21$; $F(1,638) = 171.32; p < .001$. Status was a significant positive predictor of Competence $\beta = .46$; $t(638) = 13.09; p < .001$. Similarly, the relation between Competition and Warmth was

statistically significant, $R^2 = .28$; $F(1,639) = 254.67$, $p < .001$, and Competition was a significant negative predictor of Warmth, $\beta = -.53$; $t(639) = 15.96$; $p < .001$.

2.2.3 Discussion

The first study aimed at verify the possibility to split in two different components, Sociability and Morality, the dimension of Warmth described by Fiske et al. (2002) in the SCM in the context of attitude towards women managers. The two components are suggested by Leach et al. (2007) and Brambilla et al. (2011; 2012) in the context of ingroup perception and information gathering, respectively. The EFA suggested a solution clearly distinguishing between Competence and Warmth. On the other hand, the items referred to Sociability and those referred to Morality resulted to contribute together to Warmth dimension. This outcome is in line with Kervyn, Fiske, & Yzerbyt (2015) findings; their work outlines that this distinction and the use of items referred to Morality and Sociability did not enrich Warmth dimension prediction. The authors added that Sociability items could be sufficient to measure properly Warmth dimension.

Another interesting outcome of the present study was linked to the attribution to women in managerial roles made by the participants. Generally, the respondents affirmed that women are competent enough to perform properly as managers and, on the other hand, that they are capable to put aside their Warmth if needed. This result can be interpreted as an indication of a positive attitude toward women in managerial context. Women are wonderful effect (Eagly and Mladinic, 1994), changes in organizational context (Koenig et al., 2010), or the rise of the number of women in the workforce that can affect the feature of gender roles stereotypes (Wood & Eagly, 2010) could account for this outcome. Another result in line with literature (e. g. Manganelli, Bobbio, Canova, 2012) was the differences related to the gender of the respondents. Despite the general trend to attribute

Competence and Warmth adequate to perform managerial roles, male reported lower scores compared to female participants. On the other hand, the relation between Competition and Warmth did not confirm SCM predictions. Fiske et al.(2002) verified that business women and women managers are perceived as highly competitive and that Competition is related to low level of Warmth. Conversely, the findings of the present study showed that women managers were perceived as scarcely competitive despite they were perceived to be capable to put aside Warmth if necessary to act as a manager. Possible explanations for this outcome call into question the women are wonderful effect yet mentioned above, together with the social sanctions for overt prejudice towards protected groups, and probably also the fact that women managers are not perceived as threatening. Kervyn et al. (2015), in fact, found out that Competition is related to perceived realistic threat.

CHAPTER 3

Study 2 - EXPLICIT ATTITUDES AND IMPLICIT ASSOCIATIONS TOWARDS WOMEN MANAGERS

Study 2 was designed to assess explicit and implicit cognitive processing about women in high level professional positions among a group of Italian college students. Specifically, the study had the goal to assess the similarities and differences between the explicit opinions expressed toward women managers and the implicit associations between managerial roles and the social categories 'man' and 'woman'.

The use of an instrument for the evaluation of implicit associations held by respondents lets to expand and enrich the information collected about the target group, as shown by Latu et al. (2011) work. Thus, an adaptation of the Implicit Association Test (IAT; Greenwald et al., 1998) to the issues in question was created. In this case, the IAT was used to explore the automaticity of the associations between two pairs of concepts through the detection of reaction times and errors committed during the test performance. The test was composed of a categorization task divided into different blocks of trials. The level of association between the concepts is then assessed through the speed and accuracy of participants' responses.

Moreover, in order to obtain information about the overall judgment toward the target group, the set of items elaborated in Study I was administered together with a questionnaire designed to assess the general attitude towards women as managers.

It was expected that, in line with the findings in Study 1, respondents showed positive opinions toward women in managerial roles and, at the same time, an implicit tendency to associate the figure of manager with men more than associate it with women.

It was also assumed that the results varied depending on socio-demographic characteristics such as gender and profession carried out by parents of the respondents.

The specific hypothesis were as follows:

- a) Women possess explicit stereotypes and attitudes towards women managers more favorable than men;
- b) Participants associate men with managerial position and women with subordinate position in professional context;
 - b.1) Male participants associate men with managerial position and women with subordinate professional position more than women;
- c) The level of participants' parents professions is a predictor of the implicit association made by participants.

3.1 Method

Participants

Participants were recruited between Milano Bicocca University's students. A total of 42 males and 58 females (100 participants), mean age = 22.58 ($SD = 3.04$) accepted to participate in the study.

Measures and procedure

The entire procedure lasted approximately thirty minutes for each subject, including the initial presentation of the study for the acquisition of informed consent and the final phase of research explanation and answer to questions of participants. For their participation students earned 0.1 course credit (ECTS credits). The sample was presented

with an IAT and two instruments for the explicit assessment of the attitudes toward the target group. The order of presentation of the different tasks was counterbalanced between participants both for compatible and incompatible IAT blocks and for implicit and explicit measures. Participants were assigned to the various conditions randomly. There were administered also items elaborated and used in the first study in order to assess the content of the stereotype and the Italian adaptation of Women As Manager Scale (WAMS) (Manganelli et al., 2012). Finally, were collected information about socio-demographic characteristics of the sample, as gender and age, and participants were asked to indicate how much their parent's profession was perceived as managerial or subordinate through a 1 to 5 scale (1 = completely subordinated; 5 = completely managerial; a sixth options was given = I do not know/ I prefer not to answer).

Explicit Measure

To explore the content of stereotypes toward the target group were used the items of the questionnaire created in the first study aimed at assess Competence (4 items) and Warmth (7 items) attributed to women managers (Competence Cronbach's $\alpha = .78$; Warmth Cronbach's $\alpha = .70$). The Women As Manager Scale (WAMS) (Manganelli et al., 2012) assesses the general attitude towards women as manager (number of items = 21; Cronbach's $\alpha = .92$). Items were rated on a scale from 1 (strongly disagree) to 7 (strongly agree). All the scores were coded so that higher scores corresponded to higher level or positive attribution of the observed variables.

Implicit Measure

The IAT was presented as a categorization task of stimuli belonging to Man/Woman and Manager/Assistant concepts. Four terms were selected for each category; the selection of a reduced number of terms was due to the need to use gender neutral words for Manager/Assistant concepts, not very frequent in Italian language. The selected stimuli for the different categories were as follows:

- Men: Uomo, Lui, Egli, Maschile
- Woman: Donna, Lei, Ella, Femminile
- Manager: Manager, Leader, Dirigente, Presidente
- Assistant: Assistente, Collaboratore, Dipendente, Aiutante.

The participants were asked to relate the stimuli to the concepts classes via computer keyboard; each category was associated with a single button so that the categorization task was univocal and unambiguous.

An assessment of internal consistency was realized through split-half reliability score. Using the order of appearance of the trials, two D score were calculated: one for odd trials and one for even trials of the test blocks. Split-half reliability was, then, calculated correlating even and odd D scores and applying a Spearman-Brown correction: $r = .68$ ($N = 98$).

