Università degli studi di Milano
Dip. di Scienze Sociali e Politiche

Università degli studi di Torino
Dip. di Culture, politica e società

PhD PROGRAM
SOCIOLOGY AND METHODOLOGY OF SOCIAL RESEARCH – 33rd cohort
Scientific area SPS/07

THE BIAS, THE GAP AND THE HIERARCHY.
What women know about politics and how to measure it.

Doctoral dissertation by

Silvia Keeling

Supervisor: Prof. Mauro Barisione

Director of Doctoral Program: Prof. Giovanni Semi

A.A.
2019/2020

Acknowledgments

I can hardly take full credit for this thesis, as it is truly the joint effort of many. I therefore wish to acknowledge those who offered me their assistance and cooperation in making this work complete. I am deeply grateful to them, but I alone am responsible for the mistakes and inaccuracies that may appear throughout the pages.

I would like to start by thanking Professor Mauro Barisione, this dissertation supervisor, for I would not have been able to design, develop or even write any of it without his brilliant thoughts and solid guidance.

I thank Professor Robert Luskin, for having kindly hosted me at UT Texas, and for having shared his knowledge and precious advice during my stay at Austin and beyond.

I would also like to thank Professor Ferruccio Biolcati Rinaldi, Professor Cristiano Vezzoni, Doctor Riccardo Ladini, Doctor Francesco Molteni and Doctor Federico Vegetti who have revised embryonal bits and pieces of this dissertation or listened to my chaotic projects, and thus advised me on how to make them grow.

I wish to dearly thank Professor Nicoletta Cavazza and Doctor Anja Durovic, who have meticulously revised the first official draft of this dissertation and helped me prepare a more final and complete version.

I want to thank my dad Bernard, my only and irreplaceable proof-reader, who once again took the time and patience to correct my typos and turn this dissertation into a pleasant read.

I also wish to thank Alexandra Elbakyan, for her activist efforts, without the help of whom this would not be a finished file.

Finally, I want to thank all the friends who have emotionally supported me throughout my career, my caring housemates, my astonishingly bright colleagues, and – last but not least – the amazing women I know. My mom Gloria, my sister Erica, but also all of the marvellous women I am lucky to have met along the way; they are truly too many to name but inspire my work and fight for gender equality every day. I dedicate this dissertation to them – and to Torta the cat, who is a queen herself, for she has kept me company in this very gloomy year of pandemic and thesis-writing.

TABLE OF CONTENTS

Introduction

Traditionally, politics has been a largely male pursuit, although in recent times much has changed. Women have come a long way from the universal suffrage and have become critical actors of the public scene: their educational levels and turnout rates are increasing at faster paces than those of men, making them an essential and active part of public life (Norris 2002; Coffé and Bolzendahl 2010). There is evidence for this – women today hold an average of about 24% of the seats in national legislatures, nearing or reaching 50% in places (IPU 2019; http://archive.ipu.org/wmn-e/classif.htm). Hence one can assume that women have full access to political news and have broader opportunities to cover higher occupational positions, for which practical information in politics and public administration is an asset. Yet even now, men still appear to know a great deal more about politics than women all around the world (Verba, Burns and Schlozman 1997; Mondak and Anderson 2004). Research on the matter has produced systematic results: the gap is traceable in the United States (Delli Carpini and Keeter 1996; Dow 2009), Europe (Fraile 2014), Britain (Frazer and Macdonald 2003), and Latin America (Fraile and Gomez 2017), as well as in broader comparative studies that cover both established and new democracies (Dassonville and McAllister 2018; Fortin-Rittberger 2016; Gronlund and Milner 2006).

Knowledge is essential and, above all, empowering. Following the political life of your country is a necessary requisite if you care to have your rights represented. It takes some reading and practice to detect the candidates and parties that best promote your interests – as well as to detect your interests in the first place. In fact, political consciousness – that is, the understanding of one's position in society as well as the privileges and obligations that this social rating entails – comes with some awareness of what the people's representatives are doing and how they are doing it. This is fundamentally why political knowledge represents the cornerstone of political behaviour. Informed citizens can hold their representatives accountable for the quality of their service, by voting or not voting for them, or taking alternative political action to support or contrast them. On the other hand, uninformed citizens risk being underrepresented, and although the increasing numbers in representation are a promising upgrade from the last century, with an average share of seats of about 24% in national governments, underrepresentation seems to be the case for women.

Underrepresentation is just one consequence of what social and political science literature term "the gender gap" – an expression that is generally used to refer to a disadvantageous share of resources that women have when compared to men in the realm of politics. In fact, data backs up this statement with many other examples – women seem to be less interested, subscribe to parties in smaller numbers, and, of course, are not as talkative or knowledgeable about political matters when compared to their male counterparts. The fact that certain social targets cannot dispose of the same intellectual means as others is very concerning. In fact, studying political knowledge inequalities has never been as relevant as today, amidst the so-called 'post-truth' era we find ourselves living in, dominated by populist pleas and pervasive fake-news. Indeed, it is not only the lack of knowledge that is preoccupying – disinformation might be posing an even bigger threat. Quite the opposite of ignorance, which leads to apathy and alienation, intentionally wrong information can bring to 'political and 'psychological polarization' (Settle 2018; Dylko et al. 2018) and even lead to fanatism. Partisans tend to perceive real world occurrences in a manner that credits their own party (the so-called "partisan motivated reasoning", *see* Bolsen et al. 2014, Bisgaard 2015); they often recur to emotional reasoning to explain or mystify the outcomes that do not align to their ideological beliefs (Jern, Chang and Kemp 2014); they also vote and hand out persuasive, though false appeals to fellow citizens – some of which go viral thanks to the use of social media. Just like 'ignorance', disinformation comes as a consequence of unequal exposure and consumption of political news and could be targeting specific social groups. This is why amending the knowledge gaps we already witness to today is a necessary step.

For long, cross-national analyses have tried to empirically explain these knowledge differences by considering a variety of structural and socialization factors (Abendschon and Steinmetz 2014; Giger 2009; Inglehart and Norris 2000; Iversen and Rosenbluth 2006), such as the unequal access to political resources (Rotolo 2000; Sayer 2005), the high polarization of gender roles and occupations in society that prevents women from fully engaging in politics (Gidengil et al 2008; Fox and Lawless 2011; Sapiro 1982), and the marginalisation of women from public and culturally male-coded environments (Inglehart and Norris 2003; Preece and Stoddard 2005). However, women's emancipation and gains in terms of education and status undermine the conventional explanation of a knowledge gap resulting solely from their segregation to the private realm and a consequential secondary social position.

While socialization theories have been dominant in the sociological reasoning of political discrepancies between women and men, they cannot explain the gender gap entirely; a residual gap remains even when controlling for structural and socialization factors. This has led newer strands of research to claim that it is unlikely that women are still as unaware about politics as in the past and to hence look for other sources of clarification. As the times are changing but the measurement is not, scholars have started to question whether traditional conceptualizations of politics and the measuring tools involved in political studies are responsible for the gender knowledge gap instead. Gender scholars have started researching whether the content of the questions of political knowledge is favouring men by choosing topics women are not drawn to. At the same time, methodologists ask if technical features, such as the open versus closed-ended format or the availability of the 'don't know' response option are emphasising women and men's different propensity to guess.

The first claim is that the way political knowledge is socially understood and hence conceptualized in social research has biasing consequences on the methods of data collection, as well as on women's recorded levels of knowledge. Because the study of political knowledge has suggested that familiarity with constitutional and electoral politics is the only indicator of this type of expertise, survey questions on knowledge are mostly about institutional practices and offices – a topic that men have higher chances of knowing (Frazer and Macdonald 2003). Indeed, most political figures are men, so women lack the role models that could otherwise get them interested in the electoral mechanisms (Campbell and Wolbrecht 2005; 2006; Verba, Burns, and Schlozman 1997). And because they are not socialized towards a leadership role and are less likely to run for office (Lawless and Fox 2010; Preece and Stoddard 2015; Schneider and Bos 2019), institutional and electoral politics can be superfluous and unappealing information for them. Women tend to prioritize other issues, such as balancing work and family life, for example, but political knowledge questions rarely consider women's social experience with politics (Stolle and Gidengil 2010). A part of the problem, then, seems to be nested in the content of the questions on political knowledge and not in female's lack of interest; in fact, when asked about female politicians or about public policies, women appear not to lag behind men all that much, if at all (Dolan 2011; Ferrin, Fraile and Garcia-Albacete 2018; Hooghe, Quintelier and Reeskens 2007; Stolle and Gidengil 2010).

Question content is not the only factor that social research must pay attention to. A second stream of literature reports the existence of a 'gendered psyche' before topics of political knowledge, that holds women from expressing their opinions and doubts. Men, on the contrary, feel an obligation to answer and usually will. The result is that women provide fewer answers than men, so that a portion of their knowledge might go missing because of insecurity (and not because of their lack of knowledge). Moreover, women and men's different propensity to risk before questions about politics might be enlarged by some combination of protocol (allowing "Don't know" answers versus discouraging them) and question format (open-ended versus multiple choice) that is used during the data collection. This results in men seeming more knowledgeable than they are, and women appearing as less knowledgeable, when they might actually know just as much as men (e.g. Ferrin, Fraile and García-Albacete 2017; Luskin and Bullock 2011; Mondak and Anderson 2004; Prior 2014). In order to corroborate these recent theories, research has started using experimental methods; this enables isolating, recognising and thus measuring how much of the knowledge gap can be imputable to conceptual shortfalls and survey biases. This thesis takes matters from here.

There is a tendency to explain the gender gap in political knowledge by using a choice of four; either blame it on a) structural factors – men have more resources and are overrepresented in political institutions; b) cultural factors – women are not socialised towards taking politics as an interest or an ambition; c) the limited choice of content in questions about political knowledge, which encompass only men's expertise; and d) the choice of methodological tools in survey design, which can produce gendered reactions that conflate with knowledge in one indistinguishable measure. A fifth option would be not to choose among the four but to use them all in unison, and this thesis is dedicated to doing so. We start by considering the first two explanations of the gender gap (a and b), which mostly relate to a sociological reasoning of gender inequality, and then examine the repercussions they have on the second two (c and d), which regard hands-on social research.

The main thesis this project stands on is that the way we enact gender and think about women and men's role in society – or as society as a whole, that is, divided into binary oppositions – is affecting our attitudes and the way we learn about politics, as well as how researchers carry out the data collection. For example, the private/public dichotomy still influences the way we think about women and men's roles in society and

is also very likely responsible for our personal choices as gendered individuals. Hence, women grow up knowing they will be wives and mothers at some point in time, and will develop expertise on that matter; men, on the contrary, think they will become the principal breadwinner, so they need to learn how to navigate the public sphere. As these roles are hierarchically positioned, private matters are perceived as personal issues that can be addressed through individual initiative, whereas politics needs institutional regulation because it branches out to national and international audiences. As such, only the latter is perceived as worth knowing on a large scale and is asked in knowledge quizzes about politics. The slogan of the personal being political (Hanisch 1965) was coined to support precisely the claim that denying political significance to particular aspects of everyday life is a source of gender inequality. It is very concerning that politics, as well as the study of it, does not seem to be able to amend this problem. In fact, despite the florid and growing literature calling for a gender-sensitive renewal of methodology, women's experiences do not matter in the political struggle as much as those of men. This thesis inserts itself in the legacy of this thought.

Following this reasoning, the research questions this project wishes to answer are primarily two: 1) we speak greatly of women's achievements in the run for equal rights, but are women really free from the constraints and impositions of their traditional gender role, or from the normative expectation of them complying to this role? And 2) if women are systematically linked to their conventional role as caregivers, can we, as researchers, reconsider what is said to be of political relevance – and the study of what the public knows about it – so as to include the issues that come with women's social role and clear at least social-political research from a hierarchical and unfair understanding of society? The first aim will then be to demonstrate that patriarchal normativity survives in society, especially as regards to the gender role associated to women. Subsequently, the wish is to offer to scholarly literature alternative interpretations of gender gaps, as well as inclusive methodological solutions that can give equal recognition to both women and men's political experience and knowledge resources.

To this end, a first portion of this project is dedicated to studying whether the perception of the private versus public division of labour between the sexes is still solid in public opinion. We will address this query by taking on people's attitudes towards gender roles and hence examine whether normative expectations based on gender are strong and going despite the structural and cultural changes in favour of equality that we

have witnessed to in the last decades. Our results show that people still perceive the private and public as distinct societal spheres and that women's range of actions is inescapably linked to the former. Moreover, while women tend to admit the interchangeability of roles in the public environments to a larger extent than that of men, when it comes to family and homemaking duties, men and women equally think of them as better suited to the latter. The findings suggest that women's full participation to the public sphere continues to be culturally compromised so long as the role of mothers is understood as central for the family wellbeing; they also reveal that social research methodology might be placing excessive attention to this one aspect as well. This leads on to discuss both the practical and conceptual implications of assigning disproportionate attention to the traditional role of women in social research – the validity of the measurement is impoverished and data on women's contribution to public occupations, or of men's progressive partaking in the family, are disregarded.

The second issue this research wishes to address is how to account for gender differences in the study of political knowledge. We will do so by arguing, and then demonstrating, that knowledge gaps are of qualitative and not merely of quantitative nature and that they depend on the gendered experience of individuals. With a sociological account of the gender gap as a segmentation of (equally important) expertise rather than unilateral political interest or indifference, this thesis will provide the means to measure political knowledge on equal grounds. The results of this attempt constitute the original contribution this project wishes to make to scholarly literature on gender and politics and on survey methodology research. More importantly, they provide sufficient material to demonstrate that when the social experience of women is enclosed in surveys as a political issue, new areas (as well as definitions) of political knowledge emerge.

This thesis begins by developing a theoretical framework for the analysis. Chapter 1 will start by emphasising the imbalanced perception of gender roles and how this is affecting political behaviour and methodological biases. It will then stress why political knowledge is a key element in investigating the effects of enduring gender constructions in society and social research methodology. It will argue that, in its role as an antecedent of political behaviour, it is a junction point between the social and the political experience of women and men. Throughout the chapter, the literature on the gender gap in political knowledge is often linked to the sociological debate around the socialization of women

and men into gender roles. This sociological reasoning will help us locate in the division of public and private labour the origins of the segmentation of political expertise between women and men. To this end, we will go through the material and cognitive reasons for why women know less than men about institutions and 'rules-of-the-game' – i.e., budgetary and time constraints or aversion to competition. At the same time, we will examine the fields that are closer to women's everyday concerns and explore the literature that tackles women's areas of political expertise. The ultimate purpose is then to use this information to set the theoretical framework that will help create alternative content for political knowledge questions in the experimental phase of this project.

Chapter 2 is dedicated to exploring the structural, cultural and normative explanations for why the social role assigned to women is primarily related to the private realm. For this purpose, a secondary analysis was performed on EVS data going from the 1990s to the present day, where perceptions towards gender roles are used as the dependent variable. The focus is to shed light on how attitudes towards gender roles have changed over time and across space, where they stand now, and what are the mechanisms that foster gender equality (GE). We argue that structural factors – i.e., the increasing numbers of females in education and employment, and the decreasing levels of religiosity – together with cultural elements – i.e., the period influences of the feminist movements and cohort replacement – have had a beneficial effect on GE over time, although we expect this effect to be only marginal. The results partially confirm this last expectation by showing that education and secularization can only do so much on the contextual level, and that generational value change is extremely slow and needs to be cyclically stimulated by exogenous influences brought by the feminist movements. Instead, they confirm that female employment is a powerful predictor of GE (measured in terms of lower levels of gender normativity), but that it is decreasing in time, bringing us back to a condition of conservatism. A second section of the chapter is dedicated to the measurement of GR in the EVS, to the critiques it has received in literature, and to the significant improvements that the last GR scale has brought to the analysis. Apart from measuring attitudes towards the traditional role of women, it allows us to observe how people feel about the ability of women to cover public roles as efficiently as men. However, the findings seem to suggest that while women and men could be covering public roles interchangeably, the nurturing and caregiving role does not appear to be less normative for women.

The last chapter of this thesis, Chapter 3, is devoted to analysing how traditional (and biased) understandings of the public sphere are reproduced by the means of data collection. It argues that the processes of socialization that shape women and men's social lives have repercussions on how they both participate in politics, but that this information can be used to create inclusive methodology. The purpose is here very practical – that of finding alternative survey questions and methodology that can guarantee equal chance of answering to women and men, and hence collect data on how women approach to politics as well. To engage in this challenge, a couple of experiments were designed and administered to university students, focusing, in particular, on the correlation between gender and both 1) the content of the questions, and 2) the propensity to answer or to guess. Apart from institutional politics, other issues were used as proxy to investigate political knowledge, which enabled to explore the multi-dimensional nature of this concept. In fact, after a thorough literature review, it is strongly herein suggested that knowledge is articulated in at least 3 dimensions – the topical, the temporal and the gender-relevant. The questions were in both open-ended and closed-ended format, and the 'Don't know' (DK) option was randomly discouraged. We expected women and men to perform differently on dissimilar topics (intra-gender variation) and to perform differently on the same topic (inter-gender variation). We also expected that women and men's respective risk aversion and inclination would only be evident before traditional questions of political knowledge, but that they would disappear on alternatively formulated items. The experimental manipulations gave mixed results but were able to establish that 1) there is indeed a polarization of knowledge on different political topics between women and men, and that 2) traditional methodology is offering questions that only advantage men, so it needs to be revised in the direction this thesis suggests.

The issue of knowledge gaps proves to be expedient in discussing the reach of the hierarchical position of men with respect to women. In fact, gender cultures are so solidly rooted in the foundations of society as to influence the methods through which new knowledge is produced. Specifically, research is framed here for replicating these gender biases in survey design, by paying undue attention to the traditional role of women when measuring citizen's ideas on how society is organized, while crediting only men's expertise and behaviour in the realm of political research. By doing so, it both reinforces

binary categorizations and fails to capture the complexity of modern society, which is timidly starting to reject such compartmentalisations.

On a final note, focusing on gender divisions as opposed to interchangeability is not ideal in the quest for gender equality – talking about knowledge spill-overs and patterns of behaviour that do not depend on gender would be certainly more welcome. However, this thesis is willing to show, at least, that neglecting the gender cleavages and inequalities we witness to today, especially in politics, would be an uglier limitation.

Chapter 1:

The social and the political gender

1.1 Informing socio-political research about gender

The need of constructing a social and political science that is gender informed had been called out already around the turn of the century. Back then, the focus was on the quality upgrade the feminist scholarship was securing in political research by shifting the attention from the dichotomous variable of sex to the more complex concept of gender (Lovenduski 1998). Until that moment, women were reported to be less participatory, engaged or interested in politics than men, but no relevance was given to the contextual variables that shape the individuals' social experience of gender, nor to the values that he or she come to develop because of their gender. As soon as gender started to be understood as a socially constructed and performed behaviour, investigations were led to focus on how disparities between women and men come into being in the first place. Instead of overexposing the differential level of involvement of the sexes in political institutions and organizations, scholars started to look for the structural and cultural reasons for why women were excluded. Instead of complying with the conventions of the public/private split that envisioned women's issues as personal facts, they started to acknowledge women's experience of politics (Hanisch 2016). It gradually became evident that women and men's political orientations differed, and that those of women dramatically changed according to whether they were employed, educated or mothers (Jennings and Niemi 1981; Sapiro 1983; Welch 1977). Researchers also became aware of the fact that gender was an attribute of power and that the stability of the political system depended on the segregation of women and men into normative roles (Duerst-Lathi and Kelly 1995). They started to notice that so long as female representation remained scarce, issues were handled in accordance with men's interest only. For instance, the impact of the welfare state was only discussed in terms of how it could insure or supplement the breadwinner's income, but the way it could assist citizens and ameliorate gender inequality was completely disregarded (Orloff 1996).

The tendency to ignore femininity in all political domains was replicated in research methodology – hence, the call of many to reformulate questions and

mainstream concepts in a gender sensitive way (Lovenduski 1998; Sartori et al. 2017). The claim found breeding ground in research on political behaviour, an extensively male-oriented topic, and areas like political activity came to be known as markedly gendered. It is clearer today that women are not participating less than men but are engaging in politics via less institutionalized forms of activism, such as fund-raising, petitions and critical consumerism (Stolle, Hooghe, and Micheletti 2005); they would rather get involved in small-scale organizations or charity work (Burns, Schlozman, and Verba 2001) or connect to online communities and social media (Bode 2016) than discuss within of the boundaries of conventional politics.

When gender-sensitive elements were added to traditional research, not only did information about women's behaviour flow in, but gender gaps started to close (though gaps could be still found on traditional and mainstream indicators). Political behaviour was definitely a florid area for gender sensitive, methodological renewal, and scholars started to tackle other subdomains alongside activism. Gendered explanations started to emerge for all aspects of political participation, so that gaps for political interest (Verba, Burns, & Scholzman, 1997), subjective competence (Thomas, 2012) or ambition (Lawless and Fox 2005, 2010) all underwent to revaluation. Political knowledge was also put under investigation, and we will see how in the course of this chapter.

Political knowledge is a very interesting indicator of gendered political engagement for a number of reasons – the most important one being the stagnant disproportion between women and men. After applying the concept of gender to the study of this discipline, this difference was traced back to the role of women in society and the resources at their disposal (Abendschon and Steinmetz 2014; Giger 2009; Rotolo 2000; Sayer 2005; Verba, Burns, and Schlozman 1997). Another strand of literature looked to the way the political system affected knowledge gaps, by addressing, for example, the influence of electoral systems and female representation (Dassoneville and McAllister 2018; Fortin Rittberger 2016; Fraile and Gomez 2017; Kittilson and Schwindt-Bayer 2012; Pereira 2019). Scholars also started suggesting that, just as in the case of political activity, traditional ways of data collection were making women look less concerned with politics than they actually were. The gender gap was said to be due to methodology, which was: a) based on gender-biased conceptualizations of political involvement that did not value women and men's fields of expertise in the same way (Dolan 2011; Ferrin, Fraile & Garcia-Albacete 2018; Hooghe, Quintelier and Reeskens

18

2006; Stolle and Gidengil 2010); and b) unconcerned with gender patterns in self-confidence and/or propensity to risk (Ferrin, Fraile and Garcia-Albacete 2017; Ferrin, Fraile and Garcia-Albacete 2018; Fraile 2014; Mondak and Anderson 2004; Mondak, Jeffrey and Davis 2001).

