Research Institute for the Evaluation of Public Policies



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# The Cost of a Vowel: How the Gender-marked Job Title Affects Ratings of Female Lawyers

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#### **Abstract**

Through a vignette study in Italian, we show that using the feminine job title negatively impacts how female lawyers are perceived by other professionals. 227 respondents were presented with hypothetical legal issues and shown several realistic profiles of male and female lawyers, with varying professional characteristics, and then asked to indicate how likely they would be to contact each of the given profiles for assistance with the legal issue. We randomly varied whether all the profiles of female lawyers for a given respondent were presented with the predominantly used masculine term - avvocato - or with the feminine term - avvocata. We find that, ceteris paribus, female profiles with the feminine term get lower scores by 0.36 (out of 10, -5%, -0.16SD). The downgrade is stronger among women respondents. The magnitude of the effect is large relative to the effect of other characteristics varied randomly in the profiles, such as work experience or other quality signals.

**JEL Codes:** J16, C93, J44

**Keywords:** gender language, gender markedness, job titles, vignette study

## 1 Introduction

The growing interest in the correct use of gendered language, and its causes and effects, sparks ongoing scholarly and public debate (Jakiela and Ozier, 2018). In languages where grammar requires a gender-marked form (as in Latin-based languages such as Italian), job titles are often used in their masculine form even by female professionals, especially for positions generally viewed as more prestigious (Voghera and Vena, 2016). The issue is particularly salient as it can intersect with other issues in the professional field, such as the gender pay-gap and discrimination in the workplace. The concern is that, instead of grammatical rules, the limited use of feminine titles may reflect and perpetuate societal norms and power dynamics (Sabatini, 1987; Cavagnoli et al., 2013). In addition, this "misuse" might also limit the cognitive inclusion of women (i.e., visibility of women) (Horvath et al., 2016), as well as having intergenerational repercussions, considering that the use of feminine titles has been shown to reduce the stereotypical link between gender and specific professions among school-age children (Vervecken et al., 2013; Vervecken and Hannover, 2015). The use of gender-neutral language (as opposed to traditional generic masculine language) in job advertisements increases the proportion of women applying for certain types of jobs in the tech sector and positively affects women's beliefs about the company's sensitivity to diversity, their suitability for the job, and their likelihood of being hired (Del Carpio and Fujiwara, 2023).

This paper examines in the Italian context if the use of the feminine occupation title by female lawyers impacts how they are perceived by colleagues and other professionals. The legal field in Italy is of particular interest, considering the rapidly growing share of women in the field and the slowly increasing share of female lawyers using the feminine title.<sup>1</sup> Existing related studies suggest that the use of the feminine title may come with a penalty. At an aggregate level, in countries where languages with a marked gender form,<sup>2</sup> women are worse off in terms of labor market and educational outcomes (van der Velde et al., 2015; Jakiela and Ozier, 2018; Davis and Reynolds, 2018; Bertrand

<sup>&</sup>lt;sup>1</sup>The rise in the use of feminine job titles over the past decades in Italy has been proportionally lower than the increase in the share of women in those professions (Cignarella et al., 2021). For example, in the Province of Trento, where this study was conducted, even though females represent the majority of professionals in the sector, only 15% of them use the feminine term in their job title.

<sup>&</sup>lt;sup>2</sup>As opposed to languages like English, for example.

et al., 2022). This is supported by experimental evidence from social psychology studies. Female professionals with a feminine title receive less favorable evaluations than male professionals or women with a masculine title (Formanowicz and Sczesny, 2016; Merkel et al., 2012) and are perceived by men as less competent (Budziszewska et al., 2014).

Our context and design allow us to quantify, relative to other professional characteristics, the impact of the gender-marked job title on a sample of real-life professionals, who likely interact frequently with the profession in question. We recruited 227 respondents through professional orders present in the Province of Trento, Italy, to participate in a survey containing also a vignette study with a between-subject manipulation of the gender mark of laywers' job titles. Specifically, after a brief socio-demographic section, each respondent was presented with four hypothetical scenarios, in randomized order, describing specific issues for which they would require professional assistance. In each scenario, four realistic profiles of professionals in the specific fields were presented with randomly varying characteristics, name (indicating gender), surname, and experience, among others. For each, respondents indicated how likely they would be to contact such a profile for assistance with the issue presented in the scenario.

Two of the scenarios are of main interest for the study, while the other two served as placebo. The two scenarios of interest presented legal issues pertaining to (i) a stereotypically female-dominated subfield (family law) and to (ii) stereotypically male-dominated subfields (criminal or commercial law). The treatment is embedded in these scenarios in a between-subject design, and it concerns the profiles of female lawyers: treated respondents saw all female profiles with the feminine job title avvocat a while, in the control group, all female profiles were presented with the masculine title avvocat a. The two placebo scenarios involved fields where (i) the feminine title is always used by females (medical doctors -dottore/-essa) and (ii) where the title is identical for men and women (accountants - commercialista).

We find that presenting profiles of female lawyers with the feminine title lowers women's relative ratings by 0.36 points (out of 10). The effect is statistically significant and as large as the negative difference between younger and older profiles, and, in absolute terms, almost equals the

positive signal of being part of a law firm or having around 8 years more experience. The penalty of the feminine title is particularly strong in the female-dominated subfield scenario (i.e., family law), mostly offsetting the advantage of female profiles in this subfield compared to more stereotypically male-dominated subfields.

In terms of heterogeneity concerning other profile characteristics, we find that the penalty is particularly large for profiles with low experience and without strong quality signals, such as having passed a national bar exam or being part of a law firm. With respect to the characteristics of the respondent, we find that the effects are significantly stronger among female respondents in both "closely related" professions and STEM-related professions unrelated to law. While our design does not allow us to pin down the precise mechanisms, our findings are consistent with both taste-based and statistical discrimination (i.e., the title makes respondents infer other characteristics of the profiles besides the ones presented in the experiment). In particular, the fact that we observe the effect to be negative even for respondents working outside the legal or related fields may reflect discrimination rather than a penalty for deviating from the social norm.