3.2 Results

Explicit assessment of beliefs toward women as managers

WAMS mean score was computed and the participants showed a general positive attitude toward women as managers, $t(99) = 76.58$, $p < .001$ (Table 7). Similarly,

participants attributed to women level of Competence ($t(99) = 91.64, p < .001$) and Warmth ($t(99) = 83.29, p < .001$) adequate to play the role of manager.

Table 7. Means, Standard Deviations and Correlations of explicit measures

Variables	Correlations				
	<i>M</i>	<i>SD</i>	1	2	3
1. WAMS	6.02	0.76	-	-	-
Male	5.57	0.84			
Female	6.35	0.47			
2. Competence	4.56	0.50	.71**	-	-
Male	4.23	0.54			
Female	4.80	0.29			
3. Warmth	4.32	0.59	.60**	.35**	-
Male	4.12	0.66			
Female	4.47	0.49			

Note. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$

T tests were performed to verify the existence of differences in attitudes toward women managers due to gender of the respondents. Results showed that differences due to gender exist in the general attitudes toward the target group, WAMS $t(98) = -5.97, p < .001$, and women attitudes were more favorable than those of men. Significant differences due to gender were also found for the attribution of Competence and Warmth to women managers. Women attributed higher level of Competence than men to the target group, $t(98) = 6.75, p < .001$. Similarly, female participants attributed Warmth traits to women adequate to properly play the role of manager more than male participants: Women Mean = 4.47, $SD = .49$; Men Mean = 4.12, $SD = .49, t(98) = 3.04, p = .003$.

On the other hand the perception of parents' job as managerial or subordinate did not affect the scores. A series of two-way ANOVAs were conducted to determine the

influence of two independent variables (gender of the respondents and parents' type of job) on WAMS, Warmth and Competence scores. Fifty-four responses for mothers' type of job and 33 participants responses for fathers' type of job were excluded from the analysis because participants decided not to answer.

Regarding WAMS, a significant main effect of gender was detected. The main effect for gender yielded an F ratio of $F(1, 56) = 7.11, p = .010$. No other significant effects were found. The main effect for mothers' type of job yielded an F ratio of $F(1, 56) = .001, p = .971$. Likewise, the interaction effect was not significant, $F(1, 56) = 2.19, p = .144$. Similarly, the results of the ANOVA including fathers' type of job showed a significant effect of gender on WAMS score $F(1, 67) = 23.22, p < .001$. On the other hand, fathers' type of job ($F(1, 67) = 1.04, p = .312$) and the interaction effect ($F(1, 67) = .227, p = .635$) were not significant.

Regarding attribution of Warmth, the main effect for gender was significant at the .056 significance level ($F(1, 56) = 3.82$). On the other hand, mothers' type of job ($F(1, 56) = .542, p = .465$) and the interaction effect ($F(1, 56) = .663, p = .419$) were not significant. Similarly, the results of the ANOVA including fathers' type of job showed a significant effect of gender on Warmth score $F(1, 67) = 8.58, p = .005$. On the other hand, fathers' type of job ($F(1, 67) = 2.54, p = .116$) and the interaction effect ($F(1, 67) = 2.35, p = .130$) were not significant.

For Competence score, again, the main effect of gender was the only significant ($F(1, 56) = 10.92, p = .002$). Main effect of mothers' type of job ($F(1, 56) = .262, p = .611$) and the interaction effect ($F(1, 56) = .533, p = .469$) were not significant. Similarly, the results of the ANOVA including fathers' type of job showed a significant effect of gender on Competence score $F(1, 67) = 26.70, p < .001$. On the other hand, fathers' type of job ($F(1, 67) = .001, p = .971$) and the interaction effect ($F(1, 67) = 2.19, p = .144$) were not significant.

Implicit association towards women as managers

IAT D-score for each participant was computed following the procedure suggested by Greenwald, Nosek & Banaji (2003). Latencies above 10,000 ms were deleted. Latencies for the tasks compatible with traditional beliefs (association between Manager/Man and Assistant/Woman) were subtracted from latencies for incompatible tasks (association between Manager/Woman and Assistant/Man) thus a positive score indicated that participants possess traditional gender roles beliefs. Two subjects were discarded from analysis because of inadequate performances: more than 10% of their tasks were characterized by reaction times lower than 300 ms.

The results, D score $M = .16$, $SD = .34$, $t(97) = 4.856$, $p < .001$, showed that participants were faster in associating managerial positions with men and assistant positions with women. Gender differences in score were found. On average, male participants showed greater D score ($M = .24$, $SD = 0.37$) than females ($M = .10$, $SD = 0.31$) and the difference was statistically significant $t(96) = 2.03$, $p = .045$. The order of presentation of the different measures and of IAT's tasks did not affect participants' performance ($F(7,90) = .834$, $p = .562$).

The perception of how parent's job was managerial or subordinate did not affect the scores. Two different two-way Analysis of Variance, one for fathers' and one for mothers' type of job effect, were conducted. Two independent variables were considered: gender of the respondents and parents' type of job. Parents' type of job included two levels (managerial and subordinated). No significant effect, both for main variables and interaction, was found. With regards for ANOVA considering mothers' type of job, results were as follow: main effect for gender yielded an F ratio of $F(1, 56) = .001$, $p = .978$; main effect for mothers' type of job yielded an F ratio of $F(1, 56) = .662$, $p = .817$; the interaction effect $F(1, 56) = .054$, $p = .817$. Similarly, results for ANOVA considering

fathers' type of job showed no significant effect. The main effect for gender yielded an F ratio of $F(1, 67) = 2.40, p = .126$; main effect for fathers' type of job yielded an F ratio of $F(1, 67) = .556, p = .459$; the interaction effect $F(1, 67) = 1.07, p = .304$.

Finally, no significant correlation was found between the implicit measure and the explicit ones (Table 8).

Table 8. Correlation between Gender – Manager IAT and the explicit measures

	WAMS	Competence	Warmth
IAT			
Pearson correlation	-.10	-.07	-.06
<i>Sig.</i>	.33	.47	.58

Note. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$

3.3 Discussion

The main goal of the study was to examine the differences between the implicit and the explicit cognitive processing toward women managers. Specifically, it was assumed that participants would show positive explicit attitudes toward women in managerial position and, on the other hand, traditional implicit associations between gender and managerial/subordinated professional positions. Moreover, it was hypothesized that attitudes would be related to variables as gender of the respondents and type of job of their parents. Results confirmed part of the hypothesis.

First of all, the sample showed a general favorable explicit attitude toward women managers but, as expected, women showed more positive attitudes compared to male participants. Similar results, in fact, were reported by Rudman and Kilianski (2000) in their work about female authority. However, participants displayed a favorable attitude toward women as managers and, similarly, they made attribution about women managers' Warmth

and Competence that were positive and counter-stereotypical. Through explicit assessment measure, thus, it could be affirmed that the sample shared non- traditional beliefs about women in high level professional positions.

On the other hand, implicit assessment measure application showed results that were in line with gender role traditional associations. When asked to associate women and men to different professional positions, participants showed the tendency to associate men to managerial positions and women to subordinated positions; results that reflect the Think manager – Think male effect (Schein, 2001).