In a way, the reasons for why women fail to know as much about politics as men could be aligned to those that the resource model of political participation suggests: they can't, they don't want to, and nobody asked (Verba et al., 1995). Women cannot know as much because they do not have the time, skills, or money; they don't want to learn, because they feel alienated from certain aspects of the political process; finally, nobody is asking them what they know about politics. This chapter follows the development of the study of the gender gap in political knowledge and argues that all explanations are different reflections of the same bias – that of organising the social space around dichotomies that do not contemplate fluidity, i.e., the public and private, the political and social, the cultural and natural, and especially the masculine and feminine. It will discuss that these binary oppositions do not stand on equal grounds, as the first of each pair is perceived as superior, or, most alarmingly, the norm. Instead, they establish long-lasting power-dynamics, the so-called 'gender cultures', that directly affect women and men in terms of political resources and indirectly select what women and men come to know and learn – but not only; they also dictate whose information is worthier knowing.

The chapter begins by setting the theoretical framework this project wishes to follow. It starts by tackling how gender assigns women and men to prescriptive social roles, and how this in turn is shaping both the quality and quantity of political gaps. In doing this, particular attention will be placed on the aspect of inequality in women and men's role placement in society and to how this is reflected in the political realm. The main argument is that this disparity stands on the constraints that gender normativity imposes to women's range of activities and responsibilities especially, so that equality cannot be reached so long as women and men undergo to very different levels of dogmatic emphasis.

We will continue by exploring the history of research in political knowledge and discuss how it came to be understood as only knowledge about institutions and national politics. We will argue that this is a male domain of expertise, and that neglecting what women come to learn about politics equals to ignoring their political experience altogether. We will then review both the socio-political and methodological literature

that advances the study of the gender gap in political knowledge, highlight the areas that this strand of research has left untouched, and hence set the scene for the original contribution this thesis wishes to make to this scholarship.

1.2 Gender-neutral and gender-relevant

1.2.1   Gender, the creator of imbalanced social roles.

Politics, in its traditional understanding, is mainly linked to institutions and actors, and women seem to know less about it than men. On the one hand, it is surprising that gender, which is generally envisioned as an innate characteristic, would determine the amount of knowledge one has on the matter. Yet gender, unlike sex, is not ascribed on the basis of biology but is of human production, and constructed trough psychological, cultural and social means. Unlike sex, it does not place individuals in categories by following a commonly agreed-on physical criterion but uses behavioural patterns as a means to discriminate. Gender is the ability to organize our behaviour so that we can easily identify with one or the other sex category and also have others instantly recognize our membership in social interaction. It is a set of *actions* we inescapably do, as opposed to a set of *features* we are endowed with. Rather than an innate characteristic, it is both a cultural code that we learn in order to fit in societal expectations of the *feminine* and the *masculine,* and an attitude we routinely display to legitimise our membership to a sex category.

In this formulation of gender, Goffman's contribution in "Gender display" (1976) was definitely pivotal in sociological literature. In fact, according to Goffman, gender is a necessary convention in the realm of social interaction; it is a culturally shared and recognizable code of conduct that individuals use to portray their "essential nature" before an audience (1976:69,75). Although this is true, gender stretches beyond the presentation of the self and interferes in every aspect of an individual's life; it is acted out in all life situations. Building on Goffman's work, West and Zimmerman (1987) argue that social interaction is not the only environment where gender is expressed and conveyed. Apart from what we are willing to display to our interlocutor, gender is something we constantly perform in all circumstances, by observing, learning and reproducing behaviours that seem appropriate for our gender statuses. In the authors' eyes, gender is

20

nothing more than a cultural product and is accomplished through social practice. Let us consider Garfinkel's portrayal of Agnes in "Studies in ethnomethodology" (1967): Agnes, a transgender woman, was assigned to a sex category at birth she does not feel she belongs to, and so as to confirm her identity as a woman, she learns how to act and react in an appropriate way for a girl of her age. Interaction is definitely a crucial field for her learning – while engaging with others, she must not give in to extravagant or overemphasised performances that will be perceived as odd but must be exact to go unnoticed; however, the configurations of behaviour she reproduces are not limited to interactional purposes, but Agnes adopts and reproduces them in all situations of her life.

With individuals repeating certain patterns of behaviour systematically or, on the other hand, producing original (though still compliant) activities, gender becomes a confirmatory process that safeguards the comforting gender order we are used to – and that we ourselves safeguard in the first place, by frowning upon confusing behaviours that seem to fall too far away from the apple tree. In fact, the binary conceptualization of gender is a fundamental pillar of the social structures we are accustomed with, at least in most Western societies; it is a means through which we make sense of social experience, and, as such, we feel the need to preserve it so as not to fall into chaotic incomprehension. However, this gender order we are protecting is a source of inequality and it is used with the purpose of structuring and stratifying a deliberately imbalanced, yet legitimate system, where women are subjected to men (Lorber and Farrell 1991). As a structure, gender is responsible for the division of work between the home and the economic production, and as a means for social stratification, it places privileges and obligations hierarchically across the members of society, so that only one half can benefit from having distinguished social statuses. It is, indeed, less common to find women running corporations or governmental institutions, filling the same top positions as men. And though some balancing of roles has occurred, the speed of change is so slow it is clear that gender inequality is a structural feature that is very hard to challenge.

Still, gender remains an undisputed lens through which human beings rationalize and organize their lives, a structural force it is hard to recognize because it dissolves into everyday human agency (Connell 1987). Because gender is so rooted in our social system and individual identities, we tend to believe our social statuses are biologically, rather than socially determined. Hence, men will be placed in authoritative roles and at the apexes of power, while women are thought to be eventually destined to have children

and take care of the household, despite them not wanting to, or wanting to work outside the home. With mothers dedicating more time to household duties while fathers spend more time at work, children are socialized into adopting the roles associated with their biological sex from a very young age. They are also encouraged to pursue an academic or working path that will lead them to select distinct occupational roles, such as being a nurse or an engineer, which will also influence their personality traits, behaviour, and beliefs (Diekman and Eagly 2008; Diekman and Schneider 2010). However, if we keep linking gendered patterns of behaviour to sex differences, the vertical relationship between women and men will always seem 'natural' rather than forceful, and as such, its legitimacy will be difficult to challenge. This is why it is essential to monitor the extent to which gender roles are perceived as normative in that they are intrinsically linked to the natural predispositions allegedly assigned to women (especially) and men when studying gender inequalities and gaps.

1.2.2   The normalization of masculine leadership

The physiological mystification of unequal treatment is the reason why men's authority over women continues its path discreetly and unbothered. As a matter of fact, men do not explicitly get to be the ones in power, and women do not explicitly play the role of the subaltern; the discrimination would be overly evident, violent and, therefore, questionable. Instead, male and female 'roles' are tacitly treated as natural, or worse, complementary (Connell 1987). Yet power relations lie beneath this unequal distribution of both social and economic advantages and resources.

Power relations make it possible for men to stand legitimately at the apexes of society. The reason why this happens undisputedly is because the male gender embodies this social arrangement, the authority and all that is normal[1] (Lorber and Farrell 1991). Cultural codes of masculinity stress the importance of leadership, autonomy, responsibility for self, agency, instrumentality, firmness and competitiveness, while cultural codes of femininity insist on connectedness, cooperation, responsibility for

---

[1] Authority is connected with masculinity, but the centre of it does not necessarily include "all men". Connell speaks of a gender-based hierarchy among men, where hegemonic and subordinated masculinities coexist in a vertical space. This does not, however, overthrow men's power over women, as scattered patterns of power survive in the periphery of the power structure. There is a *global* or macro-relationship of power (p. 109), where women are subordinated to men in the society as a whole, but also the local or micro-situation in particular households, particular workplaces and particular settings.

others and selflessness (Davies 1995). As public institutions are primarily forged on the first set of characteristics, men, who – needless to say – are linked to the male gender and to all of its features, are seen as naturally more apt to be in charge. Conversely, acting in public does not include expressions of intimacy, emotion, and affection, all of which are said female characteristics, so that it is more difficult for women to feel suitable for a public role, or to be perceived as such.

The dichotomy between the masculinity and the femininity and the consequential, hierarchical arrangement of the sexes are social constructs that find legitimization in cultural perception and production – sometimes even in scholarly literature of sociological foundation. Weber, for one, in an attempt to rationalize modernity, posits *bureaucracy* as the most efficient and rational way of organizing human activity. However, according to the feminist critique, he does not realize that what he delivers is an idealized, administrative system that is bursting with cultural codes of masculinity (*see* Bologh, 1990; Paterson, 1989). For Weber, public life is passionately committed to extrinsic values and separated from the private and "weak" feminine ethics of love. In fact, the concept of bureaucracy is built on ideals of authority, rationality and domination – all features connected with masculinity. On the contrary, women and features of femininity have no place in leadership and are instead located in the act of obedience, of conformation to rules and in the willingness to be protected and taken care of. Yet, because bureaucracy enforces a set of legal and moral procedures that are publicly formulated, it is perceived as impartial, and because it is able to establish itself without the use of naked violence, it is perceived as rational. In this way, a masculine ideal type of leadership seems just and socially agreed on and is subsumed into legal and cultural institutions to the point that it is difficult to even identify or override.

Although not essentially an admirer of bureaucracy, Weber saw bureaucratization as the necessary option for Western societies; what he does not see, however, is that he is institutionalizing patriarchy and labelling it as an objective and essential social order. Conversely, Bourdieu is more aware of the structure of domination that lays the foundations of the social order as we know it; in '*Masculine Domination*' (2001), he writes that "*The strength of the masculine order is seen in the fact that it dispenses with justification: the androcentric vision imposes itself as neutral and has no need to spell itself out in discourses aimed at legitimating it*" (2001:9). Masculine hegemony is able to go unnoticed because it disguises as a universal, genderless norm; it

becomes, taking from Bourdieu's vocabulary, a *habitus*, a pool of dispositions that belong to everybody, and that everybody enacts routinely, without coercion or question. As such, the androcentric perspective is assimilated by individuals to the very core, to the point it shapes their beliefs, their opinions and actions so that it is difficult to think 'out-of-the-box' or envision an alternative order of things. In this way, although it is a gendered point of view, it comes across as unbiased and uses this perceived neutrality to cover up relations of patriarchal domination and female subordination.

Femininity is, then, only falsely juxtaposed to masculinity – neutrality should be recognized as its opposite; or, better, we should stop labelling what is masculine as 'neutral' and expose it in the same way that we expose femininity. Similarly, we should quit treating what is 'gender-relevant' as the opposite of what is neutral, especially in politics, where the word 'gender' is largely used as a synecdoche of female – i.e., the whole concept represents only a part of it (and vice versa, only a part is representative of the whole concept). This is an extremely common inaccuracy that is sometimes echoed in the literature on gender and politics: many authors label as 'gender-relevant' the aspects of politics that are most significant to women – for example, abortion regulations or female representation – instead of saying 'female-relevant'. The first to do so were Delli Carpini and Keeter (1996), who then pass the habit over to future research (see Dolan 2011, Miller 2019). However, if we say gender but mean women, where does this leave men? In fact, all issues that fall under the category of 'gender-issues' are mostly relevant to women; and while the umbrella concept of gender in politics has now turned to also embrace LGBTQ rights, there is no trace of men and of male issues in this 'gender-issues' category. Either we are neglecting men and their needs, or we are failing to recognize that all that escapes this category is about men and men's needs.

1.2.3   Femininity, a natural role

When we limit the concept of politics to national politics, or to that of political institutions, we are limiting the target population to men. Institutions as we know them today, were made by men and for men; women were excluded from them, persistently, and for many years. When constitutional law was written, the issues that women might have had as citizens were not taken into consideration because women did not really have a public life but were rather associated with the ideas of 'family' and 'privacy'. As a consequence, politics largely concerns the issues that men might have in their public life,

to the point we do not even notice it anymore, but we pretend that they are issues for everybody, some basic notions that everybody should know. Instead, issues that concern women do not have the same 'neutrality' and are not perceived as universal – rather they fall in the specific category of the 'gender-issues', a niche of expertise that comes across as a form of particular knowledge, as opposed to general knowledge. Men are not expected to know as much as women on this topic. In this way, what is male vanishes and only appears before our eyes as gender-neutral and universal, while what is female becomes evidently particular and clearly marked.

The ability to impose definitions and to set the terms in which events are to be understood is an essential feature of power; this is why the female gender is classified in more detail – so that the role of women is restricted and controlled, and there are many more things it is appropriate for a woman to do or not to do than it is for a man. Classification is mostly done by associating women's role in society to their reproductive ability, so that their social value is determined by their success in carrying this out. Motherhood is a benchmark against which all other decisions are to be evaluated – women *choose* to be workers instead of mothers; they *decide* some other destiny for themselves *instead* of having kids (e.g., "a career instead of a family"); if they do not have children, they 'must have some good reason for it'. Having children for a woman seems to be an unescapable fate, to the point you either *decide not* to have any or *choose not* to want any but cannot simply just *not* have any. For this reason, expressing the female gender comes with wider normative implications. Conversely, men's role in society is not as closely linked to their reproductive ability, so that men have more autonomy and social support in outlining what they want to do, without the pressure of having to create a family eventually (although they still cannot escape social expectations). But if they do marry and have kids and participate in the family life, or when they put their families before their careers, they will be praised for it because it is an unexpected choice on their behalf. In fact, we all nod condescendingly when men are "good dads" and "good husbands" and frown if women are neglecting their family duties, though they might be excellent CEOs.

The close connection between women's social and reproductive roles is gracefully explained in Pateman's seminal work "*The sexual contract*" (1988). Here, the author argues that women are not only limited by social norms; they are also excluded from civic life expressly because the reproductive work is framed as female. Indeed,

reproduction is a biological process, and hence, women are assigned to a societal role that is purely natural and that has little to do with civilization, which is so bureaucratic and rational instead. Civility and nature are, in fact, opposed: we become civil once we leave the state of nature by order of the social contract. However, with parenting (and specifically, maternity) being idealized as the ultimate and most important feminine social responsibility, women seem to lag behind in the state of nature so that they do not have the competences to fill a public role. On the contrary, men have entered the political state and therefore own political rights – some of which extend over women as well, who are not entirely a part of the civil world and 'need' to be governed. Therefore, not only do women have less autonomy in conducting their 'public life' because they are weighed down by the social expectations of having to create a family; they also have fewer rights to do so. In fact, the social contract dispenses status unequally: on the one hand, women are included in civil society but on the other hand, they cannot have all the privileges civil citizens have, because their role is relegated to that of nurturing. Their functions must develop within the private realm of the household, a womanly, natural environment that is governed by the 'rules of nature'. Men, on the other hand, are dispensed from their biological, reproductive role and can venture into the civil life of the country: they are the ultimate targets of the social pact, and the fundamental constituency of civil society, so it is in their rights to do so. With such responsibility at hand, they will necessarily have a higher status than that of women, because their role does not feed on 'instinct' but on 'rationality'[2].

A hierarchical conceptualization of gender is not so much a consequence of men and women dealing with different tasks that come with greater or lesser responsibilities but is a matter of status and of who owns the right to be in power. If women's role is considered as natural and men's as rational, women will be civically dependent on men and will necessarily have a lower social status. Hence, the reason why tasks and duties are assigned according to the individuals' gender is only falsely because of functional reasons, but it is rather due to the power relations that shape and hold society together vertically. This power structure based on the social division of labour between the

---

[2] Pateman continues her claim by stating that, to make sure the division is institutionalized, the marriage contract becomes essential; it acts as a way for the 'husband' to gain the 'labour' the woman will provide as a wife, so that he can engage in his public commitment. Marriage is, effectively, a contract of subordination, the only one that explicitly requires a man and a woman to be stipulated – or at least did so for a long time; it exploits the different statuses assigned to women and men and legitimizes the gendered division of labour.

genders excludes women from the political scene by assigning them to family duties and by reducing institutions, and the related concepts of 'power', 'competition', 'public prestige' and 'leadership', to a series of activities and roles that are strongly stereotyped as male. A social arrangement of the sort determines a different public presence for men and women and definitely infuses less ambition in the latter to join in the game and run for office (Lawless and Fox 2005, 2010). Therefore, their social role is compromising their political role, as well as their attendance in political institutions. Is it also compromising how much they can learn about them – if women are actively excluded from the field of politics, they will feel dispensed from even taking an interest and freer to delegate this task to men (Bourdieu 1984:404,405). And the less they know, the less they will confidently engage with politics, or in discussions about it, nor they will feel entitled to do so (1984:409); so, this also explains why they are, on average, less confident in providing a substantial answer.

While female impotence is manifested as indifference, on the contrary, men's higher social status is a source of legitimacy, and translates into them having a wider opportunity to create and share a political opinion or exercise political power single-handed. However, if we allocated to the issues that involve women in the first place the political dignity they deserve, we might discover that women too can have higher levels of political knowledge, depending on the topic under investigation. This perspective would have the potential to change the partial interpretation of politics and political behaviour in both public opinion and scientific production; and indeed, it is the one that is both adopted and promoted in this piece of research.

1.3 The gender gap in political knowledge

1.3.1   Why knowledge

Knowing and caring about the political life of a country is crucial in a democratic asset, and research suggests important links between basic political information and civic attributes. In their iconic and comprehensive study of United States' citizens' levels of political knowledge, *What Americans Know about Politics and Why It Matters,* Delli Carpini and Keeter (1996) reveal that the most informed are better at identifying their rights and evaluating the candidates and parties that best promote their views; they also

tend to give less polarized political opinions and decide in advance who they are going to vote for – which is most likely the same party or coalition that they have been voting for years. In fact, there seems to be a strong linear relation between political knowledge and ideological consistency across issues and across time.

Informed citizens support democratic norms to a greater extent – Delli Carpini and Keeter find, for instance, that specific knowledge about civil rights and civil liberties increases tolerance for unpopular minorities. Similarly, Popkin and Dimock (2000) find more knowledgeable citizens to be less threatened by immigration and by the impact it might have on the country's economy. The authors explain this happens because the most informed can use the information they have about government and institutions to infer upon how the issue will be dealt with and do not give in to panic. On the contrary, those who rely on perception alone feel lost, and are driven by anxiety rather than by rationality. Poorly informed citizens are more likely to judge by their instincts and often overlook the objective facts – and the same goes with evaluating parties and candidates (Popkin and Dimock, 1999); while the most knowledgeable use officials' political position and conduct upon drawing conclusions, the least informed tend to use personal character as a proxy for political character. Information is thus essential in order to make free, rational choices, especially at the voting booth, while ignorance and misinformation, pared with emotivity, can be misleading allies.

Knowledge also encourages participation, and the more knowledgeable people are about the political system, the more they turn out to vote – a fact that is also confirmed in cross-national and comparative data. Milner (2002) finds, for example, a positive relationship between high levels of political knowledge and the propensity to vote in all countries under his investigation (i.e. Europe, North America, New Zealand, and Australia), and the scenario is particularly marked in high-civic literacy countries such as Sweden. By voting, citizens have more power to hold their elected representatives accountable for the quality of governance they provide, so it is very important they stay active community members if they are looking for good administration. Also, when more than a just handful of citizens are informed, occasions to talk about political issues and discuss about the government's performance multiply, so that the beneficial effect of political knowledge can spill from the individual to the contextual level as well, taking its advantages alongside. In their renowned study of Italian civic life, Putnam, Leonardi and Nanetti (1992) show exactly this – that

governments are especially effective when the voters are informed, and when the information circulates within the social networks. In fact, after having evaluated the twenty Italian regional governments, the authors conclude that the more informed the inhabitants of the region, and the wider their social capitals, the higher the institutional performance of that region, despite its economic situation.

Despite the perks of political knowledge, half a century of survey research on public opinion has documented how poorly ordinary citizens approximate this ideal of informed democratic citizenship. Dating back to the seminal studies of Berelson, Lazarsfeld and Mcphee's *Voting* (1954), and Campbell and colleagues' (1960) *The American Voter*, it is clear that citizens are uninformed about political affairs and know only a few, if any, major policy issues. In fact, it looks as if individuals tend to follow their party's cues and mock their leaders' issue positions instead of gathering information and evaluating objectively the current elements of politics. These findings raise a few questions about the ability of people to fulfil their duty as citizens of a democracy and promote democratic accountability via retrospective voting – that is, voting for the parties and leaders who pledge to do in government the things they would like to see done, or alternatively punish them for their inefficient conduct. Without the means to evaluate the public administration, uninformed citizens cannot exercise effective control over elected officials and their voting decisions and opinions are vulnerable to recent happenings and elite manipulation.

When governments are not accountable for their doing, they might perform poorly, the consequences of which are wasted resources; undelivered services; and denial of social, legal, and economic protection for citizens, especially the most disadvantaged. So, is political knowledge really crucial to make democracy work? Of course it is, however, optimists say the lack of civic literacy cannot invalidate the outcome of an election: people need not be perfectly informed to cast their vote wisely but can figure out what they need to know by following their parties and party leaders' statements. Citizens can delegate the reasoning to others they trust and still end up with convincing and inexpensive reasoning – quite an efficient "shortcut", considering that encyclopaedic information leads to similar results but is costly to obtain (Lau and Redlawsk, 2001). Some scholars go as far as saying that if voters are familiar with the source of the information, but ignore the information per se, they still have a chance to

influence the electoral outcome in an optimal way (*see* Lupia, 1994[3]). One could also argue that, though singular citizens might be poorly or ill-informed, when taken together, the modest knowledge of each increases the probability of reaching a 'correct' decision collectively (*see* Page and Shapiro, 1992[4]).

However, relying on informational shortcuts – also known as *heuristics* – can lead people astray, instead of fostering rational decisions, and while error in judgment happens in in all circumstances of life (*see* Tversky and Kahneman, 1974), it is particularly problematic when it happens at the voting boots. In fact, the more individuals employ energy-saving strategies in their decisional processes, the less information they have and can use to recognize misperception and manipulation (*see* Stubager et al. 2018); they could even end up voting against their own interests or support a policy that harms them (*see* Bartels 2005[5]). When people are so ill informed and subjectively affected by their own perceptions, they are unable to understand the concrete implications that major policy decisions can have on their lives; this is why voting is more reliable, more valid and less subject to bias when people rely on information and see the objective reality, instead of following their emotional considerations. And although aggregation might allow the electorate as a whole to act as more informed than each of its individual voters taken singularly, it does not allow it to

---

[3] After conducting a case-study on elections for insurance reforms in California, he concludes that if voters are familiar with the source of the information, but ignore the information per se, they still have a chance to influence electoral outcomes efficiently. Indeed, the author's results show that respondents who possess relatively low levels of factual knowledge about the policy can still emulate the behaviour of the well-informed voters, provided that they know their representatives' position on the issue.