Our study offers several contributions to the literature. First, to the best of our knowledge, this is the first study that causally assesses if the feminine job title affects how female lawyers are likely to be contacted for assistance by other professionals (both peers or potential clients) who interact frequently with the profession in question. Importantly, we are able to quantify the magnitude of such effects relative to other highly relevant professional characteristics. Our second contribution lies in the design features. Differently from previous studies (e.g., Merkel et al., 2012; Formanowicz et al., 2013; Budziszewska et al., 2014), we provide realistic scenarios and profiles that are presented with information that can actually be found online in the official professional registries.<sup>3</sup> This approach allows mimicking real-life choices and controlling for relevant observable characteristics of the profiles, which in their absence may be wrongly inferred by respondents based solely on the job title.<sup>4</sup> Furthermore, rather than testing the impact of the feminine across a range of different job titles, including

<sup>&</sup>lt;sup>3</sup>We take this approach instead of simply asking respondents to react to a given fictitious text/stories with different job titles, without providing information on the professional characteristics of the profiles.

<sup>&</sup>lt;sup>4</sup>Without providing such information, simply due to statistical discrimination or lack of accurate information, respondents may form beliefs regarding the professional qualifications of a given profile based on their beliefs about the group.

those that are grammatically correct but not used, we willingly zoom in on lawyers, for which, as we show later, the feminine title is used, although not widely. Again, we believe this approach makes our results more realistic, as a feminine job title heard for the first time might sound artificial to the respondent.<sup>5</sup>

The paper is structured as follows: Section 2 presents the institutional and cultural context in which the survey was conducted, the study design as well as the sample recruitment process. The empirical analysis and estimation results are presented in Section 3, along with a brief discussion of the potential mechanisms underlying the observed effects. Section 4 concludes.

# 2 Setting

#### 2.1 Institutional Context

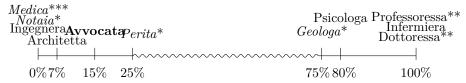
Gender-marked job titles are the correct form according to Italian grammar rules. However, actual practice has been shaped by societal norms and customs (Sabatini, 1987) resulting in the use of the masculine term as a neutral or unmarked term (Cignarella et al., 2021). What the linguistic literature shows is that the use of gendered terms varies across professions and reflects power and gender dynamics: in general, feminine job titles tend to be used primarily in low-ranked occupations (in terms of prestige, social status, or financial return), or in those that involve caring for others, such as health care (Cavagnoli and Dragotto, 2021).

The Equal Opportunity Committee of the Rovereto Bar Association launched a survey among members of all professional orders in 2021 in the Province of Trento (481 respondents), which asked, among other things, what job title people use to refer to themselves. According to this data, shown in Figure 1, feminine job titles vary significantly across professions, and, in a given profession,

 $<sup>^{5}</sup>$ An example of this in Italian is ingegnera, the feminine form of engineer, which is grammatically correct but not used.

 $<sup>^6</sup>Professoressa$ , the feminine title for Professor, is a notable exception. Although linguists note that the suffix in -essa initially started as denigratory and then became common use. See here for a discussion. In the legal field, Merkel et al. (2012) find that the suffix -essa reduces the perception of social status as compared to the masculine or the symmetrical gender-mark form -avvocata

Figure 1: Diffusion of the Job Titles among Female Professionals in the Province of Trento for Selected Professions



Note: The figure plots the use of the feminine term among female professionals. \* indicates professions with few observations in the data. \*\* indicates professions with no observations in the data, and instead inferred from common use. \*Translations: Medica - Medical Doctor, Notaia - Notary, Ingegnera - Engineer, Architetta - Architet, Avvocata - Lawyer, Perita - Appraiser, Geologa - Geologist, Psicologa - Psychologist, Professoressa - Professor, Infermiera - Nurse, Dottoressa - Doctor.

Source: Authors' calculation using data from an ad-hoc survey in 2021 in the Province of Trento among members of professional orders (N=481)

tend to be used either by very few women or by the vast majority; there seems to be no middle ground, suggesting the presence of threshold effects in the diffusion of the term.

In the legal field, the feminine title for lawyers - avvocat a - is on the left of the spectrum, with about 15% of women using it to define their job title, despite the high proportion of women in the field. This fact makes the legal field a particularly relevant context to understand the potential causes and effects of the infrequent use of the feminine job title by female professionals. If the prevailing social norm is to use the masculine job title, regardless of gender, there are concerns as to how female lawyers who deviate from the norm (i.e., use the feminine title) are perceived by colleagues and clients, particularly by the vast majority of female lawyers who follow the norm. Being in the minority, female lawyers who use the feminine title may be subject to various forms of discrimination, both taste-based and statistical. This in turn may lead female lawyers to avoid using the feminine title even if they would prefer to do so, not to suffer the negative repercussions, potentially further reinforcing the mechanism.

<sup>&</sup>lt;sup>7</sup>Taste-based discrimination would imply, ceteris paribus, preferring a female lawyer who uses the male job title. In the case of statistical discrimination, beliefs about a given female lawyer using the feminine job title will be formed based on information or beliefs about the group of female lawyers using the feminine job title.

#### 2.2 Vignette Study with Survey Experiment

We exploit a study design using vignettes, which also incorporates an experiment in which the gender-markedness of the job title randomly varies at the respondent level. The study was composed of three parts in the following order: i) a survey section on the socio-demographic characteristics of the respondent, ii) a vignette study, which included four vignettes for every respondent, and iii) a survey section on gender stereotypes.

Survey sections: The socio-demographic information collected included gender, age, education, professional order, and job title. The title was asked using an open-ended question, which allows recovering the use of the feminine job title for female professionals without risking priming the main focus of the study. The gender stereotypes scale was administered in a separate section at the end of the survey to avoid priming any gender-related responses. The scale was taken from a representative national survey by Istat (2019) and allows comparing our sample to the general population in terms of gender attitudes.

Vignette study and experiment: The vignette study was the main section of the study design and comprised also the between-subject randomization of respondents into the experimental conditions. Respondents were presented with four hypothetical scenarios, in randomized order at the individual level, describing specific issues for which they would require professional assistance. In each scenario, four realistic profiles of professionals were presented with randomly varying characteristics. For each, respondents indicated how likely they would be to contact such a profile for support on the issue presented in the scenario (on a scale from 0 to 10).