As to differences due to gender, similar patterns were found between results obtained with the two diverse type of measures. Participant showed positive explicit attitude and attribution toward women as managers, as stated before, but women showed more positive judgment and beliefs compared to men. On the other hand, stereotypical implicit associations about women and men and professional position were found to be stereotypical in both male and female participants. At an implicit level, thus, women did not showed the in-group bias (Nosek, Banaji, & Greenwald, 2002) that they showed through the explicit measures. Nevertheless, the strength of stereotypical association between men and managers was lower for female participants than for male. In a similar way, Latu et al. (2011) found differences due to gender in implicit associations between successful manager traits and men, even if with some differences. Their results, in fact, showed that male participants associated successful manager traits with men, while female participants associated successful manager traits with women. On the other hand, comparing effect sizes, it was noted that the strength of associations held by men was greater than that showed by women. Thus, it is probable that stereotypical gender roles beliefs influenced the results obtained in the cited work and in the present one.

While gender of the respondents was an important predictor, the type of work of parents participants did not affect the results. In fact, no difference was found in the

explicit attitudes and the implicit associations made by participants due to parents' job. This result is not in line with findings on similar issues; the problem could be due to the fact that, in the present case, the assessment of the type of parents' profession is realized through an evaluation made by the participant and not by parents themselves. A direct involvement of parents could enrich the information about the factors influencing stereotypes toward women as managers.

Finally, no association between the results obtained with the implicit and the explicit measures was found. This result was similar to those obtained in research on gender stereotyping of occupations (White & White, 2006) and gender stereotyping about math inclination (Kiefer & Sekaquaptewa, 2007). A possible explanation could be related to the fact that information obtained through the use of implicit measure are related to fast affective response that are not validated at a propositional level, so they may differ from responses furnished after a process of cognitive elaboration (Gawronski & Bodenhausen, 2006).

CHAPTER 4

Study 3 - SOCIALIZATION OF ATTITUDE TOWARD WOMEN MANAGERS WITHIN THE FAMILY

Study III aimed at explore the socialization of gender attitudes and gender stereotypes content toward women managers within the family. As stated in the first chapter, the family is one of the first agency of socialization that individuals encounter and this agency transmits information about stereotypes, together with norms and values (Allport, 1954; Brown, 1995). Gender stereotypes and beliefs about gender roles can influence attitudes and behaviors toward others (Fagot & Leinbach, 1995), but they can also influence the choose that an individual makes for him/herself (Lawson et al., 2015). For this reason it is important to understand not only their contents and value but also the way they are spread in society.

Thus, the main goal of the present study was to analyze similarities and differences between explicit and implicit attitudes and associations possessed by parents and children and the effect of the distribution of paid labor and domestic labor between parents on these variables. Croft et al. (2014), in fact, showed that stereotypical beliefs about gender role and an egalitarian division of domestic labor between parents was related to less gender stereotypical beliefs about paid and domestic labor in children. While some information are available about socialization within the family of gender attitudes in general and gender stereotypical beliefs about different type of occupation (horizontal segregation), less information can be found about the transmission of gender attitudes about high responsibility professional position (vertical segregation). In order to study this last issue, the measures created and employed in the previous studies were used.

Specifically, the hypothesis were:

- a) Participants possess general positive explicit attitudes towards women managers, but women's explicit attitudes are more favorable than those of men;
- b) Participants associate men with managerial figures and women with assistant figures, with differences due to the gender of the respondents;
- c) Implicit associations possessed by children are predicted by implicit associations of parents and division of paid labor and domestic labor.
- d) Explicit attitudes of children are not predicted from those of their parents.

4.1 Method

Participants:

A total of 37 children (18 female) between 13 and 19 years of age (Mean age = 15,59; $SD = 1,44$) took part in the study. For each child, at least one parent participated in the study: 29 couples and, singularly, 8 mothers.

Measures and procedure:

Participants were recruited through the word of mouth and the study was presented as a research on the transmission of opinions within the family. Participants carried out the assessment measures through a computer in their own homes and for children under 18 years of age the informed consent was collected. The entire procedure lasted about 45 to 60 minutes after which participants were thanked and debriefed.

Explicit attitudes towards women managers were assessed through the Italian adaptation of WAMS (Manganelli et al., 2012) and through the items used in Study 1 to

assess the attribution of Competence and Warmth to women in managerial position. The scores were coded so that higher scores corresponded to higher level or positive attribution of the observed variables.

The IAT applied in Study 2 was used to assess the implicit association toward men/women and management/subordinated position. Measures were identical for parents and children, but the order of presentation of the measures and the order of presentation of IAT blocks were counterbalanced between participants and they were randomly assigned to the different conditions. Finally, participants were asked to indicate their gender, age, and parents were asked to indicate the average of hours spent in a week in paid labor and domestic work.

4.2 Results

Children's explicit attitudes

Descriptive statistics for scores obtained by children through the explicit measures are presented in Table 9.

Table 9. Means, Standard Deviations and Correlations of children score (explicit measures)

Variables	Correlations				
	M	SD	1	2	3
1. WAMS	5.93	0.69	-	-	-
Male	5.66	0.71			
Female	6.22	0.55			
2. Competence	4.34	0.71	.71**	-	-
Male	4.14	0.82			
Female	4.56	0.50			

3. Warmth	4.31	0.60	.74**	.73**	-
Male	4.18	0.62			
Female	4.35	0.56			

Note. †p < .10. *p < .05. **p < .01. ***p < .001

Children's scores analysis showed a general positive attitudes toward women as managers, WAMS $t(36)=52.09, p < .001$. Similarly, participants attributed to women level of Competence ($t(36)=37.46, p < .001$) and Warmth ($t(36)= 43.75, p < .001$) adequate to play the role of manager.

A t-test was carried out for each variable in order to verify the presence of differences in scores attributable to gender of the respondents. Female participants reported a more positive attitude toward women respect to male participants only in the case of general attitude toward women. For WAMS score, in fact, results were as follow: $t(35) = 2.67, p = .012$. On the other hand, no difference related to gender was found for Competence and Warmth attribution: Competence $t(35) = 1.83, p = .076$; Warmth $t(35) = 1.31, p = .199$.

Children implicit associations

A D score for each participant was calculated following Greenwald et al. (2003) suggestions. As in Study 2, latencies of stereotypical task were subtracted from latencies of non-stereotypical task such that positive scores were indicative of stronger traditional association between gender and professional roles. A subject was discarded from analysis because of inadequate performance: more than 10% of his tasks were characterized by reaction times lower than 300 ms.

The results, D score $M = .14$, $SD = .34$, $t(35) = 2.54$, $p = .016$, show that participants are faster in associating managerial positions with men and assistant positions with women. Gender differences in score were not found. On average, male participants ($M = .21$, $SD = 0.30$) showed a greater D score than females ($M = .08$, $SD = 0.37$) but the difference between scores was not statistically significant $t(34) = 1.20$, $p = .237$.

Parents' explicit attitudes

Parents' mean score for WAMS, Warmth and Competence and the correlations between variables are presented in Table 10.