[4] Page and Shapiro (1992) draw their theory from Condorcet's jury theorem, according to which, if a number of individuals have even a modest tendency to be correct, a collective decision by those individuals can have a very high likelihood of being right. Page and Shapiro argue that, even if individual opinions are ill-informed, collective opinion is 'rational' – that is, compatible with the available information – and highly coherent throughout time – i.e., citizens do not seem to change their collective policy preferences all that much. The authors come to this conclusion by gathering a series of repeated survey policy questions and observing no significant change in Americans' collective preferences.

[5] An exemplary event that proves this is often the case is reported in Bartels' 'Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind' (2005). In the article, the author recounts of the big federal income tax-cut plan that was put forward by the Bush administration in 2001 and 2003, and that was supported by many low-to-middle class citizens despite it would have harmed them more than repaid them. As a matter of fact, taxes such as the federal income generally affect only a small percentage of overly wealthy taxpayers, however, they can be interpreted as a way of turning private luxury into public money, allowing for some redistribution of wealth. But by revoking this tax, wealth differences between rich and poor people are certain to increase; and though many supporters of the tax cut were actually opposing income inequalities, they failed to see the inherent contradiction of supporting the tax cut alongside.

act as if it were fully informed. In fact, a significant portion of individuals would change their voting preferences if provided with information and hence potentially change the electoral outcome (see Lau and Redlawsk 1997[6]).

It seems necessary at this point to say that though voting is the most partaken way of influencing the outcome of elections, there are many other ways to take part in politics and have an impact on policy outcomes than just going to the polls when summoned. All of these alternative ways require a lot more effort and knowledge than voting, amounts that cannot be achieved just by aggregating individuals. Apart from voting, citizens can attend protests and demonstrations, contribute to electoral campaigns, join a political organization that works directly to influence the political agenda, contribute to electoral campaigns, contact public officials, circulate a petition, and donate money to a candidate or a cause (Verba, Schlozman and Brady, 1995); the volume of activity that these political acts create can exert pressure on policymakers to a wider extent than voting alone. Political activities as the like require certain skills – knowledge of how to cope in an organization and information about what the government is doing are, of course, at the forefront. Hence, besides voting, knowledge is a key requirement for a list of other reforming activities.

Although we need not to be polity specialists to make civic decisions, a basic level of information is somewhat crucial to avoid misperception and miscalculation (Grönlund and Milner, 2006): clearly, unless citizens are familiar with political institutions and services, it is difficult for them to cast a vote conscientiously or to make a contribution in the policy making process. Uninformed citizens are, indeed, reportedly drifting away from institutions – they rely more on personal perception than on objective facts, they are less trusting of governments and political parties (Pharr and Putnam, 2000), uninterested in party membership (Schmitter, 2001) or identification (Manin, 1997). It is plausible to ask oneself how a democratic parliament can represent all of its citizens when a portion is so poorly informed and untrusting it has no means to make its voice heard.

---

[6] Evidence of this can be traced in Lau and Redlawsk's (1997) experimental study – the authors stage a mock presidential election with a few rounds of elections but provide respondents with more detailed information on the candidates only after respondents have cast the first vote: about one-third of their subjects changes the vote in the second round. Moreover, those who change idea manage to cast a second vote that is more in line with their values and priorities and hence can only benefit from acquiring the additional information.

The fact that political knowledge appears to be so unevenly distributed it is then extremely concerning. There are substantial knowledge gaps across western countries, all showing that white, older, better educated and employed males tend to be more politically knowledgeable, even controlling for other variables (Verba, Burns, and Schlozman, 1997; Delli Carpini and Keeter, 1996; Frazer and Macdonald, 2003; Gronlund and Milner, 2006; Fraile, 2014). Gender differences in knowledge have proven to be especially persistent and are preoccupying, as they disadvantage about one half of the world's population. In fact, the uneven distribution of political knowledge between men and women leaves women with fewer means to voice their political needs and influence the decision-making process. Because knowledge influences all aspects of citizens' civil lives, the lack of it might discourage women from engaging in political activity, from voting according to their needs, and, on the large scale, from being equally represented in national governments.

Different levels of political knowledge lead to imbalances on the political front, as women are left with less means to vote wisely, be equally represented, act politically and make their way to the top positions of society. However, a second issue makes political knowledge an essential factor to consider, especially when talking about inequalities: knowledge does not only create disparities; it is also a product of inequalities itself. The different levels of knowledge between women and men are not inherited amounts but reflect the unequal position that men and women have in society. Because women are pressured to dedicate to family life, they work fewer hours outside the home than men, and have fewer occasions to mix with peers, or learn about politics in the workplace, either by necessity or by conversing with colleagues about political events. Less women than men work in prestigious positions, or in jobs that are somewhat involved in politics, and because of their lower occupational statuses, they are not as motivated to learn about it. Society, on the other hand, is definitely not incentivizing them to do so. Indeed, the role social norms assign to women – primarily that of reproducing the species, which is more of a natural than of a social function – is, still today, so powerful it is exempting women from sharing the political power. This non-political role is also internalized to the point it is replicated in everyday activities and passed on from non-participatory mother to non-participatory daughter like a disfavouring legacy, constituting a learning disadvantage that starts from a very young age and pervades the rest of a woman's life.

1.3.2 What knowledge?

Different levels of political knowledge are the result of an unequal distribution of social incentives and, in turn, lead to disparities of political engagement; given this double role as both an outcome of social inequalities and an antecedent of political disparities, political knowledge can be seen as a fundamental point of conjunction between the social and the political spheres. Indeed, it has attracted the curiosity of a significant number of scholars in the social sciences, and yet, 'knowledge' per se remains an incredibly elusive concept. It is difficult to agree on what political knowledge actually refers to, and to give it a standard measurement is even a bigger challenge. So before drawing drastic conclusions about women and men's unequal levels of knowledge and how these respectively discourage or encourage other aspects of engagement, it is necessary to concentrate a little on what we mean by 'political knowledge' and on the gendered trajectories individuals follow so as to acquire such knowledge.

Political knowledge is most commonly understood as factual knowledge on, specifically, constitutional features and public figures, as well as the rules governing political institutions (the so-called 'rules of the game'); in brief, questions on political knowledge generally ask respondents to name office holders or average the number of years that person holds office. This understanding of the 'political' is closer to the idea of *politics*, actors and institutions, than to that of *policy*, governmental services and actions – but whether the first formula is a better indicator of how much citizens know about politics is arguable. While the institutional arrangement is definitely an important aspect to know about politics, it is still only one aspect among many. As opposed to general knowledge, it is very specific information that explicitly concerns mostly one aspect of politics, that is, electoral competition. It is documentary and didactic information that you would require if you had a desire to gamble in the political arena or you were interested in knowing who did; it is not, however, information that you acquire simply by living in society and it is not immediately practical on a daily basis. On the contrary, asking people about current policies, occurrences and governmental activity could provide researchers with equally (if not more) revealing information on whether citizens keep track of governmental decisions. After all, information of the sort is less situated and exclusive, but closely linked to citizens' daily-lives requirements – e.g., work, health,

public transport and issues of the sort. It is information citizens need and not information they need to seek out.

Despite its limitations, knowing about political institutions – or, alternatively, knowledge "of institutions", "of institutional politics" or "constitutional politics", as it might be referred to from here on out – has been widely accepted as a proxy for the wider concept of political knowledge since it was used as such in Delli Carpini and Keeter's seminal study of the US public's levels of civic engagement (1996). So as to measure how much Americans knew about politics, the authors go through more than 50 years of US survey data and collect 2000 factual knowledge questions concerning politics under many aspects. From a list of questions that range from political institutions and processes, to public policies, leaders and parties, they narrow the selection down to the 5 items that correlate better and deliver to future research what they consider to be a more parsimonious measurement of political knowledge. Out of all the questions, they select only 'rules of game' items – i.e., the party control of the house, the veto override percent, the party ideological location, the judicial review and the ability to identify the vice president; as the scale they create out of these items was found to be a strong performer (holding a Cronbach's alpha of .71), the authors decide to sacrifice a wider range of topics in exchange for reliability.

The biggest implication regarding political institutions, however, is that they interest specific fringes of society more than others, so that knowledge of them spreads only to a small portion of the population (mostly elite). The consequence of this is that each time we measure political knowledge by asking questions on how the institutions work, some people will turn out to be more knowledgeable than other. Some of these knowledge gaps are easily justifiable (the higher the level of education the greater the more knowledgeable); others, however, are less (white men know more than non-whites[7] and men know more than women). Because sex and skin colour are supposed to be 'innate characteristics', as opposed to literacy and education, both of which you acquire, it is more difficult to justify their effect on knowledge because they do not take a move from motivation and personal effort. The truth is that sex and skin colour are linked to the concepts of gender and ethnicity, both of which must be thought of acquired characteristics as well so that their consequences on level of knowledge are just as socially led as the effects of education.

---

[7] (Abrajano 2015)

1.3.3 She, who knows not

When Delli Carpini and Keeter regress the gender covariate on their political knowledge index (1996), they do, unsurprisingly, register a gender gap and conclude that women are less expert in politics in general. This is not to say that the gender gap in knowledge of institutions we witness to in the data is not real – it is real, but we must bear in mind that it refers to a specific aspect of political knowledge, one that is situated and rooted in the social positions that women and men cover in society. Subsequent investigations that use a similar index all come to the same conclusion, but all fail to see that while the measurement of political knowledge is one-dimensional, the concept in its entirety is not. Indeed, there are many things that people can know about politics, and institutional figures and procedures are only two on a lengthier list. As opposed to being general knowledge about politics, knowledge of institutions is specific and specialized. It is true, however, that women know less about it than men, and Delli Carpini and Keeter already point to this unequal share of knowledge as being a product of society rather than the result of congenital disinterest. The authors argue that learning disadvantages are not determined, if not minimally, by personal efforts and dispositions, but are nourished by both established structural and socialization processes connected to gender that leave women with fewer abilities, opportunities and motivation (see also Luskin, 1990) to seek out and learn information about this kind of politics.

Because traditional customs predict a non-political role for them, women often end up lacking the resources that are necessary for participating in politics, namely education, income, civic skills, and a social network to exchange opinions about political happenings. But political resources can also come in the more immediate, material form of time, and in their role as wives and mothers, women seem to have less on their hands to spare. In fact, women work more indoors than their spouses, regardless of whether they are housewives, parttime employees, or have a fulltime job outside their homes. By using data coming from the 1994 International Social Survey Programme (ISSP), Batalova and Cohen (2002) demonstrate that, in married couples of 22 countries[8], routine tasks such as doing laundry, caring for sick family members, going grocery

---

[8] Data comes from 22 different countries: Australia, Austria, Britain, Bulgaria, Canada, Czech Repubblic, E.Germany, Hungary, Ireland, Israel, Italy, Japan, N.Ireland, Netherlands, New Zealand, Norway, Poland, Russia, Slovenia, Sweden, United States, W.Germany.

shopping and planning dinner are mainly performed by wives[9]. Even when controlling for higher education, the wife earning more money, and husbands not working full-time, women are burdened with housework to a greater extent than their husbands. With all of this on their backs, the time that women can dedicate to other activities (and, for example, to learn about politics) diminishes significantly.

This was true in the 90s, during Delli Carpini and Keeter's investigation (1996), but a decade later the situation has not dramatically changed. Data coming from the early 2000s confirms the previous picture – wives are still doing more housework than their husbands, a pattern that seems to characterise even the most egalitarian countries (*see* Knudsen and Waerness 2008[10]). And though men might contribute by performing some episodic activities in their homes such as "painting the fence" or "fixing the drainpipe", they less often engage in the chores that routinely need doing, that are more time-consuming, not so pleasant to do and unrewarding when complete[11]. In such activities, the average contribution of men is halved upon marriage and further decreases with parenthood (Sayer 2005). For sure, with women participating in higher numbers in the labour force, their availability to do unpaid work has grown smaller, so that women and men's time allocations to household activities are converging over time[12] (*ibidem*)– although not rapidly or effectively enough to compensate for the gender gap.

Household inequalities directly turn into political disparities, as entering a partnership and having children both increase the gender gap in political knowledge. In fact, marriage and parenthood are depressors of political knowledge for women but encourage men to learn, and this is especially because of the unequal division of labour

---

[9] The authors use as dependent variable an index built out of these four routine tasks, which takes values from 1 (the wife always does the task) to 5 (the husband always does the task). The value of 3 would represent an equal division of labour, however, results show that no country has an average division of labour score greater than 2.26, and seven countries score lower than 2.0 – Italy being the second worst.

[10] Knudsen and Waerness (2008) challenge Batalova and Cohen 's results almost a decade later, as they explore the ISSP data of 2002. They sample respondents coming from Australia, Austria, Brazil, Bulgaria, Chile, Cyprus, Czech Republic, Denmark, Germany, Great Britain, Finland, Flanders, France, Ireland, Hungary, Israel, Japan, Latvia, Mexico, The Netherlands, New Zealand, Northern Ireland, Norway, RP Philippines, Poland, Portugal, Russia, Slovenia, Slovakian Republic, Spain, Sweden, Switzerland, Taiwan, and the United States.

[11] Knudsen and Waerness (2008) define as 'female' the tasks that have these connotations, hereby suggesting that, in the common understanding, it is the job of women to complete the not-so-enjoyable and repetitive chores.

[12] Sayer replicated the analysis in 1965, 1975 and 1998, and was able to trace a slight change.

within the household (Ferrín, Fraile and García-Albacete 2019[13]). Men also gain in terms of political knowledge once they enter the labour market, but the same cannot be said for women, whose levels of knowledge do not change significantly after they start working. Adulthood in general seems to increase knowledge disparities and it seems to be doing so everywhere in the world, though at very different paces. In conservative countries such as Spain, men are never penalized (but only advantaged) by being in paid employment, cohabiting or having kids, whereas in countries where gender roles are more interchangeable and the welfare state more present, such as Finland, men appear to share the costs of being in paid employment and having kids a little more with their spouses – although still not enough to wipe out the gender gap in political knowledge (*ibidem*). Apart from knowledge, women appear to reduce their engagement in politics altogether as they progress through life and gradually show lower levels of political interest and activity (Quaranta and Dotti Sani 2018[14]). The data that reports this covers a time span of more than 10 years, dating from 2002 to 2014, and comes from seven waves of the European Social Survey; it surely seems to be a long-lasting trend, at least in many European countries.

It is undeniable that structural limitations discourage women from learning about politics; however, accounting for this unequal share of resources is still not sufficient to explain the different level of engagement between women and men. Verba, Burns and Schlozman (1997) take on US data[15] as well to show exactly this, that a gender gap in political knowledge still emerges[16], all other factors being equal. The authors isolate the effect of gender from all other structural factors – for instance, they

---

[13] The authors study how the size of the gender gap in political knowledge changes according to the different life stages. The authors concentrate on adult roles and, specifically, on three adult statuses, namely living with a partner, entering the labour market and having children. They use OLS models where the dependent variable is knowledge and where gender is introduced as a covariate in interaction with the three adult statuses.
[14] The authors use five key indicators of political involvement as their outcome variables, namely political interest, feeling close to a party, voting, party activity, and taking part in demonstrations. They focus on seven life course stages: being single, childless, and living with parents; being single, childless, and living independently; being in a partnership and childless; being in a partnership and having a child aged 0–5; being in a partnership and having a child aged 6–13; being in a partnership and having a child aged 14–25; being aged 65 and above without children in the household.
[15] Coming from the Citizen Participation Study (CPS), dating to 1990.
[16] The authors report the knowledge gap to be the largest of them all. Men outscore women by nearly one full point on the CPS political knowledge 10-item scale, while modest differences are found for measures such as political efficacy and interest (Verba et al 1997). The authors measure political information with a ten-item scale, five asking the names of public officials and five testing knowledge of government and politics. Compared to women, men answered, on average, one additional item correctly.

compare women and men within fairly narrowly defined occupational categories – but still are left with a residual portion of variability that structural factors cannot explain. In order to provide a social explanation to the phenomenon they observe, Verba and colleagues introduce the idea that, while women have been enfranchised, social mores have changed and gender roles have relaxed, politics still remains a male domain that women cannot find equally attractive, and this is why they do not know as much about it. It is then the realm of 'politics' and all that follows that is so intrinsically male-dominated it is responsible for the recurring and stubborn gender gap. In fact, it is not that women 'don't want to' participate, but rather that 'they can't', or 'nobody asked' (Verba, Schlozman and Brady 1995).

The political structure is sending divergent messages to its male and female audiences – that is, it is inclusive of the former and excluded to the latter – and women's lower levels of expertise are a fatal consequence of this unequal recruitment. This has led researchers to also consider the macro factors that depress or enhance women's chances to participate and learn as much as men. One hypothesis, for instance, is that a proportional electoral system could have mobilizing effects on women, and that then mobilization would have beneficial consequences on women's overall knowledgeability (Kittilson and Schwindt-Bayer 2012; Fortin-Rittberger 2016). A second hypothesis links the size of the knowledge gap to the portion of women in national institutions; female representatives could be exerting a symbolic effect on women, encouraging them to become more knowledgeable and active citizens. While gender gaps in political knowledge are indeed smaller in the presence of proportional systems (Kittilson and Schwindt-Bayer 2012; Fortin-Rittberger 2016), the influence of descriptive representation is unclear. Yet, while it has been reported to count nothing (Fortin-Rittberger 2016) or negatively on women's levels of knowledge (Kittilson and Schwindt-Bayer 2012; Dassonville and McAllister 2018), it does seem to have a strong and significant effect on young respondents in the long run (Dassonville and McAllister 2018[17]).

Although electoral rules are mostly fixed, knowledge gaps are constantly influenced by other changing, aggregate-level factors, such as media coverage. Many

---

[17] Drawing upon the rich literature that has shown that political attitudes are formed during adolescence and remain stable thereafter, the authors argue that the formative impact of women's political representation occurs when the individual becomes eligible to vote. In fact, they find that descriptive representation has a long-term effect only on respondents aged 18 to 21.

studies have profusely argued that more information-rich settings can reduce political knowledge inequalities (Fraile 2013; Iyengar et al. 2010; Fraile and Iyengar 2014; Banducci et al 2017) as well as narrow the gap between women and men (Jerit and Barabas 2017; Fraile 2014). However, high media-choice environments could also produce to the exact opposite effect and worsen knowledge gaps when information is plentiful and easily available. This latter thesis stands on the idea that an increasing number of media sources allows citizens to choose the type of information they are most interested in – and it might not be of political nature (Jerit, Barabas and Bolsen 2006; Prior 2005, 2007; Van Aelst et al. 2017). Nevertheless, it does seem that information is beneficial to women more than to men in terms of knowledge gains, although it does very little to eliminate the knowledge gap for topics women are not interested in (Jerit and Barabas 2017). The findings raise the crucial concern that the manner in which politics is covered or presented might be off-putting to women (Bauer et al. 2016; Kahn and Goldenberg 1991; Kahn 1992, 1994), to the point their levels of knowledge suffer detrimental consequences. In fact, there are patterns in the types of issues that receive a higher media attention, which are very much male-biased (Curran et al. 2014; Ross and Carter 2011). It is unlikely that women pay attention to such issues as much as their male counterparts, or that the topics that match women's political interests receive the same amount of coverage.

So, on the one hand, men and women do not have, on average, the same resources to equally participate in politics, and even when they do, politics is so deeply male coded it is difficult for a woman to join in. The story, however, is still more complex than it seems so far. In fact, despite the social structure has changed and women are now as educated as men and vividly present on the labour market; although natality has decreased, and so have traditional nuclear families; data keeps confirming a stable gender gap between men and women in knowledge about institutions throughout the years.

It is possible, then, that the gap persists because the social determinants of political knowledge – education and employment, but also institutional practices to name a few – are themselves gendered (Lovenduski 1998), in that they are experienced differently by women and men, and hence lead to different levels of expertise. In other words, it is not sufficient to have the same resources quantitatively to mathematically achieve the same level of knowledge; one must look at the qualitative nature of those

resources as well. Hence, even when men and women have similar levels of education and occupational statuses, these are likely to be in fields that are differently involved in politics. If we look at gender segregation in higher education, for example, women choose humanities over science or pursue careers in health and social care more often than men, while men focus on more technical and administrative faculties like management and engineering, for which some knowledge in politics is a desirable advantage in the workplace (Diekman and Schneider 2010; Schneider and Bos 2009). In fact, Dow (2009) finds a bigger gender gap among the highly educated, which means that men receive larger returns to political knowledge from education than women do. Instead of evening out the levels of knowledge, education is mostly magnifying the effects of an unequal socialization to politics of women and men. Apart from education, Dow also points to other predictors of knowledge that have different implications for women and men's learning opportunities: again, life events such as marriage and having more than one child have a discouraging effect in terms of political learning for women more than for men; conversely, occupational status and working hours encourage men more than women to learn about politics.

In the face of a gender gap of noticeable dimensions, the literature reviewed so far has provided: a) structural explanations – women have fewer resources and politics is a male ground; and b) socialization reasonings – women are not socialized to aim for a public role despite their resources, and this process has long-lasting effects throughout their lives. However, these explanations cannot account for the whole magnitude of the gap. Controlling for factors such as occupation, education, marital status and so on, only mitigates the gap but does not erase it. Because there is a residual gap net of other indicators, scholars have started to consider alternative explanations to the gender gap and to finally turn their attention to how political knowledge is conceptualized and measured. In fact, although information on national and institutional facts and figures is essential in order to actively take part in the policymaking and assuring governors are respecting their duties, it is not the only topic worth of political attention. And although it is widely available and ubiquitously disclosed information, it does not concern everyone in the same way. Far from being the 'neutral' content of politics, appealing to no gender in specific, it is relevant to men more than to women, and this is why no covariate seems to be able to wipe the gender gap off this indicator.

The impression that institutional and national politics is a male-exclusive domain of expertise had already emerged in Delli Carpini and Keeter (1996), who report gender differences to be particularly striking in questions on national politics though non-existent when questions are about local politics and issues that are more relevant to women's lives, (which they call 'gender-relevant') (1996, p. 146). In fact, males and females are equally able to name the head of their local school board and were equally familiar with abortion policies and women's representation in the U.S. Supreme Court. While on the one hand, Delli Carpini and Keeter recognize that political knowledge is 'domain-specific', in that information is differently relevant to different social groups, on the other hand, they concurrently choose to ignore this multidimensional aspect of political knowledge and use the one dimension of politics that is favoured by men. They justify their choices for measuring purposes; however, they deliver to future research a measurement that is partial – as in both its incomplete and biased meanings.