Two of the scenarios, of primary interest for the study, presented issues pertaining to fields of law: (i) a stereotypically female-dominated field (family law) and (ii) a stereotypically male-dominated field (criminal or commercial law<sup>8</sup>). As discussed above, the use of the feminine job title (avvocat a instead of avvocat a) is currently infrequent in the legal field. The other two vignettes had a placebo role - one related to the medical field, where the feminine title is predominantly used by female

 $<sup>^8\</sup>mathrm{A}$  random draw at the individual level determined if the criminal or commercial law issue was presented.

<sup>&</sup>lt;sup>9</sup>For example, the family law issue was presented as follows: "Imagine that you were in need of legal advice on a family law matter (e.g. divorce, child custody, etc.)."

doctors (dottor-essa), while the other to the accounting field, where the job title is identical for men and women and cannot be gender-marked (commercialista).<sup>10</sup> In the Online Appendix, we provide a screenshot of choice options in the law-related scenario (Figure A1).

An important feature of the experimental design is the use of realistic information for the presented profiles, very similar to what can be found in the professional registries available online on the website of each order. For example, for lawyers, each profile had a name<sup>11</sup>, date of birth, date of registration with the professional order (which signalled experience), whether the person is part of a law firm, and whether he/she had passed the national exam to argue in front of the *Court of Cassation* (the highest court in Italy).<sup>12</sup> All these dimensions were randomly drawn in each vignette. The randomization of profile characteristics was stratified by scenario, profile gender, and profile age group: in each given scenario there were always two male and two female profiles, one younger and one older profile for each gender (on average there was a difference of 20 years between the younger and the older group). The minimum experience was set at 9 years. The order of the profiles was randomized in each scenario.

By design, the only difference between respondents assigned to the treatment and control groups is the gender marking of the job title in the profiles of female lawyers - the treated saw such profiles with the feminine title (avvocata) while the controls were presented with the predominantly used masculine title (avvocato). As shown in Table 1, all the other job titles were the same in both experimental conditions.

<sup>&</sup>lt;sup>10</sup>If the respondent was from the same profession related to the scenario (lawyer or accountant or medical doctor), they were either screened out and did not have to complete that scenario (accountants and medical doctors), or they were asked about the likelihood of collaborating with the lawyer profiles, rather than the likelihood of contacting them.

<sup>&</sup>lt;sup>11</sup>The gender could be inferred from the first name. First and last names were chosen from a list of common names in Italy, excluding those with a strong geographical connotation. Some last names typically found in the Province of Trento were included, given the sample, to make the study more realistic.

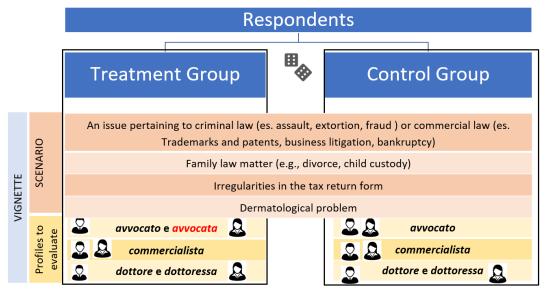
<sup>&</sup>lt;sup>12</sup>Similar information was presented for accountants, with the difference that the national exam was that of *Auditor*, another quality signal, and that we varied education between a three and five-year degree (not possible for lawyers, who all must have a five-year degree). For medical doctors, we did not include any quality signal other than experience, but only randomly varied the specialization between dermatology and cosmetic surgery.

Table 1: Experimental Design: job titles of male and female profiles by treatment status in the four vignettes

Scenario	Job titles			
Issues pertaining to <sup>a</sup> :	Female Profiles		Male Profiles	
155ues pertuining to .	Treated	Control	Treated	Control
Criminal or Commercial law <sup>b</sup>	Avvocata	Avvocato		
Family law	Avvocata	Avvocat <b>o</b>		
Tax returns (placebo)	Commercialista			
Dermatology (placebo)	Dottoressa Dottore			

*Note*: Job titles assigned to female and male profiles in the four vignettes. <sup>a</sup> The four vignettes were presented in random order at respondent level. <sup>b</sup> each respondents was randomly shown either the vignette related to criminal or to commercial law.

Figure 2: Vignette Structure and Experiment



Note: This stylized figure shows the structure of the survey experiment. Respondents saw four scenarios: two related to lawyers (one family law and one criminal or commercial law), one related to accountants, and one related to medical doctors. The treatment group saw female profiles for lawyers with the feminine title (avvocat a, while the control group with the masculine title (avvocat o). Nothing changed between treatment and control for the scenarios related to accountants (commercialista, same for male and female profiles) or medical doctors (dottore/essa, always gendermarked for female profiles). The gender was always easily inferrable by the name of the person.

The study was pre-registered at the AEA RCT Registry.<sup>13</sup> The pre-specified primary outcome is the score assigned to the profiles of female relative to male lawyers, differentiating between the family law and the criminal/commercial law scenarios. We expected that the feminine title would

<sup>&</sup>lt;sup>13</sup>https://www.socialscienceregistry.org/trials/10169

carry a higher penalty in male-dominated fields (i.e., criminal and commercial); in female-dominated fields (i.e., family law) we expected a zero or positive effect. As we show later, we indeed observe significant heterogeneity in law scenarios across sub-fields, but in the opposite direction to what was expected. Finally, we also pre-specified that we would explore heterogeneous effects by the gender of the respondent.

#### 2.3 Data

The sample was recruited through the professional orders of the province of Trento, an autonomous Italian province in the north of the country, with generally higher economic and educational outcomes than other provinces. In Italy, professional orders exist for several professions (including scientific and technical ones). Generally, to practice these professions on a self-employed basis, one has to be signed up as a member, making it almost mandatory. All professional orders of the province of Trento were contacted and encouraged to forward the survey to their members; 16 out of 26 professional orders did so. The survey remained open for a month, from October 4 to November 17, 2022. The survey was framed in a neutral way, without mentioning gender or gender language, however, it was circulated by an institution devoted to gender inclusion, the Equal Opportunity Committee of the Rovereto Bar Association.

In the Online Appendix, we show that, on average, respondents spent around 5 minutes on the survey and took around 6 minutes to complete it (Figure A3). Among those who started the vignettes, more than 90% filled in the whole survey. We observe no signs of fatigue effects across vignette orders: apart from the first shown vignette, which took more time to complete, the remaining three displayed similar response time distributions (Figure A4).