Table 10. Means, Standard Deviations and Correlations of parents' scores (explicit measures)

Variables			Correlations		
	<i>M</i>	<i>SD</i>	1	2	3
1. WAMS			.083		
Fathers	5.59	0.83		.601***	.657***
Mothers	6.04	0.53			
2. Competence				-.155	
Fathers	4.19	0.65			.272
Mothers	4.56	0.60	.32 [†]		
3. Warmth					.048
Fathers	4.21	0.54			
Mothers	4.28	0.73	.57**	.04	

Note. Correlations for fathers' variables are above the diagonal ($N = 29$). Correlations for mothers' variables are below the diagonal ($N = 37$). Correlations between mothers' and fathers' variables are along the diagonal ($N = 29$). [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$

Mothers showed a positive general attitude toward women managers, WAMS $t(35) = 69.55, p < .001$, and positive attribution toward women as managers related to Warmth $t(35) = 34.98, p < .001$, and Competence $t(35) = 48.58, p < .001$. Similarly, fathers showed a positive general attitude toward women managers, WAMS $t(27) = 35.29, p < .001$, and positive attribution toward women as managers related to Warmth $t(27) = 40.77, p < .001$, and Competence $t(27) = 33.98, p < .001$.

WAMS mean scores of mothers and fathers were different between them, $t(64) = -2.51, p = .016$, with mothers reporting more positive attitude than fathers. Similarly, mothers attributed to women more Competence than fathers did ($t(64) = 2.41, p = .019$). On the other hand, no significant difference between fathers' and mother' attribution of Warmth $t(64) = -.48, p = .635$ was found.

There were no correlations between attitudes of mothers and fathers, WAMS $r = .083, N = 29, p = .667$; Competence $r = -.155, N = 29, p = .423$; Warmth $r = .048, N = 29, p = .804$.

Parents' implicit associations

As for children, Greenwald et al. (2003) procedure to calculate the D score was applied. Also in this case latencies of compatible, or stereotypical, block of tasks (Male/Manager and Women/Assistant) were subtracted from latencies of incongruent, or counter-stereotypical, block of tasks (Male/Assistant and Women/ Manager). Thus, positive scores were indicative of traditional associations related to gender and professional positions.

D scores of both mothers $M = .09, DS = .34$, and fathers $M = .05, SD = .37$ were not statistically different from zero: mothers' D score $t(36) = 1.56, p = .128$; fathers' D score $t(28) = 710, p = .484$. No significant difference, thus, emerged in the execution of

stereotypical or counter-stereotypical task. Moreover, D scores of parents were not correlated $r = .014$, $N = 29$, $p = .943$.

Division of paid and unpaid labor between parents

Descriptive statistics for paid and unpaid labor of mothers and fathers are displayed in Table 11. Differences between hours of paid and unpaid labor between mothers and fathers were statistically significant, with mothers spending more time than fathers in domestic labor and fathers, conversely, spending more time in paid labor: paid labor $t(64) = 4.212$, $p < .001$; domestic labor $t(64) = -5.454$, $p < .001$. Correlations between hours spent per week in paid and domestic labor were not statistically significant.

Table 11. Descriptive statistics and correlation for parents' hours of paid and unpaid labor

Variables					Correlations			
	Min.	Max.	<i>M</i>	<i>SD</i>	1	2	3	4
1. Paid Labor Fathers	18	84	42.41	12.88	-	-	-	-
2. Domestic Labor Fathers	0	30	6.28	6.68	-.285	-	-	-
3. Paid Labor Mothers	0	63	25.97	17.65	-.234	.057	-	-
4. Domestic Labor Mothers	4	80	27.57	20.14	.187	-.045	-.303 [†]	-

Note: Mothers $N = 37$; Fathers $N = 29$. [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Relations between parents and children implicit gender beliefs

Different regression analysis were performed in order to assess the relation between implicit and explicit cognitive elaborations of parents and children. A first group of

analysis was performed to assess the influence of implicit association toward gender held by parents and their division of paid and unpaid labor on implicit gender beliefs held by children. Hierarchical regressions, thus, was performed including D scores of children as dependent variable. Children's gender, D scores of parents and parents' reported hours of paid and unpaid work (Step 1) were used as independent variables. Interactions between children's gender and predictors were also tested (Step 2). One regression was dedicated to assess mothers' influence and the other was dedicated to assess father's influence on children implicit beliefs (Table 12). Results showed that the model did not fit the data, probably a greater sample size is required.

Table 12. Results of regression analysis predicting children IAT D score from parents' implicit gender association and time spent in paid and domestic labor per week

Step and predictor	Mothers' variables			Fathers' variables		
	B	SE	β	B	SE	β
Step 1						
Constant	.178	.081		.242	.105	
Child gender	-.101	.118	-.149	-.228	.175	-.316
Parent IAT D score	.248	.170	.247	-.092	.195	-.095
Parent Paid labor	.001	.004	.042	.006	.007	.213
Parent Domestic labor	.001	.003	.061	-.009	.012	-.167
Step 2						
Costant	.167	.085		.187	.117	
Child gender	-.111	.122	-.164	-.271	.174	-.376
Parent IAT D score	.353	.263	.352	.106	.247	.109
Parent Paid labor	.003	.006	.174	.001	.010	.027

Parent Domestic labor	.001	.005	.063	.001	.013	.012
Parent IAT D score × Child gender	-.279	.362	-.202	-.557	.394	-.358
Parent Paid labor × Child gender	-.008	.008	-.292	.006	.014	.140
Parent Domestic labor × Child gender	-.003	.007	-.118	-.041	.029	-.359

Note: For mothers' variables $R^2 = 0$ for Step 1, $\Delta R^2 = .043$ for Step 2 ($p = .700$). For fathers' variables $R^2 = 0$ for Step 1, $\Delta R^2 = .145$ for Step 2 ($p = .296$). [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

A similar procedure was performed in order to assess the relation between explicit attitudes toward women as managers held by parents and children. As for general attitude toward women managers, children's WAMS score was considered as the dependent variable. Children's gender, parents' WAMS score and parents' reported hours of paid and unpaid work (Step 1) were used as independent variables. Interactions between children's gender and predictors were tested in Step 2. One regression was dedicated to assess mothers' influence and the other was dedicated to assess father's influence on children attitudes (Table 13). Results show that the only significant predictor was children's gender.