Verba and colleagues (1997) make a similar mistake in a different way. The scholars recognize that politics is a male domain and that is why men know more than women; however, they speak of politics and knowledge in very general terms, when they should really be referring to the one aspect of politics they actually have data for – knowledge of institutions. And although it is true that information on national and institutional facts and figures is essential in order to actively take part in the policymaking and assuring governors are respecting their duties, it is not the only topic of political concern. And although it is widely available and ubiquitously disclosed, it is unevenly spread across the population. And while it appears to many as the 'neutral' content of politics, appealing to no gender in specific, it is not – it is male-relevant, and this is why no covariate seems to be able to wipe the gender gap off this indicator.

The problem lies, then, in how we think about politics and in what we think it is relevant to know about it: if we consider politics as only concerning the electoral competition, then we can conclude that women know less than men. Nowadays, women are as educated as men, enjoy higher incomes and a fairer share of household duties than in the past; they have more knowledge, more money and time; however, they still do not seem as close as men to institutional politics. This is partly because the processes of socialization that accompany them throughout their entire lives discourage them from joining the institutions *en masse*, as it is still not perceived as a woman's job to do so. It is also because society reinforces this silent norm in various ways, by presenting, for

starters, an overwhelming majority of male political figures and a specular, discouraging number of female seats. This unbalanced representation in national government, the weaker political power and the highly competitive environment are all factors that discourage women from wanting to join in.

Yet, this does not mean women are indifferent to the political life of the country. Women, like their male citizens counterparts, have jobs they have to safeguard, families they have to take care of, pensions they need, diseases and conditions they need treatment for – and so on and so forth – and all of these needs are regulated by the public administration and policy. And while all of these topics are certainly of interest for the political enthusiasts, a portion of women who are not particularly passionate about politics might still be likely to know about this stuff simply because it occurs routinely in their lives. It is pragmatic information many people can access, as opposed to elitist information only a few will know. So, if we are tired of contributing to literature with yet another picture of how much white, educated males know about politics and discarding everyone else from our analyses, we must change the way we are measuring things. If we are willing, on the other hand, to extend our conceptualization of politics and the way the concept is made into measurement, then we might get a more realistic picture of how much everyone is following politics, according to their means.

1.3.4   She, who knows what.

Stating that women are not involved or interested in politics is actually inaccurate. The fact that women have been very active in politics the last decades is undeniable, although we could say that they have a different take. As latecomers to the public vote, women started to develop a political identity in a rapidly changing environment, and their political presence has significantly changed alongside – to a greater degree than that of men. Maybe, starting from a close to '*tabula rasa'* condition, women have been more able to express their engagement with politics without the constraints of a long-standing political tradition. So, instead of opting for conventional forms of political commitment, such as campaigning or joining a party, women were seen participating in the public space in alternative ways, for example, by boycotting goods, signing petitions or donating money (Coffé and Bolzendahl 2010). This was also said to be a more modest way to take part to public action when being actively excluded from it at the same time.

Instead of following slavishly the same party line from the beginning of their enfranchisement, women's voting preferences and political priorities also dynamically changed over time to a greater extent than those of men, at least in current Western democracies. The pre-war cohorts of women were seen voting in favour of conservative parties and on the right-hand side of men – a trend that is labelled in literature as the 'traditional gender gap' (Inglehart and Norris 2003). However, this rapidly changed once traditional, patriarchal family models declined in numbers and women started to have different stakes at heart. Therefore, at the end of the 1970s, women 'dealigned' from the traditional political parties that had represented them so far, so that gender differences in voting preferences grew smaller and eventually reversed in the 1980s. Since then, women have had a preference for parties on the left, a trend that is defined as the 'modern gender voting-gap' (Inglehart and Norris 2000), and that is still enduring in many areas of the western world (Abendshon and Steinmetz 2014).

This change of heart was located in the drastic revolution of women's routines; now that they were working, and could no longer attend to family duties, there was a need for the welfare state to invest in family support and for the government to focus its policies on public childcare and reproductive rights; all of these issues belong to the feminist agenda, as well as to left-wing political programmes, hence the positive correlation. Women have been also found to be to the left of men on issues related to free enterprise, the welfare system, healthcare, feminism (Gidengil et al. 2003) and pay more attention to relatively new topics, such as environmental protection and gender-related issues, complying with Inglehart's theory of a post material change of values (Inglehart 2007; Dalton 1996).

The fact that both the topics women prefer and the behavioural pattern they choose to adopt are not 'traditional' issues or actions does not make them less political; however, the content of the traditional survey questions on political knowledge rarely touches these issues. If we admit that women and men are living politics in distinguished ways, we can also presume that there are distinct domains of political knowledge that have different relevance to women and men; therefore, so as not to privilege one line of conduct to the expense of the other, researchers must show utmost prudence when defining the indicators used to collect the data. Indeed, if we fail to measure women's knowledge and attitudes, we end with a big portion of unexplained variance that the scarcity of our measures is unable to reason. So far, questions on political knowledge are

biased towards men's interests and expertise and fail to measure what women know. In fact, the most commonly used and accepted proxy of political knowledge are a range of items concerning national institutional politics. The problem with this measurement is that men are reportedly better at answering these questions, as they are the most involved in institutional offices and in political competition. In fact, when surveyors introduce knowledge items that are more relevant to women's lives and interests, the knowledge gap is extinguished and sometimes even reversed.

An interesting contribution in this respect is that of Dolan (2011), who surveyed a representative random sample of U.S. adults on political knowledge and included female-relevant issues in her measurement. Dolan still uses very traditional questions of political knowledge – i.e., identifying the party in hold of the majority in the U.S – although some of her questions have a clear female-reference: for instance, she asks the sample to guess women's representation in the national government as well as women's participation in other high-level political roles in the United States[18]. The interesting part of Dolan's work is that it only takes a female reference in standard questions on institutional figures and processes to wipe out the traditional female disadvantage. In fact, though the analysis revealed a significant gender-gap in the traditional measure of political knowledge, the gap disappears in the female-relevant items and even reverts in one[19]. Dolan also finds out that men are significantly more likely than women to correctly identify a man Senator but are less likely than women to identify a female Senator[20]; so, it seems that men also pay less attention to political stuff that does not appeal to them, such as the presence of women in elective offices.

A similar investigation was carried out by Hooghe, Quintelier and Reeskens (2007), who administered political questions on both female and male politicians to about 469 university students in Belgium, only to reveal that the gap is reduced when female-relevant topics are offered. Indeed, gender differences disappear in almost every question on female ministers, but the gender gap is still strong in the more standard

---

[18] These questions are: 1) Do you happen to know the name of the current Speaker of the U.S. House of Representatives? 2) Taking your best guess, what percentage of the U.S. Congress do you think are women? 3) Off the top of your head, can you name a woman member of the U.S. Congress, either the House of Representatives or the Senate? 4) Of the nine members currently serving on the U.S. Supreme Court, do you happen to know how many are women?
[19] Women are significantly more likely to know the percentage of women in Congress.
[20] So as to check for a positive impact of female representation on women's level of political knowledge, the sample diversified respondents who lived in states with women governors from those who lived in states with only men in the highest positions.

questions referring to male politicians. The authors also include questions on childcare policies – which they label as a 'female' topic inasmuch as it is family-oriented – expecting to see an inversion of the gender gap in favour of women; women do not, however, outperform men in a significant way and the authors conclude that the questions on childcare are a valid, gender-neutral measurement of political knowledge[21].

Attempts of balancing male and female questions on institutional politics did certainly give positive results and suggested that gender differences in the levels of political information are indeed malleable and largely depend on how the researcher choses to operationalize the concept of political knowledge. Although these results are an intriguing twist in the research on political gender gaps, the abovementioned investigations do not stress enough that questions on institutions and national politics cover topics that are directly relevant to men and that is why they have a considerable advantage as compared to women. Instead, knowledge of institutions and national politics comes across as neutral once again, general topics that appeal to no gender specifically, whereas other issues, like 'childcare' for example, are perceived of dubious neutrality. However, if childcare is perceived as 'female' expertise because it refers to family life, where women are more present than men, why are political institutions not perceived as a 'male' domain when they refer to a public environment that is mostly male populated?

Because women are nowhere near parity in elective offices, institutional mechanisms do not interest them as much. Knowing about national and institutional politics is not something women use in everyday life, as opposed to men. Women traditionally have the family well-being in their hands, and their priority is knowing about the services or benefits that are necessary to secure it, something institutional knowledge cannot give. However, they do seem to have some 'practical political knowledge', that is, they tend to know more about policies than institutions (Stolle and Gidengil 2010); and among the policies they might know of, they are more likely to develop an interest for those leaning towards social welfare and education, which are relevant in the presence of a child (Campbell, 2004). They also seem more expert on female-relevant political issues, such as abortion, sexual harassment and gender equality (Inglehart and Norris, 2000); and, finally, they know about local politics, as they are more

---

[21] The authors also ran a validity test to check whether the questions on childcare policies were biased towards women, and to family-oriented for men to take an interest. However, for both women and men, the same items load well (or not) on the political knowledge scale.

likely to be involved and elected locally that nationally (Shaker, 2012; Coffé, 2013). Nevertheless, neither of these topics is really considered in survey questions about political knowledge, so that women's political knowledge goes (and stays) unnoticed.

Different kinds of political knowledge develop from different sets of priorities that women and men develop during their lives (Piven, 1990); because women have greater incentive in knowing about government services and welfare programs, it seems reasonable to think that they would also possess more knowledge about these issues than men. Women are, after all, most likely to be beneficiaries of public services and welfare state policies and to be employed in the public sector (Smiley, 1999); it is then a pity that conventional measures only limit the scope of politics to the traditional arenas of electoral and legislative politics. By doing so, research underestimates what women know, fails to assess women's political competence and reports distorted interpretations in favour of men at the same time. Hence, at the turn of the century, scholars such as Norris (2000), started calling for a re-modernization of both the concept and the measurement of 'political knowledge', by also arguing that knowing about governmental programs and services is essential for everybody and closer to everybody's everyday needs, regardless of their gender. In fact, Norris suggests, knowledge about public programs is as politically empowering as knowledge about institutions, if not more: it helps in evaluating what the governments does or should be doing and provides incentives for political mobilization if results are not met.

A decade later, Stolle and Gidengil put the theory to the test (2010). They analyse data coming from a survey of 1689 respondents in Montreal and Toronto, Canada, which includes a collection of questions on governmental services and benefits, alongside more traditional items. Traditional items were very standard questions, asking for the names of important political figures, like the prime minister and the city's mayor, and also included two women, namely Canada's governor general, and a female cabinet minister. The questions about government services and benefits dealt with various topics, such as the cost of screening tests, where to go to contest a rent increase or to report of a child being abused, and awareness of Child tax benefits for low-income families. Results reported that the size of the gap clearly depended on the question asked: while women scored as high as men on all questions on government programs and services, outperforming men on the questions regarding health and childcare, men were still more

able to identify both male and female political figures, even after controlling for a variety of social background characteristics.

Women's lack of knowledge of institutions might not be so alarming, in the same way men's lack of knowledge on child benefits and services is not. It is possible that the knowledge 'gap' is a symptom of a gendered divergence of interests, rather than of apathetic attitude, and that men and women are experiencing concurrent and not shared political lives, but social research has seldom adopted this point of view. It has certainly paid attention to the defining of traditional procedures of participation in politics and weaker forms of it, categorizing disinterest as a feminine tendency. It has also attempted to demonstrate that women actually know about the same things that men know and has occasionally succeeded. In doing so, it has only spoken of one normative way of participating and learning about politics and has described female political competence and behaviour as minimal or deviant from this most accredited standard, instead of considering it as different but equally legitimate. And despite the evidence, social research has not yet unanimously stated that the way political knowledge is measured is neither gender-neutral, nor the only possible approach, but represents a code of conduct that adapts more to males than to females. Hence, if political knowledge, as we understand and measure it today, addresses topics that are more relevant to males than to females, a female benchmark might be also available, with all that this entails.

Women might not be 'lagging behind' after all, and traditional forms of political engagement might not be gender-neutral but subject to the same binary gender-division and hierarchical understanding of society. It is maybe time to lose the term 'gap' and acknowledge that a political 'gender' exists and that it is creating gendered political patterns. After all, the organs of governance were designed by men, are operated by men, and continue to be controlled by men; even if they want to be more inclusive of women, they often do not know how. As a result, women and men develop different impressions when dealing with the various arms of the political process and go through different experiences.

The impression of a different, rather than unequal, gendered contribution to political life is not new. Despite research on gender political gaps has produced systematic results all over the western world, a number of authors has challenged the idea of a 'gender gap' by highlighting that women and men have diverging voting patterns, party preferences and perform different political activities. There are political

topics that men know, as well as female fields of expertise. Talking about female and male political knowledge is somewhat of a controversial perspective to bring to the debate on political gender inequalities. It would be much more desirable to state that all topics are for everybody, and that gender does not have a role. However, the intention is not to promote gender differentiation, but rather expose the inherent and resistant androcentric normativity within politics – and within social research on politics as a consequence – that is still discriminating women. If we identify politics with political institutions only, and knowledge of politics with knowledge of institutions only, taking one part of the concept to represent the whole, we are actively prioritising men's issues to the ongoing expense of women. And, on the other hand, we are silently discrediting all other issues that are not institutional politics. However, if we start recognizing women and men's political knowledge and efforts in their being different, then it is easier to show that the ones that receive less attention, that are given less dignity in the political agenda, are the ones that women prefer. Hence, once the patriarchal system is exposed, it is easier to deconstruct old fashioned and oppressive conceptualization of politics and build more gender equal ones.

1.3.5   We don't know if she knows.

The literature on question content that was reviewed in the section above shows that women do not know less about every political topic, but it is mainly national and institutional politics they seem to have a problem with. In fact, when we talk about childcare policies or about tax benefits for low-income families with children, then women seem to know as much and sometimes more than men. However, beside the political topic of the question, there is another issue that we must address when talking about women and political knowledge questions, namely the fact that women tend not to answer them, on average. As men do not show the same aversion, this results once again in a problematic loss of data on female knowledge. There may be a chance, in fact, that women refrain from answering to political issues in the same way they step back from engaging with power institutions altogether – they feel both inadequate and exempted from doing so. Politics is still, as a matter of fact, perceived as an exclusive club which only allows access to the people who possess the necessary technical competence to formulate an opinion or master the language that politics requires (Bourdieu, 1984, p.

409). For this reason, women end up thinking it is not their duty to learn about it or feel somewhat incompetent and out of place when talking about politics. These psychological factors can hold women from answering to questions about politics, even when they know the answer, or have an opinion to share. Conversely, this trend is not recorded in men, who seem to effortlessly answer to all questions about politics.

Failing to provide the right answer to a political knowledge question is mostly due to the lack of information on the matter, although sometimes it is also an outcome of one's personality. Unmotivated survey recruits who, for example, are looking to finish the survey in the quickest possible way, might skip the knowledge questions because reminiscing would prevent them from putting an early stop to the interrogation (Mondak, 2001). On the contrary, the respondents who guess could end up looking more knowledgeable than they actually are, while overly risk-averse individuals might not share what they know because of self-doubt. Some of these personality traits vary with gender, and literature points to women refraining from answering to political questions at higher rates than men because they do not feel as efficacious or competent, despite their actual level of knowledge. On the contrary, men seem to overestimate their competences in politics, and rarely feel unfit to share their personal opinion. These dispositions are not only traceable in questions that seek to measure knowledge in politics but extend to all other questions relating to institutional processes and figures. When survey questions ask respondents to share their opinion on a certain political candidate, a party, a public figure or issue, women still tend to say that they "don't know", while men generally answer to all questions (Akenson and Rapoport, 2003). Hence, women seem less able to communicate their opinions and concerns when it comes to political matters; and while differences are mitigated when controlling for political resources, like time spent talking about politics for instance, accounting for the latter has little effect on the fact that women still do not feel as involved in the political system and look up to men more than men look up to them in politics.

This opt-out attitude is especially evident in survey questions explicitly about politics; however, when the question is formulated so as to bring attention to another issue, for example, a moral implication of the topic at hand, then women easily answer it. It was Bourdieu (1984), who, on one occasion, noticed that women had no problem answering a question about a policy implementation when the emphasis was placed on its ethical consequences; however, when the same question referred to policy

technicalities instead, and hence was taken out from the realm of morality and placed in that of politics, women stopped replying *en masse*. Instead of sharing what they did know about the policy, they just refrained from answering as soon as they heard the word *politics*. On the contrary, no difference could be detected in the response rates of men, whether they were asked about morality or technicalities. Bourdieu justifies this behaviour on the fact that, because they lack political competence, women feel dispensed from answering something that feels alien to them and would rather leave the burden to men. Bourdieu was writing this in the 1980s, but nowadays, politics is not such an unexplored territory for women, who have, on average, more skills to understand it better than in the past. Nevertheless, even today, even the most objectively competent women are less likely than their male counterparts to perceive themselves as such (*see* Lawless and Fox 2010[22]).

On top of competence, a lower feeling of internal self-efficacy, that is, the perception that one can succeed at a given task, is also keeping women from getting involved. People engage in activities in which they are confident they will succeed and avoid situations that they believe exceed their coping capabilities. Because women have lower levels of political self-efficacy than men, they do not engage in political activities as much and disclose as less interested; but they are not, necessarily, less interested than men, rather less confident. Men, on the other hand, do not have a confidence problem, if anything, they tend to overestimate their abilities in politics (Robinson Preece, 2016[23]). This already says a lot on how men and women feel they fit into the political realm and on the biasing power these altered perceptions have on the data we collect.

The levels of self-confidence and efficacy vary between genders when it comes to answering questions about politics, and when it comes to political knowledge, this disparity is problematic in so far as it enlarges the gap in political knowledge. With informed women not answering because of self-doubt, and unaware men confidently guessing (and sometimes correctly), knowledge disparities might appear to be larger than they actually are. So, when we strip the gender gap of the effects of women and

---

[22] Lawless and Fox (2010) talk about women's lack of authoritative political power in their book "It Takes a Candidate: Why Women Don't Run for Office" (2010), where they investigate why women do not run for office as much as men. They speak of women's self-censorship by calling upon a "gendered psyche" — "a deeply embedded imprint that propels men into politics but relegates women to the electoral arena's periphery" (2010:12).

[23] Robinson Preece (2016) finds that while women are self-conscious when talking about politics, men are not, but it only takes a confidence boost to close the interest gap. More on this is explained in Chapter 3.

men's different social resources and political socialization, the residual portion we are left with might be well explained by the personality traits that characterize women and men in contrasting ways. However, the fact that these gendered tendencies are further affected by the methodological choices the researchers make in order to collect the data, is even more problematic. Let us just take the questionnaire as an example; when "don't know" (DK) is accepted as a valid answer to a political knowledge question, women tend to go for it, and when it is not admitted, women do not answer but men tend to guess. This was proved by calculating separate Cronbach's alphas on the knowledge scales for men and women (Mondak and Anderson, 2004). As blind guessing introduces unsystematic variance, those who have lower reliability scores (and hence higher variability) are going to be the ones who guessed the most; the authors found these to be men. On the other hand, a DK-discouraging protocol that *discouraged* respondents from saying "I don't know" had women answering more than usual (although still less than men) and revealed some hidden knowledge on their behalf (*ibidem*). In fact, the magnitude of the knowledge gap (which is unusually large) rescaled to a level that was congruent with the gaps observed on variables such as political interest and efficacy. Though the gender gap could not be totally justified, this shows that some unexplained portion is due to men guessing more than women.

A DK-discouraging protocol seems to help women show how much they really know, but also enhances the possibility of lucky guessing; on the other hand, encouraging DKs can deter some of the guessing but does not help hidden knowledge to show. Literature is divided on the coping strategies as they often end in either a loss of validity or reliability. On their behalf, Delli Carpini and Keeter (1996) use DK-encouraging protocols: interviewers are trained not to push respondents to give an answer at signs of uncertainty, and questions are introduced with deterring phrases such as "many people don't know the answers to these questions" or "do you happen to know". While this had been the dominant strategy in the 90s, at the turn of the century, authors like Mondak (2001) and Miller and Orr (2008) started discouraging the use of DKs by arguing that they threaten the validity of the measurement. As a matter of fact, DKs do throw in the measurement a good deal of systematic, psychological contamination that comes from the respondents' personality traits and has little to do with knowledge. The risk is to pair the psychological patterns and the levels of knowledge in one undistinguishable amount. This can be prevented by using DK-discouraging strategies and pushing doubtful

respondents to provide a substantial answer to all questions. However, obliging respondents to answer at all costs is a double-edged sword: it means that those who do not know the answer will guess, and blind guessing, as previously stated, introduces random error and unsystematic variance, decreasing the reliability of the measurement. Moreover, discouraging DKs does increase correct (and incorrect) answers at the expense of DKs, however, many of the additional correct answers represent lucky guessing rather than hidden knowledge (Luskin and Bullock, 2011 see also Sturgis, Allum and Smith 2008).

Discouraging DKs seems to be the more profitable protocol if we want to control the gender patterns on the propensity to answer by paying specific attention to female respondents, on the premise that they hide what they know more than men do. In fact, a DK-discouraging protocol would help women to share their knowledge but might have no effect on men, who are more confident and do not need the extra push. Hence it might narrow the gender gap, if the increase in correct answers is stemming from hidden knowledge rather than lucky guessing and comes disproportionately from women. Yet, the DK protocol is not the only factor influencing respondents' behaviour. Literature on social research methodology has also found question format to play a role on respondents' behaviour and to play it differently for women and for men. Multiple-choice items, for instance, help the partially informed to choose the right answer among the ones given (Robison-Cimpian, 2014), so that knowledge can be detected even in unsure and self-doubting respondents; on the other hand, it enhances the possibility of a lucky deduction. This problem does not exist in open-ended questions – you either know the answer, or it is difficult to improvise the correct one otherwise. However, open-ended questions take up energy and time and make the interview very long. As such, they discourage the insecure and the partially informed and dissuades lazy yet knowledgeable individuals from answering (*ibidem*).

Women and men show recognizable group patterns of behaviour especially before questions of political knowledge, and item format also seems to take out this gendered tendency. Hence, just like with DK protocols, the suspicion that part of the gender gap in political knowledge is actually due to the gendered reaction women and men have to the question format is strong. While open-ended questions depress women's likelihood to provide a substantial answer, multiple-choice questions increase men's probability of making a lucky guess. The different level of risk-aversion and the

different propensity to guess between women and men are difficult to control and enlarge the knowledge gap even more. Women feel less confident when talking about politics, and open-ended items discourage them from feeling at ease even more. As it does not affect men in the same way, the gender gap in open-ended items might be partly due to women's reticence rather than to a complete lack of knowledge. On the other hand, closed-ended items can stimulate substantive answers from those who feel insecure, hence mainly women, but also boost guessing, especially among men. The higher propensity of men to guess than that of women to answer could end up amplifying gender differences in political knowledge on closed-ended items as well.