Table 2 provides some descriptive statistics of the sample. Most of the respondents are self-employed, primarily in the legal or socio-economic sectors. Lawyers account for roughly one-third of the sample. Figure A6 in the Appendix compares views regarding gender stereotypes of our sample to those of the general Italian population in 2018, by using the scale used in Istat (2019). Respondents exhibit significantly lower stereotypes compared to the general population, which was expected given

the characteristics of the location (province of Trento) and the professional status of our respondents (all of whom are working age, employed, and generally have a college degree). Additionally, participation was voluntary, so it is possible that those with more neutral gender views were more likely to answer the survey, which is important for the interpretation of our results. Nevertheless, the pattern across items is similar to that of the general population in terms of the relative degree of agreement with the different gender stereotypes.

Table A1 shows that these characteristics are well-balanced across the treatment (those who see avvocat a) and the control group (those who see avvocat a). No significant difference emerges between the two groups, and the joint F-test is not significant. We consider this as evidence that the randomization performed well and the two groups are roughly comparable aside from the treatment. As an additional integrity check of the experimental protocol, we find that being assigned to the treatment group has no impact on the probability of completing the survey (90.2% for those who saw avvocat a).

# 3 Empirical Analysis

# 3.1 Empirical Specification

Each respondent saw 4 profiles in each of the 4 vignettes; up to a total of 16 profiles, 8 male and 8 female. Our main estimations are carried out at the profile level. The advantage of estimating our model at the profile level, rather than at the vignette or individual respondent level, is that we can control for the randomly-varying characteristics of each profile (e.g., gender and experience) to improve the precision of our estimates. In practice, we estimate the following model:

$$Score_{j,v,i} = Scenario_v + Order_v + \alpha Treat_i + \gamma P.Woman_{j,v} + \beta Treat_i \times P.Woman_{j,v} + X_i' + Z_j' + \varepsilon_{j,v,i}$$
 (1)

where  $Score_{j,v,i}$  is the reported likelihood of contacting a given profile (varying from 1 to 10)<sup>14</sup> j in scenario v by individual i;  $Order_v$  is a vector of scenario and order of appearance (randomly allocated) fixed effects;  $Treat_i$  is the treatment group indicator, equal to 1 if the respondent saw the job title avvocat a in all profiles of female lawyers and 0 if the job title was avvocat v;  $P.Woman_{j,v}$  is 1 of the profile is female and 0 if it is male. Therefore, v is the effect of the treatment on the scores of male profiles, v denotes the difference between the scores of female and male profiles in the control group, while v, our coefficient of interest, is the change in the scores given to female profiles relative to male profiles in the treated group relative to the control group. Standard errors are consistently clustered at the respondent level.

#### 3.2 Results

The main results are presented in Figure 3 and Table 3. The main coefficient of interest is  $\beta$  in the scenarios related to the legal field (Columns 3 to 5 in Table 3), which indicates the change in relative score between male and female profiles between treatment arms. Using the feminine job title for female lawyers lowers the relative scores of female profiles by -0.36 points relative to men (out of 10; 0.16SD; p-value = 0.054). While negative in all scenarios, the effect is statistically significant only in the family law scenario and roughly three times larger in magnitude than in the criminal or commercial law scenarios. Reassuringly, consistent with the design of our experiment, we find no significant effects for the placebo scenarios on accountants (commercialista) or medical doctors (dottore/dottoressa), where profiles presented were identical for both treated and control group (but we could still have potentially observed within-participant spillovers from other scenarios).

To better put this effect into perspective, we turn to the other two coefficients of interest. First, the  $\gamma$  estimates indicate that, on average, respondents in the control group assign higher scores to female profiles relative to male profiles. Notably, this female "premium" is 2.5 times larger in the stereotypically female-dominated field of family law. In both scenarios (family law and commercial/criminal law), the  $\gamma$  estimates are about twice as large, in absolute terms, as their respective  $\beta$ 

 $<sup>^{14}</sup>$ The average unconditional scores across vignettes for the treated and control groups are plotted in Figure A2 in the Online Appendix.

estimates, thus the treatment reduces the female "premium" by about half in both scenarios. The  $\gamma$  estimates, while statistically insignificant, indicate that in the family law scenario, the treatment increases the scores of men in absolute terms; together with the  $\beta$  estimates, it indicates that in the family law scenario, the treatment increases the scores of men while decreasing the scores of women by a similar absolute amount (0.287 - 0.536 = -0.249).

In terms of economic magnitude, the effect of the feminine title is large when compared to other profile characteristics available to the respondents when scoring profiles. Figure 4 shows how it compares in terms of coefficient size to age, experience, and other quality signals. The effect is as large as the negative difference between younger and older profiles, and is equivalent, in absolute terms, to the positive signal of being part of a law studio or having approximately 8 years more experience.

In Figure 5, we depict instead the size of the  $\beta$  coefficient over years of experience, distinguishing between three groups based on quality signals, depending on whether the profile indicated affiliation with a legal studio or having passed the exam for qualification to appear before the Court of Cassation. The figure shows that those who pay the highest penalty for using the feminine term are the female profiles at the bottom of the experience×quality signal distribution. The negative effect converges to zero as experience increases, and is fully offset by a strong quality signal like having passed the exam to practice before the Court of Cassation. Interestingly, this last finding appears consistent with the actual use of the feminine job title in the population. Figure A5 in the Online Appendix shows that the use of the feminine term by female lawyers in the Province of Trento slightly increases with age (a proxy for experience), based on data from the survey preceding this study, in 2021. However, we cannot exclude that this may simply be a cohort effect and not due to a lower penalty for using the feminine title at higher levels of experience.

Table 4 reports the estimates of the heterogeneous effects by the gender of the respondent, included in the pre-registration. The negative effect is actually stronger among female respondents compared to male respondents. Women lower their scores assigned to female profiles relative to male profiles with the feminine title in both law-related scenarios by the same magnitude (family law and criminal/commercial law), whereas men do so only in the family law scenario, while actually giving

slightly higher scores in the other scenarios.