Table 13. Results of regression analysis predicting children's general attitude toward women managers from parents' explicit attitude and time spent in paid and domestic labor per week

Step and predictor	Mothers' variables			Fathers' variables		
	B	SE	β	B	SE	β
Step 1						
Constant	5.711	.155				
Child gender	.454	.232	.332 [†]	.685	.283	.500*
Parent WAMS score	.266	.226	.204	.266	.148	.269
Parent Paid labor	.000	.007	-.003	.009	.011	.164

Parent Domestic labor	.004	.006	.121	.024	.019	.235
Step 2						
Constant	5.738	.162				
Child gender	.426	.241	.312 [†]	.715	.300	.522*
Parent WAMS score	.123	.303	.094	.339	.199	.404
Parent Paid labor	-.012	.011	-.298	.010	.018	.193
Parent Domestic labor	.010	.009	.295	.026	.022	.251
Parent WAMS score × Child gender	.296	.493	.131	-.367	.343	-.276
Parent Paid labor × Child gender	.017	.015	.330	-.013	.025	-.177
Parent Domestic labor × Child gender	-.007	.013	-.163	-.010	.050	-.048

Note: For mothers' variables $R^2 = .122$ for Step 1, $\Delta R^2 = .059$ for Step 2 ($p = .510$). For fathers' variables $R^2 = .225$ for Step 1; $\Delta R^2 = .041$ for Step 2 ($p = .713$). [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

With regard to the content of stereotypes toward the target group, the same procedure used for children's WAMS score was used. Two different regression analysis were performed considering Children's Competence and Warmth as dependent variables (Table 14 and 15).

Table 14. Results of regression analysis predicting children's attribution of Competence toward women managers from parents' explicit attitude and time spent in paid and domestic labor

Step and predictor	Mothers' variables			Fathers' variables		
	B	SE	β	B	SE	β
Step 1						
Constant	4.122	.163		4.058	.207	
Child gender	.458	.244	.329 [†]	.505	.345	.354

Parent Competence score	-.024	.201	-.020	-.062	.226	-.056
Parent Paid labor	.006	.007	.154	-.008	.013	-.144
Parent Domestic labor	.012	.006	.328 [†]	.010	.023	.088
Step 2						
Constant	4.157	.168		4.141	.247	
Child gender	.378	.255	.271	.509	.367	.357
Parent Competence score	-.068	.239	-.058	-.102	.331	-.091
Parent Paid labor	-.002	.010	-.053	.003	.022	.057
Parent Domestic labor	.022	.009	.638*	.005	.028	.043
Parent Competence score × Child gender	.258	.465	.123	.139	.483	.085
Parent Paid labor × Child gender	.006	.016	.110	-.019	.030	-.239
Parent Domestic labor × Child gender	-.019	.014	-.432	.014	.062	.062

Note: For mothers' variables $R^2 = .083$ for Step 1, $\Delta R^2 = .074$ for Step 2 ($p = .419$). For fathers' variables $R^2 = 0$ for Step 1; $\Delta R^2 = .027$ for Step 2 ($p = .887$). [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 15. Results of regression analysis predicting children's attribution of Warmth toward women managers from parents' explicit attitude and time spent in paid and domestic labor per week

Step and predictor	Mothers' variables			Fathers' variables		
	B	SE	β	B	SE	β
Step 1						
Constant	4.208	.137		4.242	.168	
Child gender	.199	.201	.168	.065	.280	.055
Parent Warmth score	.164	.158	.200	.116	.216	.104
Parent Paid labor	.002	.007	.062	.012	.011	.264

Parent Domestic labor	.010	.005	.321 [†]	.022	.018	.247
Step 2						
Constant	4.211	.146		4.287	.199	
Child gender	.211	.211	.179	.013	.296	.011
Parent Warmth score	.054	.225	.065	.067	.247	.060
Parent Paid labor	-.004	.010	-.110	.019	.018	.406
Parent Domestic labor	.006	.009	.204	.020	.022	.227
Parent Warmth score × Child gender	.185	.339	.135	.339	.342	.202
Parent Paid labor × Child gender	.013	.015	.288	-.011	.026	-.176
Parent Domestic labor × Child gender	.008	.012	.212	-.001	.051	-.007

Note: For mothers' variables: $R^2 = .050$ for Step 1, $\Delta R^2 = .029$ for Step 2 ($p = .729$). For fathers' variables: $R^2 = 0$ for Step 1, $\Delta R^2 = .048$ for Step 2 ($p = .753$). [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

The results showed that in both cases, Competence and Warmth, the models did not fit data. The small sample size could have influenced the results, a larger sample size may be needed to detect some effects.

4.3 Discussion

The present study aimed at examining the influence of parents' stereotypes and behaviors on their children implicit attitudes toward women managers. Children explicit attitudes toward the target group was hypothesized to be independent from those of parents.

As expected, participants showed positive explicit gender attitudes toward women managers. Both in the case of parents and children, female participants' general attitude was more favorable than those showed by male participants. Differences due to gender were also found in attribution of Competence made by parents, but it was not detected in the group of children. On the other hand, no difference due to gender was found in the case of Warmth in both groups.

As for implicit gender roles, children showed the tendency to make stereotypical associations between gender and professional roles and this result is in line with think manager-think male effect (Schein, 2001). Moreover, no difference due to gender was found. In this case, thus, female participants did not show any ingroup bias. The group of parents showed no significant difference in performing stereotypical and counter stereotypical tasks. Specifically, they did not show differences in the strength of associations between women/men and professional roles.

Unexpectedly, no relation between implicit gender roles beliefs held by parents and children emerged. Similarly, time spent in paid and domestic labor by mothers and fathers did not affect children's implicit beliefs.

As for explicit attitudes, only gender, and only in the case of the general attitudes toward women managers, was found to be a significant predictor.

Aside from the fact that the best way to explore socialization of stereotypes within the family is a longitudinal design, the main limitation of the study was represented by the relatively small sample size. Given the number of predictor considered in the analysis, future studies should involve a greater number of participants.

General discussion

The principal aim of the present work was to study cognitive processes about gender and professional positions because of their role in sustaining vertical occupational segregation. In order to reach the goal both explicit and implicit measures were used.

The first goal was to analyze the characteristics of stereotypes toward women manager. The theoretical framework was furnished by one of the most important models about features of stereotypes in social psychology: the Stereotype Content Model (SCM; Fiske et al., 2002). Recent studies showed that in impression formation (Brambilla et al., 2011) and ingroup and outgroup evaluation (Leach et al., 2007) one of the dimension described by the SCM, Warmth, is composed by two independent sub-dimensions: Sociability and Morality. The present work aimed at verify if this distinction was suitable to describe the structure of stereotypes toward women in leading professional positions. Results showed that, in the case of women managers, a distinction between this two sub-dimensions did not emerged. This outcome could be added to Kervyn et al. (2015) results which showed that a clear distinction between the two components of Warmth was not found in the case of stereotypes about social groups as poor people, elderly people, Muslim, etc. The distinction suggested by Leach et al. (2007), thus, could be not useful to describe the content of stereotypes toward out-groups.

On the other hand, the results about the relation between Competition and Warmth attributed to women managers diverged from the results collected in the literature about the SCM. SCM explains that high level of Competition are predictive of low level of Warmth and vice versa. Unexpectedly, in the present work women manager were not perceived as competitive, while, they were perceived as capable to be cold if needed. This could be due to the fact that they are not perceived as a threat or to the fact that the social desirability of the response influenced again participants attributions.

Moreover, at an explicit level participants made positive attributions about women managers. This outcome was confirmed in the second study in which attributions about Warmth and Competence of women managers were assessed together with general attitudes toward them. Several factors can account for this outcome: the rising number of social campaigns in favor of gender issues, for example, could have pushed people to reflect about gender discrimination or could have amplified participants' impression management.