Gender seems to be more than just a random effect; in fact, it is rather a foundational feature of political knowledge, although not only. It also appears to be foundational of character – especially when this is confronted with questions about politics – and to be shaping individual interests, in politics as well. In fact, rather than an innate characteristic, gender is the process that determines how men and women are going to live their lives and how much of this life they are going to dedicate to political learning. The next section is dedicated to understanding why this is.

1.4 Producing gender-sensitive research: an original attempt

The connection between gender normativity and the development of specialized political knowledge is not investigated in depth, and neither is the specificity of institutional politics and of its audience (as opposed to it being general knowledge that is useful to all) stressed enough in the scholarly literature that takes on the topic of political gender gaps. Up to now, literature has shown that women and men have a different perceived authority to share information about politics, as well as a structural and situational disadvantage to learn about it. However, all of these results have one thing in common – they are thinking and referring to politics as if it cannot prescind from institutional facts and figures. Politics is not a one-dimensional concept, yet social research is choosing to consider the one aspect of it that is relevant to men. Still, we stand here wondering why women do not know as much or would rather not answer our questions.

On the other hand, the topics that are catalogued as 'gender-relevant' are thought to concern women only, when they are actually relevant to everybody. But precisely because they are believed to concern women only, they are not treated as universal knowledge nor they are perceived as equally important as constitutional facts and

figures. This underrating is exquisitely discriminatory and is contributing to not only differentiating gender roles even further, but also to prioritising men's needs over those of women. By conceptualising the topics that concern men as of necessary interest for all, and relegating female issues to a political niche, a secondary field of relevance and expertise, women cannot ignore institutions, but men can disregard 'gender-relevant' issues.

This thesis was born with the intention to fill these interpretational shortcomings, and it will do so by 1) showing how pressing gender normativity is especially on the role assigned to women, and how this constitutes the foundation for gender inequality; 2) arguing how the concrete effects of the higher gender normativity that is placed on the social role of women is contaminating not only political behaviour, but also the field of methodological research; and 3) demonstrating that in order to overcome this unequal perception of roles, institutional politics should be catalogued as a male (and not a neutral) domain of political expertise, in the same way issues like childcare policies are overexposed as a female domain of political expertise.

In a similar way, literature has often highlighted the fact that women refrain from providing substantial answers to political knowledge questions because of the DK options, the open-ended items and the topic under investigation; however, whether these weaknesses are only related to institutional politics or, instead, spread out to other things we might know about politics, remains an underexplored area, and one this thesis wishes to empirically contribute to. What would happen if, for example, other political topics – maybe issues that concern women instead – were added to the measurement of political knowledge; would women feel entitled to provide substantive answers instead of saying "I don't know"? And would these substantive answers be more correct than those of men? Although we expect that introducing female-relevant topics in questions of political knowledge would provide us with a different picture not only of gendered patterns of knowledge, but also of gendered patterns of response, the data to confirm this claim are scarce. In fact, when the quiz is on institutional and national politics, the number of female dropouts and incorrect answers is consistent. However, not much research has been conducted on other political topics and on whether they provoke similar gendered responses, so it is our duty to push the state of the art a step further.

Throughout this dissertation, we argue that the different social roles that are assigned to women and men lead to different political functions in the realm of politics,

which come in the form of separated expertise, interests and diverse engagement. This is not to say that the gender gap in political knowledge we witness to in the data today is not real – it is real, but we must bear in mind that it refers to a specific aspect of political knowledge, and one that is situated and rooted in the social positions that women and men cover in society. In a similar way, we do not wish to state that knowledge about political figures, events and offices should not be relevant to women as well; it is, after all, vital information that one needs to fill their duty as a citizen of a democracy and vote according to their interests. However, there are many other things one could know about politics besides institutional politics – for example, how much is the tampon tax or how long is parental leave – so why not make knowledge questions out of them? Only in this way, the continuity between the social and the political experience of women and men is not disregarded.

It is certainly useful to highlight the weaknesses women might present more often than men before knowledge questions on institutional politics, but the purpose of doing so should not be that of showing that they just know less or have less confidence. The purpose of showing women's shortcomings should be that of demonstrating that the conceptualization of politics we use today is arbitrary, narrow and also very restrictive for research. If we, as researchers, think of politics as only constitutional politics and of political knowledge as only knowledge about constitutional politics, then we will operationalize the concept of politics and all that it entails consequently. The questionnaire will have questions that measure only one aspect of politics and only knowledge on this one aspect, and the data we will collect by this method will provide us with estimates that relate to this feature of politics only. In this way, we are both failing to measure the knowledge people have on all other issues that pertain to politics and observing only a partial picture of the general levels of political knowledge; if we are unable to see the initial mistake, we are also unable to interpret results accordingly. It would be like considering only what women find relevant about politics and measuring the public's level of expertise on those topics, only to claim soon thereafter that women seem to know more about politics than men.

Chapter 2:

Motherhood and political inequality.

2.1 An introduction

Gender roles (GR) are based on normative expectations about the adequate roles that women and men should play in society, and just like many other cultural constructions of western societies, they are incredibly resistant to change. Most times, these relations are hierarchically shaped and place men in roles of power, whereas women relegated to the private realm of the household, for which they are responsible despite of whether they a fulltime job. According to social role theory, this arrangement of gender roles is the foundation of gender differences in political attitudes (Eagly and Diekman 2006, Schneider and Bos 2019). For one, women are constrained from learning about national politics or joining in the political debate by their duties as wives and mothers and end up knowing less than men. They have less time and money at their disposal; they work more indoors than their spouses (Batalova and Cohen 2002), especially after marriage (Sayer 2005) and even in the most egalitarian countries (Knudsen and Waerness 2008). The more women comply with their social role, the less they pay attention to politics, and, in fact, marriage and parenthood are depressors of political knowledge for them, but stimulate learning among men (Ferrín, Fraile and García-Albacete 2019). This 'politically passive role' (Welch 1977, 13) is transmitted from mother to daughter via primary socialization, so while boys are encouraged to chase status and independence, girls are encouraged to support their families emotionally and privately (Gilligan 1982). Indirectly, this process shapes the orientations toward politics from childhood and adolescence, creating gender gaps in the quantity and quality of political engagement (Ferrin, Fraile, and Rubal 2015; Quaranta and Dotti Sani 2018).

To some, this traditional arrangement of roles based on gender might ring outdated; in fact, we talk profusely about women's achievements in the context of equal rights, to the point gender equality has recently been taken as a no-longer relevant or surpassed issue (Gillis, Howie and Munford 2007; Morrison et al. 2005; Oakley and Mitchell 1997). But how much have women actually secured? To what extent is the general public's evaluation of prescribed gender roles becoming more progressive, and

thus contributing to creating greater opportunities for women to participate into the public sphere? Both emancipation and affirmative action encourage women to venture outside of the family area and occupy the same qualified positions in society as men; yet, gaps exist, especially in politics, where women continue to come across as interlopers. In fact, despite the revolutionary changes that female participation in the labour force and in education have brought to the structure of European societies, the suspicion is that this binary segmentation into private and public roles, and the segregation of women to the former realm, is still perceived as fair. And thus, until women fully emancipate from this private/family role, they will be disadvantaged in more than one frontier of political engagement.

Unfortunately, investigating whether gender normativity is affecting women more than men, and negatively so as regards to their unequal levels of knowledge is, at this stage, impossible. Data linking people's perceptions of gender roles to their levels of political knowledge are scarce, if not inexistent. Hence, the focus of this chapter can only be limited to the first of the two above-mentioned relations – we will primarily investigate how strongly people feel about the traditional division of labour around Europe, and check to what degree the nurturing role of women is still endorsed. With this, we wish to argue that the strong connection of the female gender to the private role is stronger than any other connection between gender and gender roles. Subsequently, we will examine which factors feed gender expectations and which discourage them instead, in an attempt to deliver a picture of how gender norms have transformed in time and across space because of structural and cultural variations, and to which variables is this change attributable.

Isolating the sources that foster – or on the contrary depress – gender equality is quite difficult, as both attitudes towards gender norms are said to vary across cohorts, genders, countries and years. Personal achievements like education and employment certainly play an important role in the making of egalitarian attitudes (Bolzendahl and Mayers 2004; Cassidy and Warren 1996; Corrigall and Konrad 2007; Shorrocks 2018; Zuo and Tang 2000), but they also seem to enlarge gender inequalities in politics, as men have higher returns in terms of knowledge from such resources (Dow 2009; Ferrín, Fraile and García-Albacete 2019). Instead, values like religious dogmas lead to appreciating traditional gender roles (Hofstede 1980,1991; Sherkat 2000; Voicu 2009) and to

adopting conservative political stances (Inglehart and Norris 2000) that might disfavour women's political involvement and learning alongside.

Education and employment might act in diverging ways on the individual level, but their aggregate effect on the macro-level could be more effective in both fostering egalitarian attitudes towards GR. In fact, gender cultures transform over time and in space, aided, for instance, by national demographic and educational patterns, by local regulations and processes of secularization, all of which play an essential role in reinforcing or discrediting the cultural understanding of specialized labour. For instance, women's availability to do unpaid work has grown smaller in time (Sayer 2005), maybe changing people's take on gender norms over the decades. Accordingly, a greater female presence on the national labour market might have introduced the greater proximate community to enhanced levels of egalitarianism. However, while we predict higher parity in social resources on the national and longitudinal levels, together with processes and current levels of secularization, to have increased gender egalitarianism, we expect this change to be very marginal.

Hence, we will start the analysis by testing how structural variation can contribute to either stopping or boosting the run towards gender equality. Instead, the final portion of this chapter is dedicated to discussing the political and cultural features that can influence the public opinion just as well. In fact, cultural revolutions have more power to change the normative expectations based on gender than any *de jure* right (Inglehart and Norris 2003), but though their potential is recognized in scholarly literature, empirical results remain feeble. We will then pay specific attention to the evolution of the feminist movement, and to the influence this has had in shaping generational attitudes towards gender roles. We will study whether equality can be associated to mechanisms of cohort replacement, that is, to the idea that, eventually, traditional customs will die out with the older generations and be replaced by the progressive perspectives of younger and more egalitarian cohorts (*ibidem*).

While generational turnover has been pivotal for many cultural revolutions, it is not as influential in the case of the feminist stances. Equality was initially growing across cohort until the 1970s, but then this trend started to lose strength, until it reversed in the 80s and 90s (Shorrocks 2018). The decrease in support was taken as a consequence of the second-wave feminist movement losing relevance, with younger people starting to think of it as outdated (post-feminism) and appearing *less* egalitarian than their

predecessors (*ibidem*). Hence, rather than naturally growing across cohorts, gender equality appears to be cyclically called into question and hence contingent to specific generations. This raises the concern about whether feminism can ever be effective enough to change attitudes for good and make of equal rights an imperative value.

This also leaves us with the question as to where we stand now. In fact, in recent years, gender inequality has re-claimed a status of urgency; from the women's marches, which challenged Trump's sexist electoral rhetoric, to the Metoo movement – the first campaign to go viral via the use of a hashtag – gender-based violence and inequality of status got pushed back into the centre of the storm, especially in online political debates, and among the younger users of online social media. These recent happenings might have provided feminist ideals with the exogenous shock they needed to grow more egalitarian alongside the newest cohorts and ignite the generational contrasts once again. As this has not yet been verified in scholarly literature concerned with the cultural change of values, it is our duty to do so here.

The timid feeling is to trace only marginal variation in gender etiquettes. In fact, despite the revolutionary changes that female participation in the labour force and in education have brought to the structure of western societies, women still experience occupational segregation and wage discrimination, and are far from being represented equally in national governments (IPU 2019; http://archive.ipu.org/wmn-e/world.htm). There seems to be a stalemate situation in the emancipation agenda, and there are strong reasons to believe that the elements that were once guiding social change have now lost some of their power in debunking the roles that are assigned to women and men. While we expect them not to have done so entirely, we will discover that this intuition does have a foundation.

To indulge in this challenge, the European Values Study (EVS) has proven to be a valuable archive[24], though with some reservations. In order to measure gender roles, the EVS has provided a cluster of questions in all waves, starting from 1981. However, the measurement of GR attitudes has raised a few objections in literature because of its weak internal validity (Lomazzi 2017; Voicu and Tufis 2012). Measuring attitudes towards gender roles is no trifle, and this is so for two reasons. First, just like the concept of gender equality, gender roles – as well as attitudes towards gender roles – involve more than

---

[24] The EVS is a repeated cross-sectional survey research programme on basic human values, that provides data on attitudes towards gender roles as well.

one aspect of society and hence cannot be measured by one dimension alone. Distinct GR can be traced in the division of labour both inside and outside of the household, yet most of the EVS questions pay undue attention to the traditional role of women, ruling out all questions on the perceived ability of women to take on public roles, or that of men in managing the household. This multidimensionality of the concept is ignored in the EVS waves going from 1981 to 2010, and all of the related GR scales, unsurprisingly, turned out to be quite unreliable. However, the last wave added new items to the GR scale and edited older ones, allowing for some multidimensionality in the measurement of gender roles. This modification has both improved the measurement and brought a fresh perspective on the study of gender roles, and we will finish the chapter by discussing these favourable events.

2.2 Gender equality: how far are we?

2.2.1   Egalitarian in time

The different allocation of private and public social responsibilities to women and men respectively, provided breeding ground to the male breadwinner/female carer family model, which was predominant in many western countries in the XX century. It relied on the normative expectation of the husband taking care of the family economically while the wife was responsible for the domestic work. Both the success and the downfall of the male breadwinner/female carer family model have been linked to structural and cultural change. On the one hand, structural–functionalist theories trace the development of this family model back to the birth of the modern capitalist society, where complementary gender roles allegedly became necessary so as to face the new highly differentiated social systems (Parsons and Bales 1955). However, this traditional arrangement of gender roles started to erode as soon as industrialization and economic growth resulted in huge improvements in the living conditions and status of women (Inglehart and Norris 2003), who became more present in education and paid workforce. Other scholars claim that the model has won and lost appeal mainly because of cultural trends (Pfau-Effinger 1998, 2004; Voicu and Tufis 2012). It became attractive in the 20th century thanks to the rising western bourgeoisie and its cultural standards, according to which children were to be socialized in the household under the omniscient supervision of the mother (Pfau-

Effinger 2004). Yet, when traditional family institutions in the form of the nuclear family based on the married couple lost its place as the cultural core of society, and fertility rates fell dramatically as more women entered the paid labour force, traditional expectations connected to gender started to blur alongside (Inglehart and Norris 2003).

Owing to a combination of cultural and structural revolutions, attitudes on the appropriate roles of men and women eventually started to ease off. While for most of the XX century, family roles concerning partnership and parenting duties were expected to be covered by women, and public offices and occupations were exquisitely ascribed to men, from the 1970s onwards, roles started to mix and converge. The popularity of the male-breadwinner family model was, in fact, increasingly challenged by the rather consistent number of dual-earner couples, where both spouses pursued careers and contributed to the total household income (Blossfeld and Drobnic 2001). Concurrently, the majority of the workforce transitioned into highly educated, skilled, and specialized staff; geographic mobility across borders became relatively easy, scientific and technological innovations grew exponentially, alongside mass media channels and global politics and trade (Bell 1967). The western world was experiencing unprecedented levels of economic prosperity and welfare protection, to the point where the public concern shifted from the material fear of surviving to the pursuit of quality-of-life issues (Inglehart 2018). Instead of unemployment, housing and social safety, post-material societies started to prioritize values such as individual autonomy and self-expression. Ultimately, divorce became possible and so did liberalizing patterns of sexual behaviour, which together eroded conventional marital partnerships and traditional family roles (Bolzendahl and Myers 2004).

The structural and cultural changes in the lives of women and men powered an ongoing process of democratization that led to a greater acceptance of gender equality over time. Indeed, the increased social support for the liberal values of tolerance, faith in democracy, human rights and equal opportunities entailed some adherence to egalitarian gender beliefs as well (Inglehart and Norris 2003). Several quantitative studies (e.g., Bolzendahl and Myers 2004; Brewster and Padavic 2000; Cotter, Hermsen, and Vanneman 2011; Lee, Alwin and Tufiş 2007; Shorrocks 2018) have recorded a change of sentiment throughout the years and have reported that while traditional stances anchored on a binding gender division of roles are declining, egalitarian positions have increased.

As feminist ideologies gained recognition, scholars started to trace the social determinants of gender egalitarian opinions. Many concentrated on the revolution of the paid labour force, where occupational and educational opportunities grew exponentially, especially for women (Inglehart and Norris 2003). Subsequently, educated and employed mothers passed on this unconventional role-model to their children, and especially to their daughters, who then developed a different understanding of women's place in society (Bolzendahl and Myers 2004; Cassidy and Warren 1996; Sani and Quaranta 2017). Others focused on the extension of compulsory education, which enabled schools to spread their democratic ideas to a wider basin and 'enlighten' individuals on alternative interpretations of gender roles in society (Rhodebeck 1996). At the same time, religion lost its influence on schools, culture and on other institutions like science and the law – a process that goes under the name of secularization. The patriarchal orientation towards gender roles of the Christian tradition started to fall out of fashion (Voicu 2009; Wilcox and Jelen 1991; Sherkat 2000) and was positively related to the increase of more postmodern standpoints on gender roles (Inglehart and Norris 2003; Voicu 2009).

The structural and cultural alteration that occurred in women's lives in the second half of the XX century is destined to have changed how people think of women and men's places in society in the long run. Additionally, with the church losing some of its leverage and people moving away either from its political stances or from religion altogether, the nuclear family is doomed to have lost its appeal. It is then reasonable to believe that the increasing numbers of women in employment and in education, together with the decreasing levels of religiosity, have had a positive impact on egalitarian attitudes towards GR in the long run. With this in mind, the first hypothesis goes as follow:

H1a (the longitudinal hypothesis): the more women enter in education and employment, the higher the support for equality in time; conversely, the more religion loses attraction in time, the stronger the support for equality.

2.2.2 Gender Roles for women and men

Apart from investigating if the cultural and social changes in women's lives and statuses of the past century have affected the growth of egalitarian attitudes, this paper is dedicated to understanding how the degree of support for gender equality changes on the individual level as well. In fact, is gender equality cherished as a universal value or is there, on the contrary, a gender discrepancy in thought? Indeed, while women's public presence and stakes expanded, men did not experience such a revolutionary change directly, so it is reasonable to believe that structural changes have had a stronger impact on women's beliefs. For this purpose, a strand of literature has put women at the centre of investigations, linking egalitarian orientations especially to them rather than to the whole public. In has also linked feminist attitudes and consciousness to well-educated and employed women primarily (Klein 1984; Thornton and Freedman 1979; Gurin 1985; Sapiro 1982; Cook 1989; Bolzendahl and Myers 2004).

According to interest-based explanations (Bolzendahl and Mayers 2004), a person's pro-feminist attitudes depend on how much they can benefit from gender equity ideology; as gender equality seeks to cut disparities by allowing, for instance, equal pay rights, it is reasonable that women support it to a greater extent than men (Davis and Robinson 1991). Another set of explanations justifies women's higher levels of egalitarianism on the bases of them being more exposed to inequality – especially when employed or in education (Bolzendahl and Mayers 2004). Education exposes women to feminist ideas, which combat gender stereotypes and provide alternative interpretations of women's roles in the social world (Davis and Robinson 1991; Rhodebeck 1996). Instead, employment exposes women to discriminatory situations in the workplace, where they grow to acknowledge inequality; it dispels myths about their capabilities to perform (Banaszak and Plutzer 1993; Davis and Robinson 1991; Klein 1984) and allows them to enter social networks of non-traditional women (Rhodebeck 1996). Workplace experience is also thought to demonstrate that women can manage family-duties alongside working fulltime (Poweǁ and Steelman 1982) and to show women the possibilities for greater independence from men via financial self-support (Klein 1984).

Nevertheless, not all women have egalitarian opinions about GR, and not all women agree among themselves about policy matters related to gender (Rhodebeck 1996). While we expect women to be more egalitarian than men on average, those who

are excluded from the labour force might actually be less progressive. In fact, they do not suffer the unequal treatment in the office and do not need welfare services as much, because they provide care to their families themselves. Moreover, homemakers are more religious and less educated on average, and religion has been associated to conservative ideas and partisanship (Norrander and Wilcox 2008; Inglehart and Norris 2000; Barisione 2014); hence, traditional women might have no interest in demystifying the gender roles they strongly believe in. Moreover, some religions stress the biological and societal differences between women and men (Hofstede 1980,1991; Voicu 2009), so that adherence and religiosity are directly linked to a patriarchal orientation towards gender roles (Sherkat and Ellison 1999; Read 2003; Sherkat 2000).

So, on the one hand, education and employment are most likely to be enforcing egalitarian attitudes for all, but especially on behalf of women; conversely, religiously affiliated people – and especially women – are expected to be more inclined to support unequal gender roles and to consider women as housekeepers and mothers first of all. The third hypothesis goes as follows:

H1b (the individual-level hypothesis): educated and employed individuals are more egalitarian than their uneducated and unemployed counterparts, while religious individuals are less egalitarian than their non-religious counterparts. These effects are magnified with gender, so that the gender gap increases in the case of educated and employed women and decreases among religious women and men.

2.2.3 Equality across countries

Gender is definitely an important predictor of pro-feminist stances, although some scholars suggest that the key contrast in levels of egalitarianism lies in societal characteristics rather than in individual characteristics (Inglehart and Norris 2003; Hook 2006; Batalova and Cohen 2002). The national context is significant in defining expectations based on gender, as it brings to the field the macro-level predictors that shape citizens opinions – first and foremost, political institutions (Ruppanner 2010). In fact, the political system operates on those structural factors that keep women to become fully engaged in the public sphere, hence assign resources unevenly to women and men. By doing so, it reinforces the cultural perspectives of male or female designated

responsibilities and the beliefs of them being necessary to the functioning of society (Fox 2009).

The allocation of household responsibilities is also determined by policies that regulate the work/family life balance (Hook 2006; Lewin-Epstien and Stier 2006). Policies like these dictate the benefits offered to workers, such as childcare and parental leave. When generous towards women but not towards men, they support the female-caregiver/male-breadwinner bifurcation (Hook 2006). In contrast, when equal or neutral, they encourage the opposite, decreasing the appeal of specialized labour. Welfare state regimes are, in fact, effective in shaping the gender ideology of a nation, as they either burden women with caring activities when conservative, or lead to more equal housework sharing when universal (Geist 2005). For instance, women are not especially linked to caregiving activities in Scandinavian countries (Anttonen 1997), where the welfare system is the primary provider of social assistance. Instead, their role in the family is particularly emphasised even today in conservative welfare regimes like Italy and Austria (Esping-Andersen 1990), where the male-breadwinner arrangement of gender roles is still very frequent (Haas 2005; Zagheni, Zannella, Movsesyan and Wagner 2015).