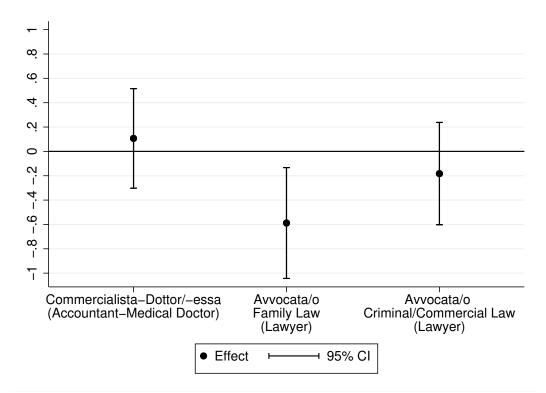


Figure 3: Treatment Effects on Female Profiles Relative to Male Profiles, by Scenario

Note: The figure plots point estimates and 95% confidence intervals of the  $\beta$  coefficient in 1, giving the treatment effect on female relative to male profiles, in the placebo scenarios, (accountants and medical doctors), family law scenario (female dominated) and the criminal/commercial law scenarios (male-dominated). The outcome variable is the reported likelihood of contacting a given profile, ranging from 0 to 10.

To the extent possible, we delve into the mechanisms behind the negative effect of the feminine job title through heterogeneity analysis and an examination of response times. Unfortunately, this analysis is significantly limited by the relatively small sample size, which does not allow going beyond what was pre-registered (i.e., heterogeneous effects by gender). All the results can be found in the Online Appendix.

Table A2 shows that female respondents, when exposed to the feminine term, decrease their response time compared to male respondents, who actually allocate more time than those in the control group. In terms of magnitude, the treatment cancels out the positive coefficient on the dummy for female respondents (i.e., Female), meaning that women take longer than men in the control group to fill the vignettes, while they take, on average, as much time as men in the treated group. As

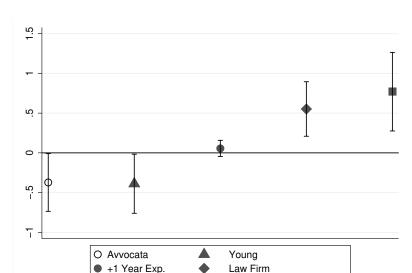


Figure 4: Effect of Profiles Characteristics on Scores of Female Profiles

Note: Point estimates and 95% confidence intervals estimated through OLS, using standard errors clustered at the respondent level. Avvocata indicates the estimate of the coefficient of interest ( $\beta$ ) in Equation 1. The other categories indicate point estimates of the coefficients on the randomly varied profile characteristics. Young indicates profiles in the younger age group (by 20 years on average), +1 Year Exp indicates having one additional year of experience, conditional on age group, while Cassazionista indicates having taken a national exam to argue in front of the Court of Cassation in Italy. See Figure A1 in the Online Appendix for an example.

95% Confidence Intervals

Cassazionista

shown in the literature, lower response time may indicate greater reliance on intuition or impulse and stereotype (De Neys, 2006); we take this as tentative evidence that women who see the feminine title act more on impulse/stereotype and decrease the time spent evaluating each profile.<sup>15</sup>

Finally, in Table A3 in the Online Appendix, we decompose the main effect by the gender and profession of the respondents, distinguishing between those "professionally close" to lawyers (lawyers, tax lawyers, work consultants) and those in other STEM-related professions. Despite the low sample size, the results show that both female respondents in "close" professions and STEM-related professions assign reduced scores when seeing avvocata for female profiles. Thus, both potential collaborators and clients penalize the use of the female title.<sup>16</sup>

In summary, we find that the negative effects are primarily driven by female respondents, that, women decrease their response time when treated compared to men, and that this downgrade

 $<sup>^{15}\</sup>mathrm{A}$  similar pattern can be observed in the place bo group, which may indicate a carryover effect from the law-related scenarios.

<sup>&</sup>lt;sup>16</sup>It should be noted that in all the STEM-related professions of the respondents in our sample either the neutral term is in use or the masculine term is prevalent.

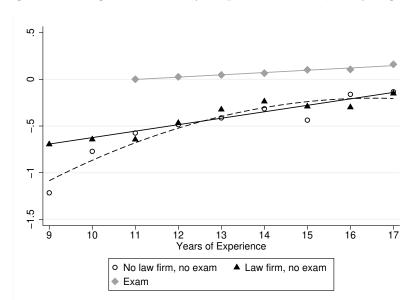


Figure 5: Marginal Effects by Experience and Quality Signals

Note: Effects of the feminine job title (y-axis) for female profiles in the younger category, with different years of experience (x-axis). Law firm indicates profiles who are part of a law firm, while Exam indicates profiles with the qualification to appear before the Court of Cassation. Note that the exam to obtain the qualification can only be taken after roughly 10 years, which is why no profile with less than 10 years of experience had this title.

is consistent regardless of the respondent's field's proximity to the legal profession. We interpret the observed effect as the result of a stigma attached to women who use the feminine title. This interpretation is also supported by the fact that the effect is more pronounced in family law, which is traditionally a female-dominated field. Our design does not allow us to distinguish between statistical and taste-based discrimination. However, improving upon previous studies in the literature, the profiles shown in our study come with relevant professional characteristics that we control for in our models, which should limit the role of statistical discrimination. Finally, considering that roughly only 15% of female lawyers in the province use the feminine term, it is possible that such a minority is punished by the majority using the masculine term for deviating from the perceived social norm.

# 4 Conclusion

In this paper, we investigate how a gender-marked job title for female lawyers affects their ratings among colleagues and potential clients. We conducted a vignette study with a sample recruited

through the professional orders of the Province of Trento, where respondents were asked to rate the likelihood of consulting (or collaborating with) a given profile in a realistic scenario. In our experiment, we randomly varied, across participants to the survey, whether female lawyers were presented with the feminine title avvocata or with the masculine title avvocato. In our context, roughly 15% of women lawyers use the feminine title. We find a strong, negative effect on women's relative scores when presented with the feminine title. This negative effect mostly comes from women downgrading female profiles, and, specifically, both from those in professions with a similar background/education to lawyers and from those in more distant professions. The effect is large in magnitude when compared to other information available to the respondents when making the decision (e.g., equivalent to 8 years of experience), but is fully offset by quality signals like experience, affiliation to a law studio, and successful completion of a challenging national exam. Importantly, we show that the effect is most negative for young, inexperienced women without strong quality signals. This mirrors the real-world usage pattern in the reference population, where the proportion of female lawyers using the feminine job title rises with age. In our setting, we are unable to distinguish between the various possible explanations underlying these effects. In particular, the small sample size significantly constrains our ability to explore heterogeneity. Nonetheless, our interpretation is that this likely reflects discrimination (either statistical or taste-based) against female professionals who use female professional titles.