Despite the encouraging positive attitudes about women managers, at an implicit level participants showed traditional gender roles stereotypes. They associated women to subordinated professional positions, as those of assistants or adjutants. On the other hand, men are more easily connected with managerial positions. This outcome is a support to the fact that the Think manager – Think male effect (Schein, 2001) is still an issue. As showed by Latu et al. (2011), implicit beliefs can adversely affect the professional path of women, so gender studies still deserve attention.

Finally, relations between gender beliefs held by parents and adolescent children were studied. The results showed that parents did not influenced children's beliefs about women manager both at an explicit and at an implicit level. Neither the division of paid and domestic work seemed to affect them. Specifically, parents and children expressed positive but unrelated explicit attitudes toward women managers. At an implicit level, children showed stereotypical associations between men/women and professional roles. On the other hand, parents implicit associations about professional roles were not different for men and women. Results about parents implicit associations, thus, are not in line with those of the second study and with literature. Probably, the principal limitation of this last study is related to the small sample size.

Given the great importance played by parents' gender stereotypes on children beliefs about professions and on their future academic and professional choices, additional

research are necessary to better elucidate if and in which condition this influence took place. A better understanding of this processes could, in fact, furnish the opportunity to individuate actions that could be taken, within and outside the family, in order to stem the spread of prejudicial beliefs about girls and women's future possibilities.

Conclusions

Recent data about women's working conditions showed a reduction in incidence of horizontal and vertical segregation, with an increasing number of women involved in traditionally masculine professions. On the other hand, women in higher working positions are not assigned to actual strategic roles. Forms of subtle discrimination are, therefore, still an issue.

The present research aimed at study explicit and implicit attitudes towards women managers through a psycho-social approach. Information gained from the studies suggest that at an explicit level women managers are positively judged. At an implicit level, however, the tendency to associate men with managerial positions and women with subordinated positions continue to be a reality for the major part of participants.

As first step, the content of stereotypes toward women managers was studied. The goal was to verify if Warmth attributed to the target group was composed by two independent dimensions: Sociability and Morality. Results showed that, in this case, a distinction between Sociability and Morality did not emerged from data.

As for implicit gender role associations, a general tendency to associate women with subordinated professional positions emerged. While at an explicit level people showed positive and counter-stereotypical attitudes towards women as managers, implicit gender role associations were still traditional. Women, however, possess less stereotypical beliefs than men toward the target group, both at an implicit and explicit level.

Counter-tendency and unexpected results emerged from the study of socialization of gender role beliefs within families. No relation between implicit gender role attitudes possessed by parents and children emerged. The small sample size is probably an issue: future research should involve a greater number of families. It could be also interesting to

assess sexism toward men and women held by participants and explore the role of further agencies of socialization about the target group. Given the fundamental role played by families in influencing future professional aspirations of children and the relation of these aspirations with occupational segregation, further research on the socialization process about attitudes towards women in managerial roles need to be realized.

References

- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology*, 93, 751–763.
- Allport G. W. (1954). *The nature of prejudice*, Addison-Wesley Publication, Cambridge; trad. it. *La Natura del Pregiudizio*, La Nuova Italia, Firenze (1973).
- Brambilla, M., Rusconi, P., Sacchi, S., Cherubini, P. (2011). Looking for honesty: the primary role of morality (vs. sociability and competence) in information gathering. *European Journal of Social Psychology*, 41, Pp. 135-143.
- Brambilla, M., Sacchi, S., Rusconi, P., Cherubini, P., Yzerbit, V.Y. (2012). You want to give a good impression? Be honest! Moral traits dominate group impression formation. *British Journal of Social Psychology*, 51, Pp. 149-166.
- Brambilla, M., Sacchi, S., Pagliaro, S., Ellemers, N. (2013). Morality and intergroup relations: Threats to safety and group image predict the desire to interact with outgroup and ingroup members. *Journal of Experimental Social Psychology*, 49, pp. 811-821.
- Brodbeck, F. C., Frese, M., Akerblom, S., Audia, G., Bakacsi, G., Bendova, H., et al. (2000). Cultural variation of leadership prototypes across 22 European countries. *Journal of Occupational and Organizational Psychology*, 73(1), 1-30.
- Brown R. (1995). *Prejudice. Its social psychology*, Blackwell Publishers, Oxford; trad. it. *Psicologia Sociale Del Pregiudizio*, Il Mulino, Bologna.

- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, *106*(4), 676.
- Carraro, L., Castelli, L., Matteoli, S., Pascoletti, E., & Gawronski, B. (2011). Di padre in figlio. La trasmissione degli stereotipi di genere all'interno della famiglia. *Psicologia Sociale*, *2*, 153-170.
- Castelli, L., Zogmaister, C., & Tomelleri, S. (2009). The transmission of racial attitudes within the family. *Developmental Psychology*, *45*(2), 586.
- Chung-Herrera, B. G., & Lankau, M. J. (2005). Are We There Yet? An Assessment of Fit Between Stereotypes of Minority Managers and the Successful-Manager Prototype. *Journal of Applied Social Psychology*, *35*(10), 2029-2056.
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological assessment*, *7*(3), 309.
- Costello, A., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, *10*(7).
- Crespi, I., (2004). Socialization and Gender Roles Within the Family: A Study on Adolescents and Their Parents in Great Britain. Milan: Department of Sociology, Catholic University of Milan. Available at:
<http://www.mariecurie.org/annals/volume3/crespi.pdf>
- Croft, A., Schmader, T., Block, K., & Baron, A. S. (2014). The second shift reflected in the second generation do parents' gender roles at home predict children's aspirations? *Psychological Science*.

- Cuddy, A.J.C., Fiske, S.T., Glick P. (2008). Warmth and competence as universal dimensions of social perception: the stereotype content model and the BIAS map. *Advances in Experimental Social Psychology*, 40, Pp. 61-150.
- Cuddy, A. J. C., Fiske, S. T., Kwan, V. S. Y., Glick, P., Demoulin, S., Leyens, J., et al. (2009). Is the stereotype content model culture bound? A cross-cultural comparison reveals systematic similarities and differences. *British Journal of Social Psychology*, 48, 1-33.
- Dawson, J., Kersley, R. & Natella, S. (2014). *The Credit Suisse gender 3000*. In *The CS Gender 3000. Women in senior management*. Credit Suisse Research Institute. Retrieved from <https://publications.creditsuisse.com/tasks/render/file/index.cfm?fileid=8128F3C0-99BC-22E6-838E2A5B1E4366DF>.
- Degner, J., & Dalege, J. (2013). The apple does not fall far from the tree, or does it? A meta-analysis of parent–child similarity in intergroup attitudes. *Psychological Bulletin*, 139(6), 1270.
- Deutsch, F. M., Servis, L. J., & Payne, J. D. (2001). Paternal participation in child care and its effects on children's self-esteem and attitudes toward gendered roles. *Journal of Family Issues*, 22(8), 1000-1024.
- Devine, P. G. (1989). Stereotypes and prejudice: their automatic and controlled components. *Journal of Personality and Social Psychology*, 56(1), 5.
- Eagly, A. H., & Diekmann, A. B. (2005). What is the problem? Prejudice as an attitude-in-context. In J. Dovidio, P. Glick, & L. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 19-35). Gospons, Blackwell Publishing.

- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*, 573–598.
- Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin*, *15*, 543–558.
- Eagly, A. H., Wood, W., & Diekmann, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp.123–174). Mahwah, NJ: Erlbaum
- Eccles, J. S., Jacobs, J. E., & Harold, R. D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues*, *46*(2), 183-201.
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: testing predictions from the stereotype content model. *Sex Roles*, *47*, Pp. 99-114.
- Fagot, B. I., & Leinbach, M. D. (1995). Gender knowledge in egalitarian and traditional families. *Sex Roles*, *32*, 513-526.
- Fazio, R.H. e Olson, M.A. (2003). Implicit measures in social cognition research: Their meaning and use, *Annual Review of Psychology*, *54*, 297-327.
- Fiske, S.T., Cuddy, A.J.C., Glick, P., Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of Personality And Social Psychology*. *82*, Pp. 878-902.
- Fiske, S.T., Xu, J., Cuddy, A.J.C., & Glick, P. (1999). (Dis)respecting versus (dis)liking: status and interdependence predict ambivalent stereotypes of competence and warmth. *Journal of Social Issues*, *55*, Pp. 473-489.

- Fox, R. L., & Lawless, J. L. (2003). Family structure, sex-role socialization, and the decision to run for office. *Women & Politics, 24*(4), 19-48.
- Fulcher, M., Sutfin, E. L., & Patterson, C. J. (2008). Individual differences in gender development: Associations with parental sexual orientation, attitudes, and division of labor. *Sex Roles, 58*(5-6), 330-341.
- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: an integrative review of implicit and explicit attitude change. *Psychological Bulletin, 132*(5), 692.
- Gawronski, B., & Bodenhausen, G. V. (2007). Unraveling the processes underlying evaluation: Attitudes from the perspective of the APE model. *Social Cognition, 25*(5), 687-717.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491–512.
- Glick, P. & Fiske, S. T. (2001). Ambivalent sexism. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 115–188). Thousand Oaks, CA: Academic Press.
- Gniewosz, B., & Noack, P. (2015). Parental Influences on Adolescents' Negative Attitudes Toward Immigrants. *Journal of youth and adolescence, 44*(9), 1787-1802.
- Goodwin, G. P., Piazza, J., Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology, 106*, Pp. 148-168.

- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464-1480.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of personality and social psychology*, 85(2), 197.
- Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (2012). The role of parents and teachers in the development of gender-related math attitudes. *Sex Roles*, 66(3-4), 153-166.
- Haddock, G., & Zanna, M. P. (1994). Preferring “housewives” to “feminists”: categorization and the favorability of attitudes toward women. *Psychology of Women Quarterly*, 18(1), 25-52.
- Halpern, H. P., & Perry-Jenkins, M. (2016). Parents’ gender ideology and gendered behavior as predictors of children’s gender-role attitudes: A longitudinal exploration. *Sex Roles*, 74(11-12), 527-542.
- Harris, L. T., and Fiske, S. T. (2006). Dehumanizing the lowest of the low: Neuro-imaging responses to extreme outgroups. *Psychological Science*, 17, 847–853.
- Helbig, M. (2015). JGR - Java GUI for R. R package version 1.7-16.
- Heilman, M. E. (1995). Sex stereotypes and their effects in the workplace: What we know and what we don’t know. *Journal of Social Behavior and Personality*, 10, 3–26.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women’s ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–674.

- Hoffman, L. W., & Kloska, D. D. (1995). Parents' gender-based attitudes toward marital roles and child rearing. Development and validation of new measures. *Sex Roles, 32*, 273-295.
- Istat (2015). *Mercato del lavoro: Soggetti, imprese e territori*. In *Rapporto annuale 2015. La situazione del Paese*. Consultato su <http://www.istat.it/it/files/2015/05/CAP-4-Rapporto-Annuale-2015-3.pdf>
- Jaspers, E., Lubbers, M., & de Vries, J. (2008). Parents, children and the distance between them: Long term socialization effects in the Netherlands. *Journal of Comparative Family Studies, 39*, 39–58.
- Johnson, S. K., Murphy, S. E., Zewdie, S., & Reichard, R. J. (2008). The strong, sensitive type: Effects of gender stereotypes and leadership prototypes on the evaluation of male and female leaders. *Organizational Behavior and Human Decision Processes, 106*(1), 39-60.
- Kervyn, N., Fiske, S., & Yzerbyt, V. (2015). Forecasting the Primary Dimension of Social Perception. *Social Psychology*.
- Kiefer, A. K., & Sekaquaptewa, D. (2007). Implicit stereotypes, gender identification, and math-related outcomes a prospective study of female college students. *Psychological Science, 18*(1), 13-18.
- Koenig, A.M., Eagly, A.H., Mitchell, A.A., Ristikari, T. (2011), Are leader stereotypes masculine? A meta-analysis of three research paradigms, *Psychological Bulletin, 137*, Pp. 616-642.
- Kulik, L. (2002). Like-sex versus opposite-sex effects in transmission of gender role ideology from parents to adolescents in Israel. *Journal of Youth and Adolescence, 31*(6), 451-457.

- Latu, I. M., Stewart, T. L., Myers, A. C., Lisco, C. G., Estes, S. B., & Donahue, D. K. (2011). What We “Say” and What We “Think” About Female Managers Explicit Versus Implicit Associations of Women With Success. *Psychology of Women Quarterly*, 35(2), 252-266.
- Lawson, K. M., Crouter, A. C., & McHale, S. M. (2015). Links between family gender socialization experiences in childhood and gendered occupational attainment in young adulthood. *Journal of Vocational Behavior*, 90, 26-35.
- Leach, C.W., Ellemers, N., Barreto, M. (2007). Group virtue: the importance of morality (vs. competence and sociability) in the positive evaluation of ingroups. *Journal of Personality and Social Psychology*, 93, Pp. 234-249.
- Manganelli A. M., Bobbio A., Canova L. (2012), Sessismo, ideologia conservatrice e atteggiamento nei confronti delle donne manager, *Psicologia Sociale*, 2, Pp. 241-259.
- Montañés, P., de Lemus, S., Bohner, G., Megías, J. L., Moya, M., & Garcia-Retamero, R. (2012). Intergenerational transmission of benevolent sexism from mothers to daughters and its relation to daughters’ academic performance and goals. *Sex Roles*, 66(7-8), 468-478.
- Nesdale, D. (2004). Social identity processes and children’s ethnic prejudice. In M. Bennett & F. Sani (Eds.), *The development of the social self* (pp. 219 –245). New York, NY: Psychology Press.
- Nosek, B. A. (2007). Implicit–explicit relations. *Current Directions in Psychological Science*, 16(2), 65-69.
- Nosek, B. A., Banaji, M. R., & Greenwald, A.G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration website. *Group Dynamics: Theory, Research, and Practice*, 6, 101–115.