The shift from traditional to non-traditional gender roles attitudes is also attributed to women's presence in the public sphere, who serve as role models to younger generations (Bolzendahl and Myers 2004; Wolbrecht and Campbell 2007). As a matter of fact, exposure-based explanations are valid on the country level as well. A greater number of women (especially mothers) in the labour market is an incentive for younger women to join in (Cassidy and Warren 1996; Sani and Quaranta 2017; Zuo and Tang 2000) and work will provide younger women with an egalitarian outlook in turn. Female education is also tightly linked to more egalitarian attitudes toward gender roles because highly educated women are exposed to ideas about feminism and gender equality (Rhodebeck 1996). Furthermore, early contact with feminist ideas and life experiences reduces acceptance of gender stereotypes and can assist both women and men in developing a political consciousness about gender equity issues (Banaszak and Plutzer 1993; Klein 1984; Powell and Steelman 1982; Rhodebeck 1996).

Industrialization, economic prosperity and social security have decreased the social importance of religion, as well as changed people's religious orientations, both of which have a pivotal influence on gender relationships at the macro level (Inglehart

2018; Inglehart, Halman and Weltzel 2002). Scholars have classified countries according to whether they have a masculine or feminine orientation towards GR and have linked the former to lower degrees of secularization, and the latter to greater levels of gender equality (Verweij, Easter and Nauta 1997). In fact, systematic and predictable differences in cultural attitudes toward gender equality vary across Western and other nations according to their level of traditionalism (Inglehart and Norris 2003). The level of secularization varies significantly across countries, especially in Europe (Voicu 2009); therefore, we expect a country's average level of religiosity to have an impact on how its citizens feel about gender roles.

If we take the three predictors we have consistently repeated so far – religion, employment and education – and apply them to the country level, the expectation is that countries with a higher rate of female employment, alongside those with higher rates of educated women, are going to be the most feminist; conversely, the more religious countries on average will be less sympathetic towards the feminist cause. Hence, the hypothesis goes as follows:

H1c (the country-level hypothesis): the higher the rate of females in employment and the higher the level of education for females in a given country, the more egalitarian the attitudes towards GR. On the contrary, the higher the country average of religiosity, the less egalitarian the attitudes towards GR.

2.2.4   The (feminist) waves of change

The structural and cultural changes in the lives of women and men powered an ongoing process of democratization that led to a greater acceptance of gender equality over time. Several quantitative studies (e.g., Bolzendahl and Myers 2004; Brewster and Padavic 2000; Cotter et al. 2011) have recorded a change of sentiment throughout the years and have reported that, while traditional stances anchored on a binding gender division of roles are declining, egalitarian positions have increased on average. Although definitely aided by the widespread change of perspectives, support for gender equality was rather related to cohort effects, that is, to unobserved features that characterize a certain population that is born and raised at a particular point in time (Blanchard, Bunker and Wachs 1977); the idea is that recent generations are leading the attitudinal change with

their predominantly egalitarian opinions, and by replacing their older and more conservative counterparts. Indeed, following the theories of social change, the beliefs and attitudes that emerge during primary socialization from the contingent social, economic and political context, endure throughout the individuals' lives. Hence, if younger cohorts are born in an environment that is becoming more egalitarian by the day, we would suppose that attitudes also become more egalitarian across birth cohorts.

The acquisition of sex roles and core values of gender equality are learned very early in life, and while they might not vary so much within individuals who were born at about the same time, they were shown to become significantly more egalitarian across generations (Brooks and Bolzendahl 2004; Inglehart, Norris and Welzel 2002). Individuals who were born before the 1940s experienced the aftermath of the war, the Great Depression, mass unemployment and poverty, and decisive historical events like these leave an imprint. As a consequence, these individuals are likely to prioritize material social needs and have proven to be quite traditional in their beliefs about the appropriate division of household and parental responsibilities (Inglehart and Norris 2003). By contrast, the post-war baby boom generation lived a period of wealth and social stability, where women became educated, employed and politicised; the individuals who experienced such wealth from the very beginning of their lives, were also socialized differently about women's roles in the world and more easily adhered to postmaterialist values, including the aspiration of equality between the sexes.

So, on the one hand, one can expect this revolutionary change in values to have continued its exponential growth across generations throughout the present day, so that the younger cohorts of today's 'post-industrial age' are significantly more sensitive towards equality than their parents and grandparents. However, research has demonstrated that, after a rapid change of hearts, generational disagreement started to ease off, as individuals born between the 1950s and 70s seemed to be sharing similar egalitarian attitudes (Brewster and Padavic 2000; Inglehart and Norris 2003; Mason and Lu 1988). Moreover, as soon as individuals born in the 1980s were included in the analysis, attitudes towards gender roles were found to become *less* egalitarian the younger the cohort (Shorrocks 2018). The fact that attitudes had started to level off across cohorts is admissible – traditional family models had already weakened and individuals who were raised by mothers who worked outside the home became a far less select group; the newer cohorts were left with fewer traditional stereotypes to

'deconstruct'. The diffusion of liberal attitudes seemed to have reached its outer limit (Brewster et al 2000), but then the recent decline in egalitarian stances led researchers to look once more for alternative explanations to cohort mechanisms.

It soon appeared obvious that the individuals who were born during the 1960s and 1970s had more egalitarian perspectives on gender roles than those born before or after them because they were socialised during the second-wave feminist movement (Shorrocks 2018), which dates back to about the same years[25]. Knee deep in an intensive campaign for role equality, free welfare provisions, equal pay and the liberalization of abortion, these individuals grew up vis-à-vis an outstanding effort to change the norms related to the position of women in society and to challenge traditional conceptions of women's homemaking and mothering role (Dahlerup 1986; Lovenduski 1986). This historical period that the so-called baby boomers went through in the western part of the world at the beginning of their lives, was more influential than any legacy that could be passed on to the next cohort. In fact, this revolution in thought was so circumscribed to a specific time and geographical space that a similar 'feminist generation' was never traceable in the Eastern part of Europe, where the rise and fall of the communist regime had established a radically different gender culture (Shorrocks 2018).

In a similar way, the slimming influence of the feminist movement in the 1980s and 90s, alongside the development of new economic concerns, determined the decline of egalitarianism in the individuals born and socialized in those years (Kaplan 1992; Shorrocks 2018). Feminism started to be considered as radical or no longer needed because many goals had been achieved – a sentiment that has been referred to as post-feminism (Gillis, Howie and Munford 2007; Oakley and Mitchell 1997). It started to be felt as a personal value rather than a collective ideology (Gillis et al. 2007), and despite the on-going and evident gender disparities, younger individuals were less likely to sympathise with the cause than their 'second-wave' equivalents (Schnittker, Freese and Powell 2003), or more likely to down-play and ignore the persistence of gender inequality (Morrison, Bourke and Kelley 2005). A backlash against feminism also came into being, manifesting itself through politics and the media, and generally criticising the second-wave feminist movement for having demonized the institutional figures of the housewife and the mother (Oakley 1997). In fact, backlash stances were inviting women

---

[25] The second wave of feminism dates back to the 1960s-1980s, and the cohorts that Schnittker, Freese, and Powell (2003) find to be the most feminist are those representing individuals born between 1936 and 1955, who were young adults in the period of time considered.

to re-claim their family role and forge their identity around it, as emancipation had only succeeded at the expense of men and children.

The interchangeability of gender roles appears to be periodically called into question. Rather than growing indisputably alongside cohort, gender equality needs a constant reminder of its cruciality. This raises the concern about gender equality ever establishing itself as an indispensable value or criterion. In recent years, however, issues of gender equality have become again a pressing matter, resulting in a fourth-wave feminist movement that is facilitated by the use of online tools and appeals especially to young women (Munro 2013). Women started to protest and take the streets again in the name of feminism. Following the inauguration of Donald Trump, a slew of 'Women's Marches' took place across the USA and UK to challenge to the misogynist rhetoric of Trump's election campaign. The Metoo movement – the first global campaign promoted via the use of a hashtag – went viral, raising sudden awareness about the ongoing discrimination of women especially among the users of online social media, who are mostly from generations Y and Z. It is indeed plausible that the newest cohorts for which we have data and that we can track (who were born during the 1990s) have re-started a process of solidarity towards the gender inequality claims.

The opposite might be true as well. Both generations Y and Z matured and became adults during or after the 2008 economic crisis, which led to the dismantling of public services in most of the EU. Austerity measures as the former end up delegating the major responsibility of care to women, and thus shift national gender regimes towards more conservative directions (Lombardo 2017). Moreover, the language of 'gender' and 'gender equality', as well as feminist knowledge production, tend to lose emphasis vis-à-vis the incommensurate primacy of the economic crisis narrative (Cavaghan 2017; Kantola 2018; Elomäki, Kantola, Koivunen and Ylöstalo 2019). Yet, the youngest generations have also matured alongside the rapid development and distribution of technology, the use of which has most definitely increased the pace of value change and habits transformation. It is hence reasonable to believe that the residues of traditionalism that the crisis reintroduced have been overshadowed by the recent non-negligible events that have characterised the western world in the last decade, at least in the case of the youngest generations. Although we will not be testing this, the hope is that these life-changing events, fuelled by the rising fourth-wave feminist movement, have

provided enough fuel to give attitudes towards GR a liberal kick and ignite once again a generational change of values. This argumentation leads to the following hypothesis:

H1d (the fourth-wave exogenous-shock hypothesis): *today, younger cohorts are more egalitarian than their older counterparts, and the generational conflict more marked than in the past decades.*

The extent to which the youngest and extensively digitalised generations today hold more egalitarian attitudes towards GR as compared to their predecessors remains an underexplored area at large. Similarly, how support for egalitarianism is still affected by education, religiosity and employment – once very strong predictors of GR attitudes – is to reassess both at the individual and contextual level. The literature on GR attitudes so far presented, points to the positive effect that the increasing possibility to get an education and a job for women has had in time, to the positive effect it has on the country level, as well as to the personal gains it brings for both women and men on the individual level. On the contrary, it has found in religion and female inactivity two promotors of conservative attitudes on the both the personal and the contextual level. While we are expecting the same effects to endure up to the present day, we would not be surprised to find that they have weakened instead, or do not longer count in a significant manner.

2.3 Women as mothers: an unescapable relation

2.3.1 Gender roles in social research: a methodological concern

The conceptual separation of 'private' and 'public' as distinct societal spheres has led to a different allocation of adult social responsibilities to women and men. Today, this segmentation of labour that assigns men to public roles and women to private ones might not be as clear-cut; on the one hand, it may be now common to see women in business and politics but emancipating the female gender from the nurturing role is going to be a harder undertaking until it is commonly believed that it meets women's biological predispositions. This cultural bias is met on the large-scale population as well as in social research methodology for data collection, which is accused of placing exclusive attention to the role of women as primary caregivers. The EVS scale of gender roles provides a good example of why that is.

The EVS is a trustworthy cross-national and repeated survey program that investigates Europeans' values in an increasing number of countries. Since the first wave in 1981, it has included one or more items on attitudes towards the role of women in society, which we as researchers interpret more extensively as attitudes towards gender roles. The scale of gender roles has been altered over time and goes from one to more questions, depending on how recent the survey wave is; from the one question blandly concerning attitudes towards gender roles in the 1980s (Do you think that a woman has to have children in order to be fulfilled or is this not necessary?), we grow to a pool of questions that articulate the division of labour between the sexes in more detail in the subsequent years, as shown in the table below.

Table 1 *Name of item, question it refers to, waves it appears in and total number of times the item is repeated across EVS waves.*

Variable	Question	W1	W2	W3	W4	W5	Total
WOMENWANT	A job is alright but what most women really want is a home and children		1	1	1	1	4
WORKINGMOM	A working mother can establish just as warm and secure a relationship with her children as a mother who does not work		1	1	1		3
PRESCHOOL	A pre-school child is likely to suffer if his or her mother works		1	1	1		4
	(Similar alternative) When a mother works for pay, the children suffer					1	
HOUSEWIFE	Being a housewife is just as fulfilling as working for pay		1	1	1		3
INDEPENDENT	Having a job is the best way for a woman to be an independent person		1	1	1		3
HOUSEHOLD	Both the husband and wife should contribute to household income		1	1	1		3
	In general, fathers are as well suited to look after their children as mothers			1	1		2
	Men are less able to handle emotions in relationships than women			1			1
	Men should take as much responsibility as women for the home and children				1		1
FAMILYSUFFERS	All in all, family life suffers when the woman has a full-time job					1	1
MANSJOB	A man's job is to earn money; a woman's job is to look after the home and family					1	1
MALELEADERS	On the whole, men make better political leaders than women do		SE			1	1
UNIBOYS	A university education is more important for a boy than for a girl			SE		1	1
BUSINESSMEN	On the whole, men make better business executives than women do					1	1
	One of my main goals in life has been to make my parents proud					1	1
JOBSCARCE	When jobs are scarce, men should have more right to a job than women			1	1	1	4
FULFILLED	Do you think that a woman has to have children in order to be fulfilled or is this not necessary?	1	1	1	1		4

The questions that seek to measure people's attitudes towards gender roles (also in studies that differ from the EVS) generally ask for the grade of agreement or disagreement with statements such as the ones listed in Table 1. Respondents are given a choice of 4 response options – strongly agree, agree, disagree, strongly disagree. This collection of questions can be collapsed together so as to form a scale, which is then used as a proxy to measure attitudes towards gender roles.

Despite the nuances the GR scale allows for, questions as the ones listed above (if we ignore the most recent wave) remain quite circumscribed to the so-called 'traditional' role of women in society – that of being caregivers – and hence focus on the role of women in the male breadwinner/female carer family arrangement. When respondents reject this family model, we assume that they are more likely to be in favour of gender equality altogether, while, on the contrary, if they comply, they are more likely to be in favour of a strict division of roles. However, these questions mostly measure the degree of rejection or acceptance of the traditional gender division of labour and pay little attention to new family models (e.g., "dual earners"), or to the changing roles of men (Braun 2008). In fact, they seem to ignore that attitudes towards gender roles are a complex, multidimensional concept, involving power balance both in the private and in the public spheres (Constantin and Voicu 2015; Larsen and Long 1988). So, besides tapping women's involvement in domestic roles and activities, a measurement of GR should take into account the public dimension as well, which considers women's engagement in non-domestic roles and activities such as education, the labour market, politics, and business (Constantin and Voicu 2015; Wilcox and Jelen 1991).

Having said so, the latest EVS gender roles scale (in Wave 5) introduces a few questions that go beyond women's household duties and focus on 'public' roles as well (and ask respondents whether men are better suited). In this way, both the private/public division of gender roles is assured, as well as the parallel distinction of women and men's social roles. The first part of this analysis will check how well these items performed by comparing the reliability score of the 2017/2018 GR scale with reliability scores coming from previous EVS waves. It will then move on to investigating whether introducing a different perspective on GR is also allowing to measure more than one latent factor.

Multidimensionality has already been traced in previous factorial analyses performed on the EVS scale, although the results have often pointed to unstable and inconsistent dimensions of attitudes towards gender roles. Lomazzi (2018), for one, demonstrated that the scale included at least three dimensions; however, the variables included in the factor analysis correlated differently across countries and different latent factors emerged, no two involving the same variables. The overall picture ended being quite inconclusive and chaotic, and the factorial structure was decreed not stable enough across countries to talk about three, solid latent dimensions. By repeating a similar

exploratory factor analysis on the 2017/2018 GR scale, we expect this renovated scale to reveal more than one latent dimension as well as a more solid factorial structure across countries.

2.3.2   Private and public gender roles

There are a few attempts in literature that try measuring attitudes towards gender roles in both the private and the public spheres. All were carried out with the underlying hypothesis that there are different dimensions of gender-egalitarianism, and that people might react differently to each one. Women and men definitely seem to do so, although results are very mixed and might also depend on the generation we are looking at.

For a long time, women appeared to have more egalitarian views about gender roles than men, opposing in particular the supposedly negative consequences of their jobs on family life (Bolzendahl and Myers 2004; Scott 2008). Some survey evidence comparing attitudes towards marriage and the family in Britain, Ireland, the United States, and the now former West Germany definitely suggested so (Scott, Alwin and Braun 1996), so that modernization was said to have fostered the rise of a feminist conscience among women especially. However, in more recent times, attitudes started to converge among the youngest generations, with younger women re-claiming a fondness for their traditional role in the family (Shorrocks 2018). As regards to attitudes towards the suitability of women in public and leading roles, women appear to have become more egalitarian than men at a later stage, and still come across as the most egalitarian. It was not until the 1970s that women started to participate in big numbers in areas from which they were once excluded, namely education, business and industry. At the same time, they began experiencing discrimination, and, together with their rising stakes and statuses, this feeling of injustice eventually inspired a sense of unity and belonging to a group (Cook 1989; Klein 1984), accompanied by a goodly amount of motivation to contrast discrimination via political action (Klein 1984). Hence, when attitudes towards public roles were measured, no significant difference was initially found between women and men (Bolzendahl and Myers 2004), but then younger cohorts of women were reported to have become more egalitarian than younger cohorts of men (Sani and Quaranta 2017; Shorrocks 2018).

In the previous section, we hypothesized the advent of the fourth-wave feminist movement to have had almost e live effect on the youngest generations, making them

more egalitarian than their older counterparts; here, we add the suspicion that this effect very much depends on gender and on the type of roles we are measuring. According to the literature just presented, men seem to have become more conservative altogether, while women only seem to have re-grown an affection for their traditional role in the family. Hence, we expect younger women to be more egalitarian than younger men on average, but we forecast this gender gap to be present only when gender roles in the public sphere are discussed. Instead, we predict women and men's attitudes to be on about the same page when we consider private gender roles. The last two hypotheses are the following:

H1e (the generational gender gap hypothesis): the gender gap in attitudes towards public gender roles is widening across birth cohort; and

H1f (the generational gender convergence hypothesis): the gender gap in attitudes towards private gender roles is narrowing across birth cohort.

2.3.2 Mother duties around the world

Apart from focusing especially on women's duties, the GR scale has received negative attention for another reason. Indeed, the same EVS questions are asked to all respondents of all countries who choose to participate to the study, and the scale of measurement is, of course, exactly the same in all countries. While this allows for comparison of attitudes towards GR across different cultures, it silently implies that the male breadwinner/female carer family model is dominant worldwide, or at least was dominant at some point in time. It also implies that agreement or disagreement with this gender arrangement somewhat measures respondent's attitudes towards progressive stances of equality everywhere in the world. But is this so? The analyses dedicated to the dynamics of gender beliefs in Europe certainly seem to suggest this is the case, as they are mainly based on the assumption that the male-breadwinner model of gender relations came to be as societies developed industrially. However, not all European countries involved in processes of industrialization and post-industrialization share the same gender culture, and while this public versus private division of sex roles characterizes the western culture, it cannot explain attitudes towards gender equality worldwide.

To Pfau-Effinger (2004), the male breadwinner/female carer family model is especially restricted to the western countries and their 20th century cultural standards, which were set by the rising bourgeoisie of the time. Rather than being strictly connected to structural changes, the male breadwinner/female carer family model – where only one of the two spouses worked, while the other took care of the children's education – was adopted by the wealthy families to show off their abundance of resources. In fact, poor families could not afford such lushness (but only aspire to it). While the male breadwinner/female carer family model was expanding in Western Europe, the communist regimes in Central and Eastern Europe experienced a completely different gender arrangement. In these countries, the agrarian-family economic model predominated (Pfau-Effinger 1998) and was based on the idea of mutual dependence between genders – both husband and wife worked together for the household's economy and were involved in agricultural activities that were perceived as equally important (Pfau-Effinger 2004). After the Second World War, the communist regimes promoted full employment policies so that women could be found on the labour market in the same numbers as men – if anything, they were overburdened by having to work inside and outside of the house, as inequality still survived indoors (Gal and Kligman 2000; Heitlinger 1985; Voicu and Tufiş 2012), but they were never excluded from the public environment.

Similarly, the male breadwinner marriage never had great cultural or practical relevance in Northern Europe. In the Scandinavian countries, the agrarian family model was traditionally prevalent, but settlements were so sparse across the country that separate female and male subcultures never developed (Alanen and Bardy 1991). When industrialization hit, the agrarian model was replaced by a dual-breadwinner model, with full-time integration of both genders into paid employment (Anttonen, 1997; Pfau-Effinger 2004). However, unlike Eastern European women, Scandinavian women were not as burdened by household duties, because childcare was considered to be better run by the state.

Decades of public policy dedicated to family needs and full employment of women, as in the case of Scandinavia, also means that the traditional statements on GR (as listed in the table above) might appear distant from people's daily experience, and hence make little sense (Voicu and Tufiş, 2012). The interpretation of the items can vary across countries, but also across individuals themselves. For instance, the items focusing

on the emotional needs of children and on being 'good mothers' can provoke reactions led by social expectations even in fairly egalitarian people (Braun 1998, Philipov 2008); and items that stress the importance of both husband and wife contributing economically to the household might be differently interpreted in different socio-economic contexts (Walby 1994).

The geographical inaccuracy of the GR scale is a problem we can only partially amend. Nevertheless, the last part of this chapter will be dedicated to building a geography of gender roles by disaggregating the scores of every participating country on the public and private dimensions in order to rearrange the countries according to a typology of gender roles.

2.4 Data and methods

A first portion of the analysis is dedicated to exploring the simultaneous effect of both the longitudinal and contextual variables on the changing attitudes towards gender roles, while a second focus will be on generational change. To this end, EVS data from 4 waves were pooled together in a comprehensive dataset so as to cover the time span between the years 1990 and 2018[26]. As regards to the modes of measuring, obstacles were found on the conceptual side as well as in practice, starting from the fact that the items on the gender roles scale have not been repeated with consistency in time and that not every country involved in the EVS study has taken part in every wave. From 1990 to 2018, only three questions are repeated and only a handful of countries have punctually participated in every study, decreasing our chances of performing a thorough longitudinal and cross-national comparison[27]; still, the aim is to do so in the best possible way.

The countries participating to the EVS change throughout the waves, though not dramatically. In fact, while Western Europe is almost ubiquitously present, on the other hand, we will have to wait until the 4th EVS wave to see the entrance of countries coming from the West Balkans (Albania, Bosnia-Herzegovina, Kosovo, Macedonia, Montenegro and Serbia) and Asia (Armenia and Georgia). Most of them also participated to the last

---

[26] Wave 1 was sacrificed as it only had one question on GR. It was repeated throughout Wave 4, but the decision was to prioritize continuity with the last wave. By sacrificing Wave 1 and not Wave 5, we were able to analyse the newer birth cohorts, for which data are scarce.