Overall, we believe these results have important policy implications and deserve further research and investigation. First, we show that the distribution of the feminine terms in job titles seems to exhibit threshold effects, with few or no professions where a significant share of both masculine and feminine titles coexist. This suggests that there might be an important role of policy in pushing towards those thresholds where diffusion of the feminine term becomes easier, and, presumably, the penalty assigned to feminine titles disappears. Second, we show that in a profession, lawyers, where few use the feminine term, presenting a profile with the gender-marked job title significantly decreases the score of that profile, suggesting that there is a negative bias associated with the feminine job title. Assuming that the diffusion of feminine job titles is a positive phenomenon, important for breaking stereotypical links between gender and specific professions, this result underlines that there might be

misalignment between individual incentives and group interests, as women might benefit from greater diffusion of the female term, but, individually, this switch might come at a cost. (as highlighted by Budziszewska et al., 2014) Third, we show that this effect is most negative at the bottom of the experience/quality distribution, i.e., young professional women are the ones with the largest incentive to use the masculine title, who are also the least likely to use it in practice. This also has important policy implications, as it might shape habits among those starting their careers, who have to decide what title to use. All in all, the findings of this paper suggest that coordinated policy interventions, at the level of the professional orders or public authorities, would be the most effective in changing practices, encouraging the diffusion of feminine job titles among women, and countering stereotypes against them.

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Table 2: Sample Characteristics

Observables	Frequency	%
Education level		
High School	24	10.57
Bachelor Degree	8	3.52
Master Degree	178	78.41
PhD	11	4.85
Gender		
Female	131	57.71
Male	96	42.29
$\mathbf{Age}$		
26-36	37	16.30
36-45	63	27.75
45-55	70	30.84
55+	55	24.23
Employment Type		
Employment Type	33	14.54
Employee Self Employed		
Self-Employed	$\frac{188}{3}$	82.82 1.32
Entrepreneur Pensioner	3 2	0.88
Ŧ		
Location	200	00.07
Trento	209	92.07
Outside of Trento	15	6.61
Profession		
Lawyers	68	29.96
Accountants	52	22.91
Architects	26	11.45
Work Consultants	18	7.93
Geologists	17	7.49
Other	46	20.26
Gender-marked (if female)		
Gender-marked Title (female)	84	64.12
Feminine if Gender-marked (female)	15	11.45
Observations	227	

Note: Descriptive statistics of the sample collected through the member lists of professional orders of the province of Trento. Missing values or responses coded as other are not indicated. 227 respondents answered the survey and completed at least one vignette. Gender-marked Title indicates the share of women in professions where there is a gender-marked form (some titles do not vary by gender). Feminine if Gender-marked indicates the shares of women who actually use the feminine title if they are in professions where there is a gender-marked form.

Table 3: Treatment effects on Profile Scores by Scenario Type

	ALL	PLACEBO	Lawyer Scenarios	FAMILY LAW	CRIMINAL/ COMMERCIAL LAW
	(1)	(2)	(3)	(4)	(5)
	Profile Score				
$\alpha$ Treated	0.050 $(0.212)$	-0.027 $(0.232)$	0.163 $(0.237)$	0.287 $(0.254)$	0.093 $(0.248)$
$\gamma$ Female Profile	0.528*** (0.099)	0.412*** (0.134)	0.697*** (0.138)	0.984*** (0.175)	0.405*** (0.152)
$\beta$ Treated×Female Profile	-0.103 (0.155)	0.108 (0.208)	-0.362* (0.186)	-0.538** (0.231)	-0.193 (0.213)
Control group Mean	6.55	6.59	6.52	6.52	6.54
Control group SD	2.26	2.33	2.21	2.16	2.23
Observations Respondents	3,216 $227$	1,508 217	1,708 219	860 215	848 212
R-squared	0.062	0.053	0.104	0.108	0.122

Note: OLS estimates of Equation 1. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors clustered at the respondent level in parentheses. The outcome is the reported likelihood of contacting a given profile, ranging from 0 to 10. Treated indicates respondents shown profiles of female lawyers with the feminine job title (as opposed to the masculine title). Female Profile indicates profiles of female professionals. The number of observations indicates the number of individual profiles evaluated by the respondents ((1)=(2)+(3)) and (3)=(4)+(5). Scenario fixed effects and order of appearance fixed effects are included. Respondent level controls include age, gender, dummies for having a college degree, STEM-related profession, self-employment, and whether working in the province of Trento. Profile-level controls include age, experience, and other quality signals.

Table 4: Treatment effects on Profile Scores by Scenario Type and Gender

	LAWYER SCENARIOS	FAMILY LAW	Criminal/Commercial Law
	(1)	(2)	(3)
	Profile Score	Profile Score	Profile Score
Female	-0.243	-0.249	-0.417
	(0.369)	(0.405)	(0.376)
Female Profile	0.562**	0.878***	0.241
	(0.222)	(0.325)	(0.185)
Female × Female Profile	$0.212^{'}$	0.168	0.256
	(0.283)	(0.378)	(0.284)
Treated× <b>Male</b> ×Female Profile	-0.080	-0.425	0.270
	(0.298)	(0.410)	(0.287)
$Treated \times Female \times Female $ Profile	-0.585***	-0.609**	-0.585***
	(0.227)	(0.269)	(0.286)
Profiles Evaluated	1,708	860	848
Respondents	219	215	212
R-squared	0.108	0.110	0.131