- O'Bryan, M., Fishbein, H., Ritchey, P. (2004). Intergenerational transmission of prejudice, sex role stereotyping, and intolerance. *Adolescence*, 39, 407-426.
- Powell, G. N., & Butterfield, D. A. (1979). The "good manager": Masculine or androgynous? *Academy of Management Journal*, 22(2), 395-403.
- R Core Team (2013). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <http://www.R-project.org/>.
- Rosti L. (2006), La segregazione occupazionale in Italia, in Simonazzi A. (a cura di), *Questioni di genere, questioni di politica. Trasformazioni economiche e sociali in una prospettiva di genere*, Carocci, Milano, Pp. 93-111.
- Rudman, L. A. (2004). Sources of implicit attitudes. *Current Directions in Psychological Science*, 13(2), 79-82.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of social issues*, 57(4), 743-762.
- Rudman, L. A., & Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin*, 26(11), 1315-1328.
- Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of applied psychology*, 57(2), Pp. 95-100.
- Schein, V. E. (1975). Relationships between sex role stereotypes and requisite management characteristics among female managers. *Journal of applied psychology*, 60(3), Pp. 340-344.
- Schein, V.E. (2001), A Global Look at Psychological Barriers to Women's Progress in Management, *Journal of Social Issues*, 57, Pp. 675-688.

- Schein, V.E., Mueller, R., (1992), Sex role stereotyping and requisite management characteristics: a cross cultural look, *Journal of Organizational Behavior*, 13, Pp. 439-447.
- Schein, V. E., Mueller, R., Lituchy, T., & Liu, J. (1996). Think manager—think male: A global phenomenon? *Journal of Organizational Behavior*, 17, 33–41.
- Sczesny, S., Bosak, J., Neff, D., & Schyns, B. (2004). Gender stereotypes and the attribution of leadership traits: A cross-cultural comparison. *Sex Roles*, 51(11-12), 631-645.
- Shapiro, J. R., & Williams, A. M. (2012). The role of stereotype threats in undermining girls' and women's performance and interest in STEM fields. *Sex Roles*, 66(3-4), 175-183.
- Sherman, S. J., Chassin, L., Presson, C., Seo, D. C., & Macy, J. T. (2009). The intergenerational transmission of implicit and explicit attitudes toward smoking: Predicting adolescent smoking initiation. *Journal of Experimental Social Psychology*, 45(2), 313-319.
- Shinar, E. H. (1975). Sexual stereotypes of occupations. *Journal of Vocational Behavior*, 7, 99–111.
- Sinclair, S., Dunn, E., & Lowery, B. (2005). The relationship between parental racial attitudes and children's implicit prejudice. *Journal of Experimental Social Psychology*, 41(3), 283-289.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11(1), 1-19.

- Tenenbaum, H. R., & Leaper, C. (2002). Are parents' gender schemas related to their children's gender-related cognitions? A meta-analysis. *Developmental psychology*, 38(4), 615. <http://dx.doi.org/10.1037/0012-1649.38.4.615>
- Tomasetto, C., Alparone, F. R., & Cadinu, M. (2011). Girls' math performance under stereotype threat: The moderating role of mothers' gender stereotypes. *Developmental psychology*, 47(4), 943.
- Tomasetto, C., Mirisola, A., Galdi, S., & Cadinu, M. (2015). Parents' math–gender stereotypes, children's self-perception of ability, and children's appraisal of parents' evaluations in 6-year-olds. *Contemporary Educational Psychology*, 42, 186-198.
- White, M. J., & White, G. B. (2006). Implicit and explicit occupational gender stereotypes. *Sex roles*, 55(3-4), 259-266.
- Whitley B.E. Jr., Kite M.E. (2009). *Psychology of prejudice and discrimination* (II Ed.), Cengage Learning, Wadsworth.
- Willemsen, T.M. (2002). Gender typing of the successful manager – a stereotype reconsidered. *Sex Roles*. 46, Pp. 385-391.
- Witt, S. D. (1997). Parental influence on children's socialization to gender roles. *Adolescence*. 32(126), Pp. 253.
- Wojciszke, B. (2005). Morality and competence in person- and self-perception. *European Review of Social Psychology*. 16, Pp. 155-188.
- Wood, W., & Eagly, A. H. (2010). Gender. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (Vol. 2, 5th ed., pp. 629–667). New York, NY: Wiley.

Zogmaister, C., & Castelli, L. (2006). La misurazione di costrutti impliciti attraverso l'Implicit Association Test. *Psicologia Sociale, 1*, 65-94.

APPENDIX A

Items “Competition” (Fiske et al., 2002):

Più potere acquisiscono le donne manager, meno potere avranno le persone come me.

Le risorse che vengono date alle donne manager è possibile che siano sottratte a persone come me.

Se le donne manager ottengono delle facilitazioni, è probabile che questo renda le cose più difficili per persone come me.

Items “Status” (Fiske et al., 2002):

Quanto sono prestigiosi i lavori solitamente ottenuti dalle donne manager?

Quanto successo economico hanno le donne manager?

Quanto sono istruite le donne manager?

APPENDIX B

Women As Manager Scale (Manganelli et al., 2012)

1. E' meglio che le posizioni lavorative di alta responsabilità siano ricoperte da uomini piuttosto che da donne.
2. Quando il "capo" è donna è più difficile lavorare bene.
3. Le donne sono in grado di valutare in modo concreto e realistico le questioni di lavoro.
4. Ho fiducia nelle donne manager.
5. A uomini e donne dovrebbero essere date le stesse opportunità di accedere a programmi di formazione manageriale.
6. Le donne sono in grado di acquisire le competenze necessarie per essere dei manager di successo.
7. Prima o poi il mondo imprenditoriale e quello finanziario dovranno accettare che le donne assumano importanti ruoli direttivi.
8. Le donne dovrebbero essere presenti nelle posizioni manageriali con la stessa frequenza degli uomini.
9. Mi sento a mio agio solo quando il mio "capo" è un uomo
10. In genere, le donne manager sono meno capaci degli uomini di contribuire al successo di un'azienda.
11. Il lavoro di una donna manager dovrebbe essere valorizzato come quello di un uomo.
12. Le donne non sono abbastanza ambiziose per avere successo nel mondo delle aziende.
13. La possibilità di una maternità rende le donne meno adatte ai ruoli manageriali.
14. Le donne più degli uomini consentono alle loro emozioni di influenzare il loro comportamento come manager.
15. Le donne non sono abbastanza competitive per aver successo nel mondo delle imprese.

16. E' giusto che le donne competano con gli uomini per le posizioni di alta dirigenza
17. Le donne sono capaci almeno quanto gli uomini di dirigere i loro collaboratori.
18. Le donne non riescono a far valere le proprie idee quando la situazione d'affari o lavorativa lo richiede.
19. Per diventare un manager di successo una donna deve sacrificare parte della sua femminilità.
20. Le donne non riescono ad essere aggressive quando una situazione d'affari o lavorativa lo richiede.
21. Le donne hanno quella sicurezza in se stesse necessaria per essere un buon capo.