[27] Descriptive tables of the full dataset are available in the Appendix section. (Tables 24 and 25).

wave too, and those who did were included in the sample so as to allow for some geographical diversity. However, those who did not, together with countries that participated in only one EVS wave had to be sacrificed as there is no comparison in time that can be made. The countries included in the analysis are listed in Tables 26 in the Appendix.

The three questions that are consistently repeated each survey year asked respondents to rate whether they strongly agreed, agreed, disagreed or disagreed strongly with the following sentences: "A [pre-school] child is likely to suffer if his or her mother works"; "a working mother can establish just as warm and secure a relationship with her children as a mother who does not work"; and "when jobs are scarce, men should have more right to a job than women". Despite the limited material we can dispose of to trace the changing attitudes towards gender roles, the three variables could not be summarized in one comprehensive index as it carried a very low Cronbach's alpha – possibly signalling multidimensionality. In fact, while the first two items focus on women's perceived ability to balance work and private life, the latter does not make a reference to family but only speaks about the right to have a job. To amend this problem, the variable that correlated the least – that is, as expected, the one referring to women having the same right as men to work under situations of economic constraint – was dropped, while the other two variables were grouped together in a final index that served as the dependent variable in the first two parts of this study[28]. The resulting standardized index measures acceptance versus refusal of traditional gender roles[29] on a numerical continuum that takes the minimum value of zero and the maximum value of 1; when respondents polarize on the extreme values of this index, they either favour a strict gender division of roles or, on the contrary, completely reject this distinction.

---

[28] The goodness of the EVS scale has often been a matter of doubt in previous research (Voicu and Tufiş, 2012, Lomazzi, 2018); specifically, the choice of indicators has not always been considered the most suitable option for measuring GR across waves and countries. Historically, any scale that was built on these indicators has had very low reliability scores. A few studies solved this problem by selecting a sole item and proceeding in the analysis with a single indicator. Instead, here, we keep two items and proceed with both. The choice of coupling the remaining two variables was made on the basis of their semantic contingency and on the fact that they both correlate to the about the same extent with the same covariates. Unfortunately, as well as previous attempts, our own index did not have a satisfactory reliability score (of 0.61), but as similar versions of it have been used in previous and seminal research (*see* Inglehart and Norris 2003), the decision was to use it as it was.
[29] The final questions are the following: a) "A job is alright but what most women really want is a home and children"; and b) "A pre-school child is likely to suffer if his or her mother works", plus its similar alternative in the most recent wave "When a mother works for pay, the children suffer". Possible answers: agree strongly, agree, disagree, strongly disagree.

So as to simultaneously estimate the individual, the longitudinal and the cross-country effects on GR attitudes of religion, education and employment, we fit a three-level random intercept model to the data. As countries usually participate to more than one EVS wave, respondents were nested within country-years, nested in turn within countries; this seemed the optimal model to account for variation both across countries and within countries over time. A total of 127,499 respondents are grouped in 119 country-years[30] (each respondent is observed in one specific state at one specific time), and country-years are in turn grouped within 38 states (each state-year is a single observation of a state that is observed many times). The intercept term thus depends on random characteristics of both the year the individual is living and the state to which he or she belongs.

On the individual level, education is represented by a standardized numerical scale that takes the minimum value of 0 for individuals who have not had any formal education and the maximum value of 1 for individuals who have completed education at 21 years of age or more; the middle values represent anyone finishing education between 12 and 20 years of age. The variable representing occupation takes the value of 1 when the individual is currently in the labour market and the value of 0 if he or she are inactive or temporarily unemployed[31]. The level of religiosity is represented by an additive, standardized index combining belief in God (yes or no), the frequency of service attendance (that goes from no attendance to weekly attendance), and the degree to which people rely on the church for solving individual and social problems (a.k.a. 'confidence in church', which goes from 'a great deal' to 'none at all'). The index representing religiosity was borrowed from previous literature (*see in particular* Voicu 2009), which describes religiosity as a latent factor that can be derived by pooling three indicators related to religious values: Importance of God, Orthodoxy and Confidence in church. The index was accepted as a suitable proxy for the level of religiosity because it had a good level of reliability (a Cronbach's alpha of 0,76). A dummy variable representing women was also added to the model as an individual-level variable.

So as to conduct simultaneous but separate analysis of cross-sectional and longitudinal effects, we calculated the mean of our covariates (religiosity, females in

---

[30] Years should be intended as the round of the survey.
[31] Students, homemakers, the military, the disabled and the retired all fall under the umbrella of 'inactivity'.

employment, average school years for females[32]) across all level-3 (countries) and level-2 units (country-years). Country-mean variables represent the average level of religiosity and the proportion of females in employment and in education within a specific country. They are fixed in time and only capture the enduring differences across countries, so they can be used as country-level variables only. Instead, every country-year-mean variable paints a picture of a specific country at a specific point in time, so that the same country will have a different country-year variable for each time it has participated in the EVS wave. As such, it is constant for individuals within a given country-year but non-constant both across countries and across the other country-years nested within that given country. If country and country-year variability are treated as equal and grouped in one variable, it is impossible to distinguish if social change is driven by the country's characteristics or by the time factor, or by both – maybe also in opposing ways (Fairbrother 2014). So as to isolate the effect of time from that of country, we had to subtract from each county-year-mean their country-mean. The resulting variables represent the average increase or decrease in time of the levels of religiosity and of the proportions of women in education and employment. The cross-sectional component (a country-level variable) and the longitudinal component (a *de-meaned* country-year level variable) are thus independent from each other, and their effects can be estimated separately (Fairbrother and Martin 2013).

A second random intercept model was dedicated to the study of how attitudes towards gender roles change throughout the generations. To analyse this association while taking into account the fact that we are dealing with different nations, observations were clustered within countries. We preserved the dependent variable of the conjoint longitudinal and cross-country analyses but decided not to cluster countries in country-years in our second model, as studying how countries also change over time was unnecessary at this second stage. Nevertheless, we did account for the time factor by controlling for EVS survey wave. The main independent variable is thus represented by birth cohort, which is introduced in the model as a categorical variable. Categorization of cohort has always raised a few issues, as, for one, it assumes distinct breaks between generations when we might expect a more gradual transition in attitudes. To provide a fast solution to the variable's problematic nature, we first checked whether GR attitudes

---

[32] The average years that women spend in education was computed by taking into consideration individuals above 21 years of age (which is also the last category of the original variable), assuming that one finishes their educational path around that age.

were growing in a linear manner across birth year or whether there were significant differences from one birth year to the other instead[33]. We thus continued by breaking the variable in 9-years intervals and creating a categorical variable of cohort that could best account for the generational differences. To secure equal representation to all birth cohorts, individuals born before 1930 were dropped together with those who were born after 1995, as they all fell in very underpopulated categories. Subsequently, birth cohort was reimplemented in the model as a continuous variable in interaction with survey wave, so as to check if generational differences are intensifying, or, on the other hand, weakening over time.

The last portion of the analysis is dedicated to studying the innovations brought about by the new GR scale. It starts by running reliability tests for all GR scales and comparing them across the last 4 EVS waves. It then carries on performing an exploratory factor analysis on the items concerning gender roles in the 2017-2018 GR scale. The two factors that emerge from this analysis – representing public and private GR – are then tested as dependent variables in two distinct 2-level hierarchical models that study the effects of gender, cohort and their interaction. Years spent in education, the level of religiosity and employment are also regressed as control variables first on the private GR scale and then on the public GR scale, and so is their interaction with gender.

2.5 Results

2.5.1 The state of the art so far

Support for equality is definitely becoming stronger for everybody in time, and this is a sign of the gender culture changing. However, not everybody cherishes it equally, and women seem to be particularly leading this change of values when compared to men. in whichever way we want to put it, the female gender has a positive impact on egalitarian attitudes towards gender roles, no matter what we are controlling for. Indeed, a gender gap is detectable in all waves as women keep scoring significantly higher than men on the GR index on average, as the table and figure below show. The table also shows that the average score tends to grow quite steadily across waves for men as well, and that the

---

[33] We regressed the variable of birth year by considering it as categorical.

rising trend is pretty much the same as that of women; however, they still do not seem as convinced as women about the feminist agenda.

Table 2 Average score on the GR index, per gender, per survey wave. N. 181,738.

EVS Survey	GR index mean	
Wave	M	W
1990-1993	0.38	0.40
1999-2001	0.42	0.44
2008-2010	0.46	0.48
2017-2018	0.55	0.57
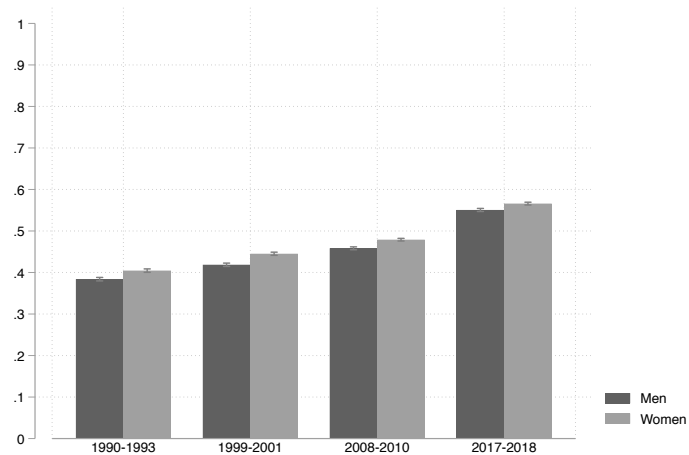
Figure 1 Average score on the GR scale per gender and wave. N. 181,738.

As the level of egalitarianism is growing in time, we continued the analysis by checking whether this is aided by the seemingly growing proportions of women in employment and in education, and by the decreasing levels of religiosity. At first, we checked whether these trends actually go in the direction so often assumed. The results of the analysis are displayed in the bar charts below: each bar represents a country, and the zero line represents the countries' average rates of women in employment and in education, or the country's average level of religiosity[34]. When the bar grows above the zero line, it means that, today (or in more recent times), more women are in employment or in education and the average level of religiosity is higher than in the past[35]. Conversely, if the bar falls below the zero line, it means that, today, fewer women are spending time in education or are employed, and that religiosity has decreased as compared to the past. The countries are listed on the Y axes.

---

[34] The general average was calculated by pooling together the rates of women in employment, those of women in education, and the average levels of religiosity of every country-year unit.
[35] To trace what the situation is today as compared to the past, the figures report the rates of women in employment and in education and the average level of religiosity relative to wave 5 (2017-2018) or to wave 4 (2009-2010) when countries have not participated to the last wave.
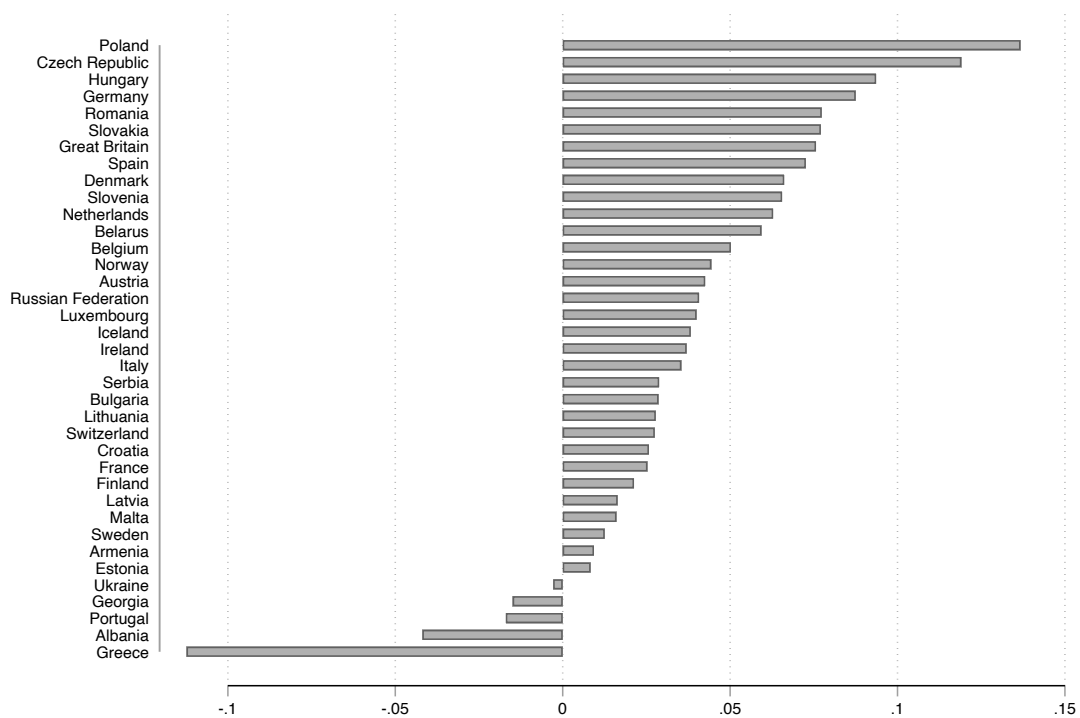
Figure 2 Increase or decrease of women's average years of education in Wave 5 as compared to the past waves. N 65947.
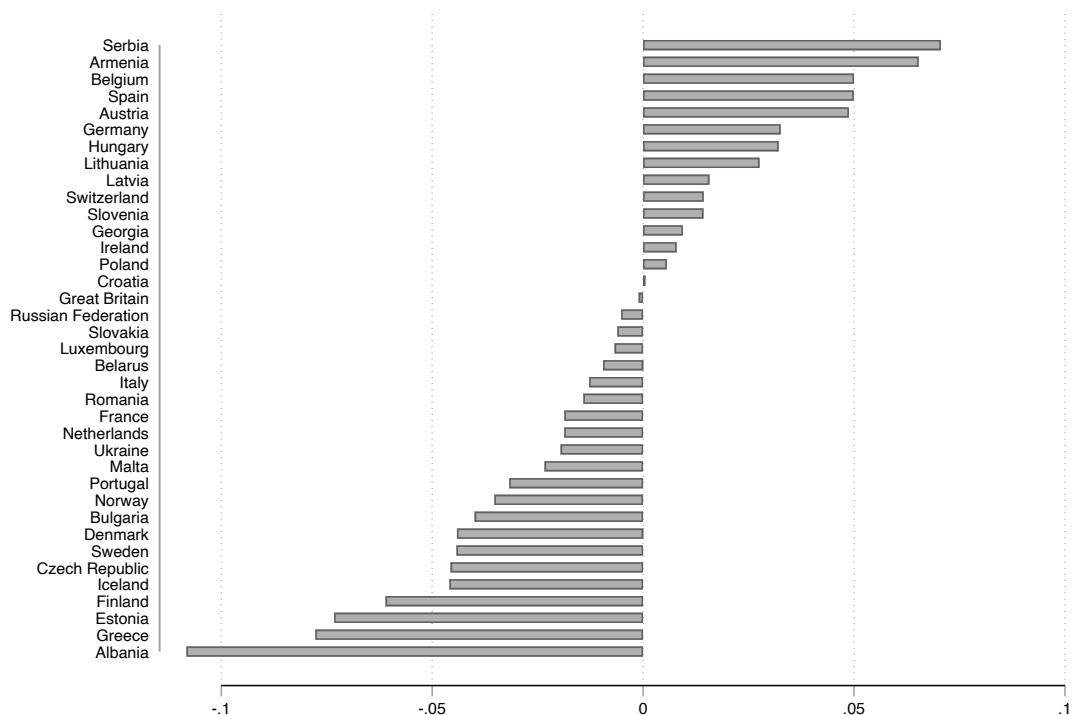
Figure 3 Increase or decrease of women in employment[36] in Wave 5 as compared to the past waves. N 65947.

---

[36] Over 25s are available in the Appendix.
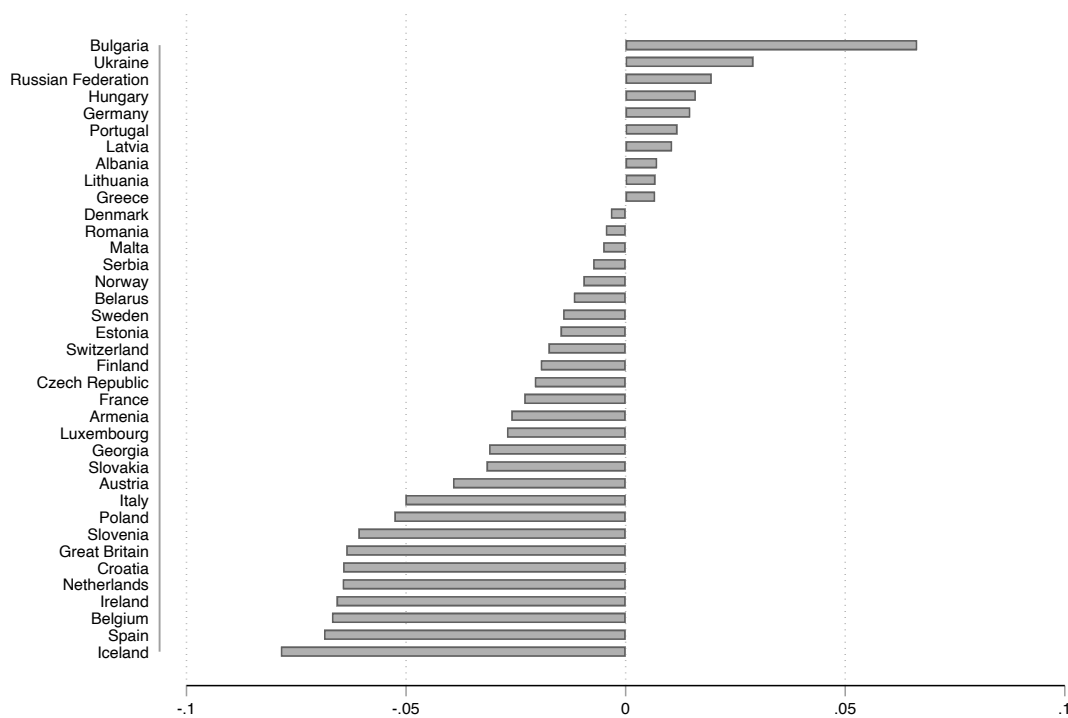
Figure 4 Increase or decrease of levels of religiosity in Wave 5 as compared to the past waves. N 65947.

As evident from the Figures, while the average years that females spend in education have increased almost ubiquitously, the rate of women in employment and the average level of religiosity have collapsed. While we had correctly predicted the level of religiosity to decrease, and the rate of women in education to increase throughout the years, the falling rate of women in employment comes as an unexpected result. It is, however, true that the rate of men in employment has collapsed alongside. As reported in Table 3, the percentage of women in employment shrinks of about 10 percentage points in 2018 but starts increasing again thereafter, whereas that of men totals a loss of almost 20 percentage points, going from 79.3 in the 90s to 60.2 in 2018. Figure 5 provides a visual account of these data.

Table 3 Percentage of employed men and women on the entire population[37]. N. 181,738.

EVS Survey Wave	Employment rate (%)	
	M	W
1990-1993	79.3	57.0
1999-2001	64.4	49.1
2008-2010	61.4	48.1
2017-2018	60.8	51.2
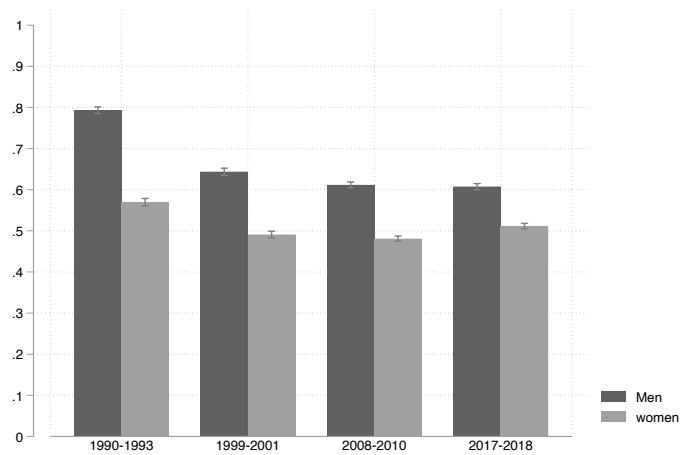
Figure 5 proportion of employed men and women, distributed per Wave. N 181,738.

After having assessed the trends of religiosity, female employment and education over time, the longitudinal variables were regressed on the GR index, together with the individual and country-level variables. Table 4 reports the results of the 3-level multilevel regression models. Model 0 is a null model which includes only an intercept and random effects and provides an indication of the partitioning of the variance across the different levels of the model. Models I and II respectively include a) the individual level variables and b) their interactions. These models are relevant for the *individual-level hypothesis* (H1b), which predicted education and employment to have a positive impact on egalitarian attitudes, and religiosity to increase conservatism instead; it also expected the variables to affect women more than men. Model III introduces both the longitudinal, de-meaned variables and the country-level variables, so as to check whether their variation across space and in time has had the predicted effects on attitudes towards GR. Specifically, the *longitudinal hypothesis* (H1a) expected the changing numbers of females in employment and in education, and the drop in religiosity over time, to have had a positive effect on egalitarian attitudes. Instead, the *country-level hypothesis* (H1c) predicted individuals to score higher on the GR index the higher the national rate of women in employment or in education, and the lower the national average of religiosity.

Results show that, overall, the binary division of gender roles is still greatly supported; in fact, the grand mean in Model 0 is 0.47 – quite a low average if we consider

---

[37] Percentages of employed men and women over 25s are available in Appendix.

that the GR index takes values that go from a minimum of 0 to a maximum of 1. The relative sizes of the variances for the random effects in Model 0 show that attitudes towards gender roles are not substantially clustered within states nor within state-years, hence one might suggest a simpler model as a better fit. In fact, the intraclass correlation coefficients (ICC) are also moderate and very slightly correlated with country (0.13) and country-year (0.22). This is to say that country level variables can only account for about 13% of the total variance and state-within-wave level variables can only account for about 22% of the total variance, while the rest is probably explained by variables on the individual level. While one could say that the observations within clusters are no more similar than the observations from different clusters, the use of a multilevel model is still necessary to measure how much of the overall variation in the response is explained simply by clustering. This can help answering questions as to what extent is gender equality a personal attitude (varies among people, but not within countries) or a cultural value (varies little on average among people but varies a lot across countries). Furthermore, the LR tests confirmed that the three-level model is preferred to its single-level counterpart, to its two-level individuals-within-countries or individuals-within-country-years counterparts[38]. Thus, it is important to retain the country and country-year random effects in the model.