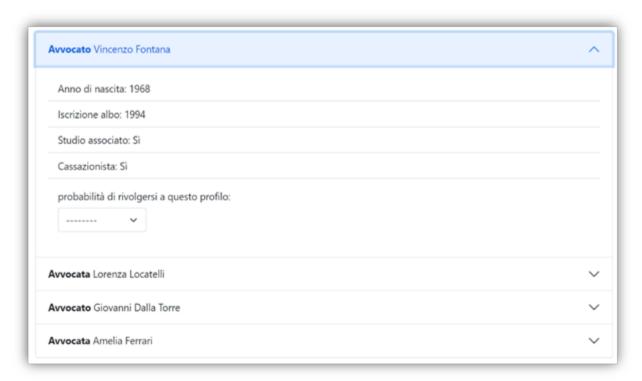
Note: OLS estimates of Equation 1, modified to include also two and three-way interactions with the gender of the respondent. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors clustered at the respondent level in parentheses. The outcome is the reported likelihood of contacting a given profile, ranging from 0 to 10. Treated indicates respondents shown profiles of female lawyers with the feminine job title (as opposed to the masculine title). Female and Male indicate the gender of the respondent. Female Profile indicates profiles of female professionals. The number of observations indicates the number of individual profiles evaluated by the respondents ((1)=(2)+(3)). Scenario fixed effects and order of appearance fixed effects are included. Respondent level controls include age, gender, dummies for having a college degree, STEM-related profession, self-employment, and whether working in the province of Trento. Profile-level controls include age, experience, and other quality signals.

Online Appendix
for "The Cost of a Vowel: How the Gender-marked Job Title Affects Ratings of Female Lawyers"

# A Appendix

# A.1 Tables and Figures

Figure A1: Choice Example in the Vignette Study Section



Note: Example of a choice example from the vignette study section. For each scenario, respondents had to choose among four profiles, two men and two women. For the treated, the feminine job title (avvocat a) was used for female profiles (as in the figure), while for the control group, the masculine title (avvocat a) was used. Respondents had to click on each profile which would display the professional characteristics and make visible the choice field where they indicated the likelihood of reaching out to such a profile to address the issue described in the scenario.

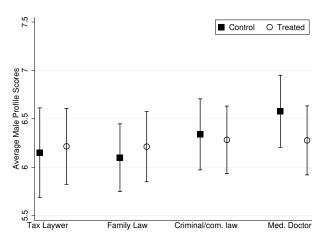
Table A1: Balance Check Joint Test

	(1)
	Treated
College Degree	-0.158
	(0.108)
Profession with Gender-marked Title	-0.004
	(0.089)
Feminine Gender-marked Title	-0.097
	(0.124)
STEM-related Profession	0.094
	(0.091)
Female	-0.068
	(0.073)
Age 45+	0.011
	(0.070)
Working in the Trento province	-0.213
	(0.134)
Self-Employed	-0.054
	(0.097)
Observations	227
R-squared	0.067
Joint F-test p-value	0.28

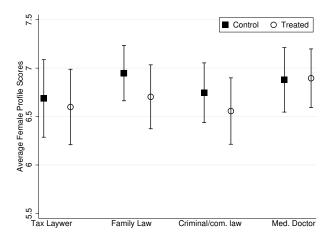
Note: OLS estimates obtained from regressing the treatment status variable on all observable characteristics (all binary variables). The specification includes dummy variables indicating missing values in each variable (missing values are coded as zero).

Figure A2: Unconditional Male and Females Average Profiles Scores in the different Scenarios

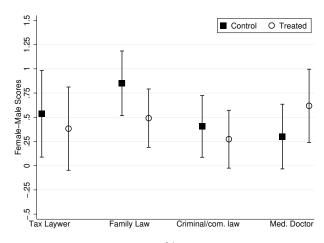
#### (a) Male Profile Scores



#### (b) Female Profiles Scores

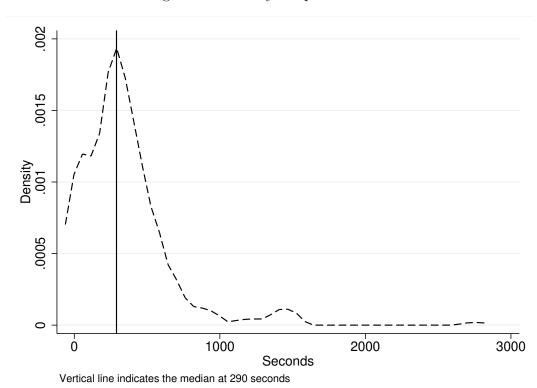


#### (c) Female - Male Profile Scores



Note: Point estimates of the average unconditional and 95% confidence intervals of the reported likelihood to contact a given profile, by treatment status (i.e. seeing the gender-marked vs. the masculine job title for profiles of female lawyers). Panel (a) reports the average scores for male profiles; Panel (b) reports the average scores for female profiles; Panel (c) gives the average difference between female and male scores.

Figure A3: Survey Response Times



Note: Distribution of time spent on the survey across respondents, regardless of whether they completed or not the survey (more than 90% of those who started completed the survey). The vertical line indicates the median time spent (290 seconds, 4.8 minutes.) For those who complete the survey, the median time is 5.8 minutes.

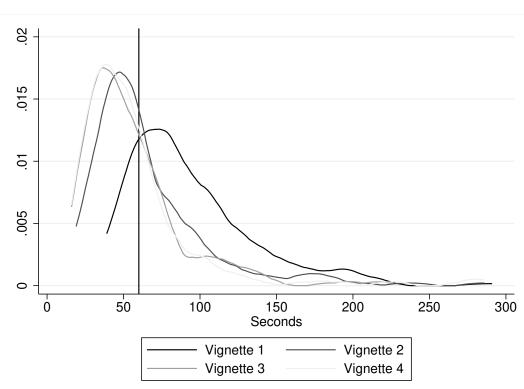


Figure A4: Vignettes Response Times

*Note:* Distribution of time spent on the survey across respondents, by order of appearance of the vignettes (scenarios). The vertical line indicates the median across vignettes, which is roughly at 1 minute.

Table A2: Treatment effects on Survey Response Times (in logs), by Gender

	(1)	(2)	(3)	(4)	(5)
$log \ of$	T. Complete	T. Spent	T. Vignettes	T. Vignettes Law	T. Vignettes Placebo
m 1	0.140	0.100	0.100	0.140	0.160
Treated	0.142	0.102	0.189	0.140	0.169
	(0.095)	(0.107)	(0.117)	(0.116)	(0.108)
Female	0.156*	0.106	0.176*	0.237**	0.061
	(0.089)	(0.103)	(0.102)	(0.112)	(0.103)
$Treated \times Female$	-0.181	-0.176	-0.332**	-0.306*	-0.146
	(0.133)	(0.148)	(0.151)	(0.158)	(0.150)
Observations	100	210	210	200	200
Observations	189	219	219	209	209
R-squared	0.155	0.097	0.094	0.102	0.090

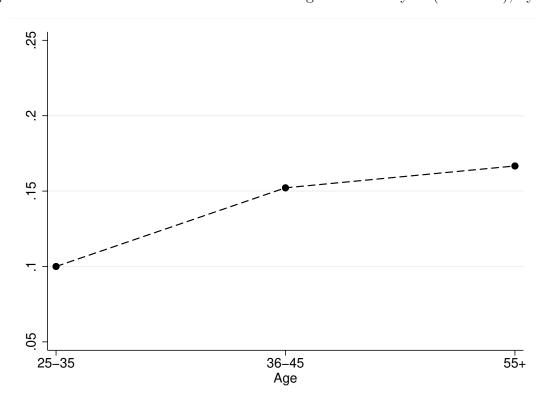
OLS estimates obtained from regressing the log of seconds spent to complete the survey or vignettes on the treatment status variable Treated, interacted with a binary variable indicating if the respondent is female. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The unit of analysis is the respondent. Controls for whether the criminal or commercial law scenario was shown. The outcome variable is the total amount of time to complete the survey (Column 1), the time spent on the survey for those who completed at least one vignette (Column 2), the time spent on all vignettes (Column 4) on the law-related vignette (Column 5) and on the placebo vignettes (Column 6). Observations with response times above 1500 seconds (N=8) are excluded from this estimation. All the response times are expressed in logs.

Table A3: Treatment effects on Profile Scores by Gender and Profession in the Law Scenarios

	Close Pr	Close Professions		ED PROFESSIONS
	Female	Male	Female	Male
	(1)	(2)	(3)	(4)
	Profile Score	Profile Score	Profile Score	Profile Score
Treated	0.291	-0.460	-0.037	0.761
	(0.331)	(0.510)	(0.503)	(0.565)
Female Profile	0.782***	0.594**	0.695***	0.563
	(0.217)	(0.294)	(0.252)	(0.353)
$Treated \times Female Profile$	-0.547*	-0.210	-0.652*	0.106
	(0.291)	(0.356)	(0.321)	(0.540)
Profiles	724	464	248	272
Observations	93	59	32	35
R-squared	0.117	0.153	0.297	0.266

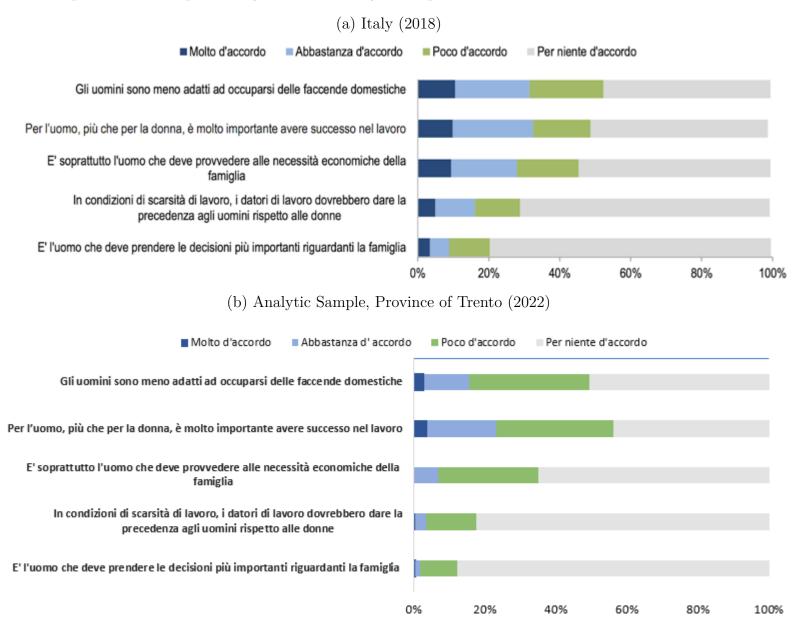
Note: OLS estimates of Equation 1 estimated separately by respondent gender and type of profession for the law scenarios. Standard errors clustered at the respondent level in parentheses. \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1. The outcome is the reported likelihood of contacting a given profile, ranging from 0 to 10. Treated indicates respondents shown profiles of female lawyers with the feminine job title (as opposed to the masculine title). Female Profile indicates profiles of female professionals. The number of observations indicates the number of individual profiles evaluated by the respondents. Close Professions indicates professions more closely related to the law profession; it includes lawyers, work lawyers, tax lawyers, and notaries. Respondent level controls include age, gender, dummies for having a college degree, scientific profession, self-employment, and whether working in the province of Trento. Profile-level controls include age, experience, and other quality signals.

Figure A5: Use of the Feminine Job Title among Female Lawyers (Avvocata), by Age



Note: The share of female lawyers who use the feminine job title, avvocat a (y-axis) by age group of the respondent (x-axis). This information is taken from a survey circulated by the Equal Opportunity Committee of the Rovereto Bar Association to professional orders of the Province of Trento in 2021 (N=124)

Figure A6: Level of Agreement with Statements Capturing Gender Stereotypes (1-4 Likert Scale), in a representative sample in Italy and in the analytic sample



Note: Level of agreement with gender stereotypes measured through a Likert 5-item scale. Panel (a) shows the results from a nationally representative sample collected by istat2019 in 2018. Panel (b) shows the results from the present study conducted in the Province of Trento. In order of appearance, the translated items are: 1) Men are less able to take care of household chores; 2) For men, more than for women, it is very important to be successful at work; 3) It is primarily the man who must provide for the economic needs of the family; 4) Under conditions of labor shortages, employers should give priority to men over women; 5) It is the man who has to make the most important decisions concerning the family. In order of appearance, the translated response options are: Strongly Agree, Somewhat Agree, Slightly Agree, and Disagree.