---

[38] Three-level model *versus* single-level counterpart ($\chi 2$ = 36398.28, p < 0.000), versus two-level individuals-within-country years counterpart ($\chi 2$ = 37.90, p = 0.000); and *versus* its individuals-within-countries counterpart ($\chi 2$ = 11303.54, p = 0.000).

Table 4 3-Level multilevel regression on the GR index from Wave 2 to Wave 5. Individual, longitudinal and country effects.

Category	Model 0	Model I	Model II	Model III
Individual variables				
Female		0.05*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Years of education		0.15*** (0.00)	0.14*** (0.00)	0.15*** (0.00)
Religiosity		-0.12*** (0.00)	-0.11*** (0.00)	-0.12*** (0.00)
Employed		0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)
Female*Years of education			0.01 (0.00)	
Female*Religiosity			-0.02*** (0.00)	
Female*Employed			0.01** (0.00)	
County-year variables				
Female education (increasing rate)				0.54*** (0.08)
Secularization (increasing rate)[39]				0.10 (0.12)
Women in employment (decreasing rate)				- 0.42*** (0.06)
Country variables				
Women in education (country mean)				- 0.30* (0.13)
Religiosity (country mean)				- 0.15 (0.13)
Women in employment (country mean)				0.40* (0.18)
Constant	0.47 (0.02)	0.38 (0.01)	0.38 (0.01)	0.46 (0.01)
Random effects				
Country year variance	0.008	0.007	0.007	0.006
Country variance	0.006	0.005	0.005	0.002
Individual variance	0.050	0.050	0.050	0.050
N respondents	127,449	127,449	127,449	127,449
Waves*countries	119	119	119	119
Countries	38	38	38	38

*p<0.05 **p<0.01 ***p<0.001

---

[39] The variable representing the change in levels of religiosity across time was multiplied by -1 so as to facilitate the reading of results. In fact, the level of religiosity is expected to have collapsed in time, hence, it would have negatively correlated with the dependent variable, making results not easy to understand at first glance.

The findings also show that educated and employed individuals support gender equality to a larger extent, while the more religious tend to resist it. Each additional year spent in education leads to a noticeable 15-percentage point gain in egalitarianism; employment, as opposed to inactivity, enhances egalitarian attitudes of 4 percentage points; and finally, each additional unit of religiosity provokes a decrease of 12 percentage points on the GR scale. As previously mentioned, women are more egalitarian than men on average, and their egalitarianism grows *even more* with education (although not significantly) and with employment (although by a sole percentage point) but *less* the higher their level of religiosity (-2 percentage points). H1b is to accept, although not for the supposed effect on the GR scale of the interaction between education and women.

A graphical account of the interaction effects is provided below. Figure 6 offers the average marginal increase in score on the GR index when the interacted variables both change[40]; in other words, it shows the change in attitudes towards GR for women and for men per additional unit of education and religiosity, and when employed as opposed to inactive. Men sit on the left extreme of the X axis, and women on the right; their scores are connected either by an ascending or a descending line, which represent women's probability of being more egalitarian than men. It is clear from Figure 6 that women's egalitarian attitudes increase more than those of men with employment and with every extra year of education, while they decrease as the level of religiosity grows larger.

---

[40] Margins were calculated by regressing one interaction term at the time, so as to isolate the effect of one from the other. However, gender, education, religiosity and employment were present in all models as covariates.
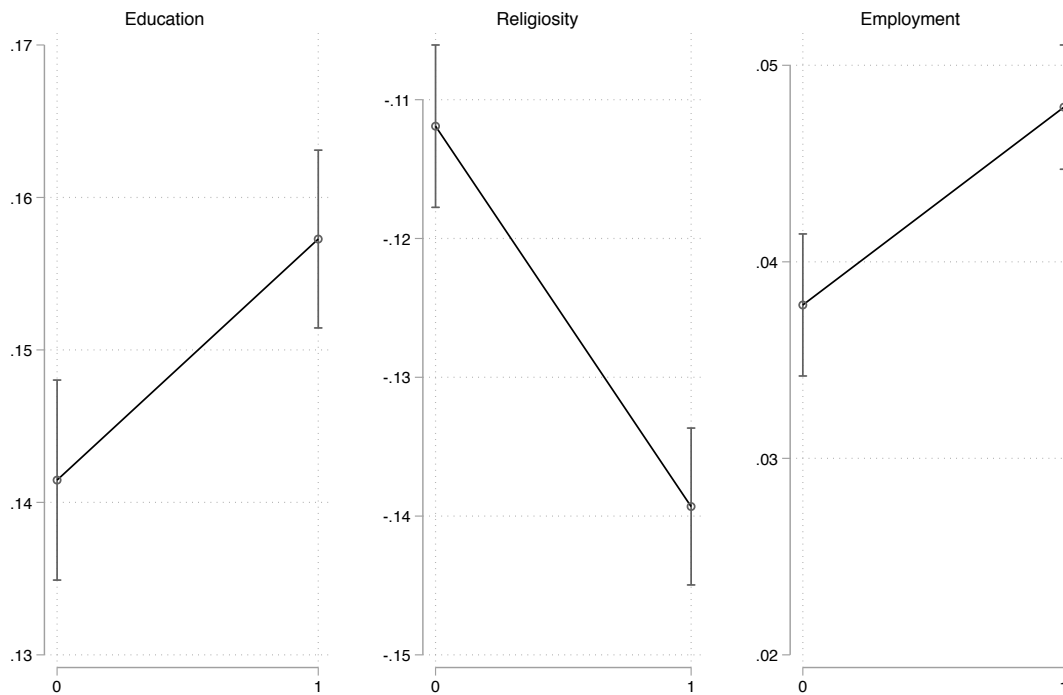
Figure 6 Average marginal increase in score on the GR index for women and men per additional unit of education and religiosity, and when employed as opposed to inactive.

Turning to the longitudinal perspective, the more women prolong their education over time, the higher the egalitarian attitudes, whereas processes of secularization do not seem to have any effect on perceptions about GR. In fact, only the longitudinal coefficient for the effect of education is positive and significant. Instead, the decrease in female employment over time has had detrimental consequences on egalitarian attitudes towards gender roles: the longitudinal coefficient of women in employment is negative and significant.

The situation is different on the country level, where female employment is fundamental for the enhancement of egalitarian views; the cross-sectional coefficient is *positive* and significant. Hence, the higher the rate of women in employment in one country, the more citizens reject traditional gender roles. More religious countries do not appear to be less egalitarian, although there seems to be some kind of negative contextual effect; still, the coefficient for country-level religiosity is not significant, nor it is as meaningful as the effect of religiosity on the individual level. Instead, the cross-sectional coefficient for women in education is negative and significant. This comes across as a counterintuitive result, as we had expected the countries where women spend more time in education to be more progressive on average.

The *longitudinal hypothesis* (H1a) is hence true only as regards to the positive effect over time of women in education, whereas it is false as regards to the effects of secularization and women in employment (secularization has no effect, while women in employment has a negative effect). Conversely, the *country-level hypothesis* (H1c) is true only as regards to the positive effect on the country-level of women in employment, whereas it is false as regards to the effects of national levels of religiosity and rates of women in education (religiosity has no effect, while women in education have a negative effect).

2.5.2   The feminist generations

The second part of this analysis wishes to tackle the hypothesis according to which gender equality is cyclically called into question and is now living an era of reboot. Specifically, we expect the younger generations to have become more egalitarian after a short halt in the liberalization process and the generational conflict to have become more evident. We started by checking the trend of GR attitudes across birth years. As visible from Figure 7, the effect is almost linear – that is, egalitarian attitudes increase of about the same amount one birth cohort after the other. The line is quite smooth, although a few (small and loosely significant) irregularities are observable in correspondence of almost each of the birth years marked on the X axis; indeed, we have above-average marginal increase in the levels of egalitarianism among the individuals who were born around 1935, among those born around the start of the 1970s, and then again among those who were born at the beginning of the 1990s. However small, these birth cohorts appear to have heightened levels of egalitarianism when compared to their immediate predecessors. Figure 7 is also displaying quite evidently a 'plateau effect' , that is, a segment of the curve that is basically flat, that is characterising the individuals born from the 1970s to the late 1980s: during this period, attitudes towards GR have been very homogenous, neither increasing or decreasing across cohort[41].

---

[41] When we control for years spent in education and employment, the positive effect of birth year on the GR scale remains unaltered, although differences among birth years are slightly mitigated (see Figure 19 in the Appendix).
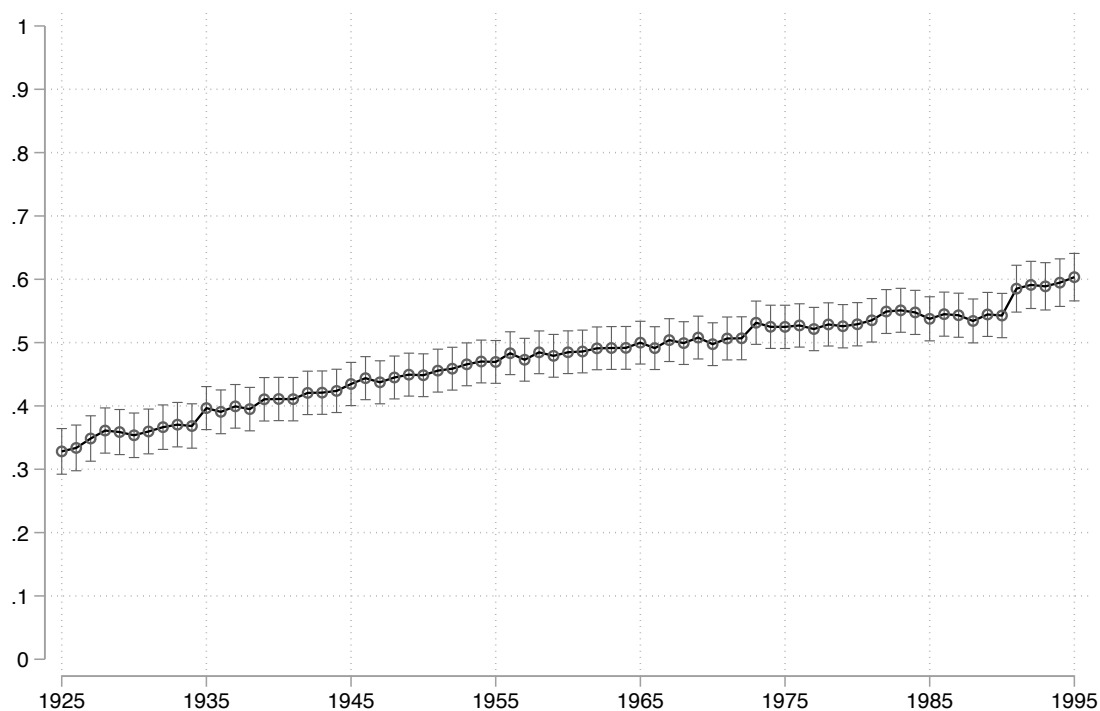
Figure 7 Birth year regressed on GR index, 2-level hierarchical model. Data pool 3 EVS survey waves, N 139,556[42]

We used the same GR index to build our 2-level hierarchical models, and thus study both the effects of birth cohort and time on attitudes towards GR, and how the intragenerational conflict is changing across survey waves. The results of our analysis are displayed in Table 5. Birth cohort– divided in 9-year break-up points – and the survey waves were regressed both singularly (Model I and II) and in interaction (Model III) on the GR index. Last but not least, we included in Model IV includes three control variables, namely, years of education, employment and level of religiosity; in this way, we can account for the structural differences that have occurred in the time period that goes from the 1990s to the year of 2018.

The intraclass correlation coefficient (ICC) amounted to 0.17 – a value that is often considered too low to justify the use of mixed models; however, multilevel models were still employed so as to face the hierarchical structure of the data and have robust standard errors in return. Moreover, if we consider that we are only talking about a couple of variables, a 0.17 portion of variance on the country level cannot be considered residual. The final multilevel models involved 139,556 individuals nested in 38

---

[42] The same figure, controlling for education, employment and religiosity is available in the Appendix.

countries[43], and the likelihood ratio test confirmed that the two-level random intercepts model was a better fit than its single-level counterpart[44].

---

[43] See participating countries in appendix.
[44] Two-level model *versus* single-level counterpart ($\chi2 = 21007.43$, $p < 0.000$).

Table 5 2-Level multilevel regression on the GR index from Wave 2 to Wave 5. Gender, cohort and Wave effects, plus their interaction are displayed.

GR index	Category	Model 0	Model I	Model II	Model III	Model IV
cohort (ref: <1940)						
	1940-1949		0.05***	0.04***	0.05***	0.02***
			(0.00)	(0.00)	(0.00)	(0.00)
	1950-1959		0.09***	0.08***	0.09***	0.03***
			(0.00)	(0.00)	(0.00)	(0.00)
	1960-1969		0.12***	0.10***	0.13***	0.05***
			(0.00)	(0.00)	(0.00)	(0.00)
	1970-1979		0.14***	0.12***	0.15***	0.05***
			(0.00)	(0.00)	(0.00)	(0.00)
	1980-1989		0.16***	0.12***	0.16***	0.06***
			(0.00)	(0.00)	(0.00)	(0.01)
	1990-1995		0.19***	0.14***	0.17***	0.07***
			(0.00)	(0.00)	(0.00)	(0.01)
wave (ref: 1990-1993)						
	1999-2001			0.06***	0.08***	0.06***
				(0.00)	(0.00)	(0.00)
	2008-2010			0.09***	0.11***	0.09***
				(0.00)	(0.00)	(0.00)
	2017-2018			0.14***	0.12***	0.14***
				(0.00)	(0.00)	(0.00)
Cohort*wave (ref: 2017-2018)						
	1990-1993				-0.001*	
					(0.00)	
	1999-2001				-0.001***	
					(0.00)	
	2008-2010				-0.001***	
					(0.00)	
Years of education						0.13***
						(0.00)
Employed						0.02***
						(0.00)
Religiosity						-0.1***
						(0.00)
Constant		0.47	0.37	0.31	0.42	0.30
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Country variance		0.010	0.011	0.011	0.011	0.009
Individual variance		0.050	0.050	0.049	0.048	0.046
N respondents		126,966	126,966	126,966	126,966	126,966
Countries		38	38	38	38	38

*p<0.05 **p<0.01 ***p<0.001

Model 0 is the intercept-only model and gives us an idea of how the variance is distributed across levels. As the individual variance amounts to 0.05 and the country

variance amounts to 0.01, it seems that a larger part of variability is explained at the individual level, which is also in line with the ICC score.

In Model I, birth cohort was regressed on the GR scale, and the regression coefficient turned out to be positive and progressing the younger the cohort: in fact, individuals born in the 1990s score, on average, 0.19 points more than those born before 1940. The direction of the cohort effect goes unaltered despite we are controlling for the survey year in Model II; hence, the younger the birth cohort the higher the score, independently from the EVS wave we want to consider. However, the effect of cohort is largely mitigated when we also control for years of education, employment status and level of religiosity (Model IV) – the youngest cohort is still the most egalitarian, although the intergenerational difference has shrunk to a 7 percentage-points gap.

By introducing the years when the survey was run, we can focus on the effect of time on GR attitudes. In Model II, we can see that all individuals have become significantly more egalitarian on average throughout the survey years, despite their birth cohort; in fact, the average score on the GR scale is highest in the most recent survey wave, and a gap of 14 percentage points separates this last wave from the very first one. This is, however, insufficient to wipe out the effect of cohort, which is still positively related to egalitarianisms, although to a lesser extent.

The fact that the generational gap seems to be narrowing when controlling for EVS wave – it goes from 0.19 points in Model I to 0.14 in Model II, a 5-percentage point decrease – might be suggesting that the two variables are interacting with one another. Hence, model III includes the interaction term between cohort and wave that can allow us to check whether our intuition regarding a possible interaction between the two variables is correct. Results show that the generational gap is larger in 2018 (EVS Wave 5, also the reference category) than it was in the early 90s (Wave 2), at the turn of the century (Wave 3) or in 2010 (Wave 4). The gap is larger now than it was almost 20 years ago, and the increase is significant, although really small. The results seem to confirm the fourth-wave exogenous-shock hypothesis, as egalitarianism is nowadays towed by cohort effects to the extent it has reignited the generational conflict of opinions – although the effects are very moderate. A graphical account of the findings is also shown in Figure 8, which reports the GR scale score increase for birth cohort across Waves[45].

---

[45] Figure 8 does not account for religiosity, education or employment.
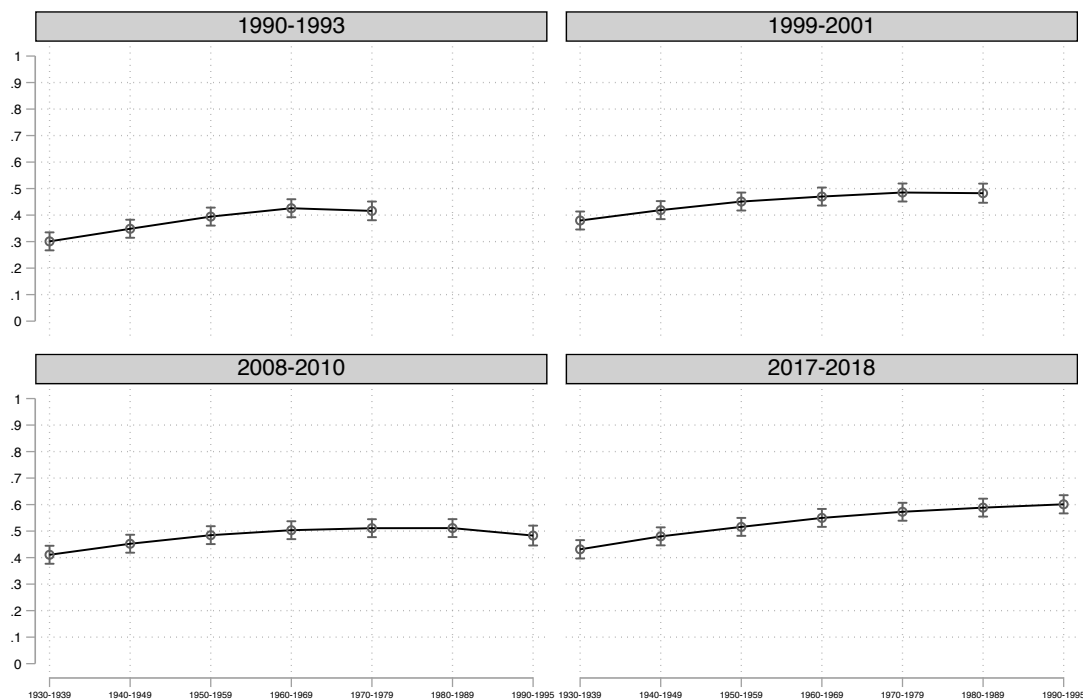
Figure 8 Average score on the GR scale for birth cohort and survey wave.

In Figure 8, the GR index is on the Y axes and birth cohort is on the X axes, while each quadrant represents a different EVS wave. In all EVS waves, the generational differences are not exactly striking; indeed, the level of egalitarianism of the youngest cohort with respects to the oldest one in each survey wave is tiny. However, as compared to the 2008-2010 survey wave, where we can almost spot a decreasing level of egalitarianism in the youngest generations, in the 2017-2018 survey wave, they seem to have substantially changed their perspective on GR.

A more striking effect is that of time; in fact, older cohorts are also becoming more egalitarian across the survey waves; if we take the oldest cohort that has participated to all waves (that of individuals born between the years 1930-1939) as an example, we can see that while they were once seen scoring about 0.3 on the GR scale (in 1990), today, they score above 0.4 on average. With these results at hand, the effect of birth cohort seems to be quite limited, especially when compared to that of time. Moreover, it is not increasing linearly across time; rather, it appears to be connected to specific birth cohorts, who were exogenously stimulated by thriving periods of feminist activism.

2.5.3 A different scale

In order to check whether the GR scales are grasping the concept they seek to measure in a reliable fashion, Cronbach's alpha reliability tests were run for each wave. All countries in each wave were pooled together so as to check the average internal consistency of the GR index and compare its reliability across survey years. The scores of each wave are listed in the table below. The score of the Cronbach's alpha reliability test ranges from 0 to 1, but a threshold of 0.7 is generally used as a rule of thumb: everything that falls beyond this value is said to signal reliability. Unfortunately, results show that the GR index has had quite a poor performance in all survey waves. In fact, in no wave does the GR scale get to the baseline score.

Table 6 Cronbach's alpha reliability test scores for Wave 2, 3 and 4, and total average score; all countries participating in each wave were considered.

Wave 2		Wave 3		Wave 4		Average (across waves)	
Item	alpha	Item	alpha	Item	alpha	Item	alpha
preschool	0,51	preschool	0,47	preschool	0,48	preschool	0,51
womenwant	0,50	womenwant	0,48	womenwant	0,49	womenwant	0,52
workingmom	0,53	workingmom	0,50	workingmom	0,51	workingmom	0,54
housewife	0,52	housewife	0,50	housewife	0,51	housewife	0,54
independent	0,56	independent	0,53	independent	0,54	independent	0,56
household	0,58	household	0,55	household	0,55	household	0,58
jobscarce	0,56	jobscarce	0,55	jobscarce	0,57	jobscarce	0,58
Test	0,57	Test	0,55	Test	0,56	Test	0,58

The scores of the GR scale ranges in time from 0.55 to 0.58, which is unsatisfactorily low. Not only results reported an overall lack of sufficient reliability, but they also showed dramatic variation across countries and within countries in time. In fact, Cronbach's alpha reliability tests were also run for each country in every survey wave, only to reveal very low and wavering scores[46].

The Cronbach's alpha reliability tests scores swing from a minimum of 0.23 (Romania, early 1990s), to a maximum of 0.75 (Germany, late 2000s); this inconsistency points to the difficulty the measurement has had in meeting the standards for

---

[46] The alphas are reported in Table 29 in the Appendix, although this time only the countries that participated in all EVS waves were retained for longitudinal comparison.

comparison. In fact, while in some cases, such as in Great Britain, Germany, Italy and the Netherlands, the scale achieves a score above the threshold in almost every survey wave, in other countries, the score has always been low, as in the case of Estonia, Hungary, Latvia, Lithuania, Slovakia, Slovenia and Poland. Here, the scale is not as reliable as it is in the Western part of the Union[47] – a largely expected result. As the questions focus on the typical gender division of labour within the male breadwinner family model and seek to capture whether respondents comply or reject it, it comes as no surprise that the index has a better performance in the west, especially in places like the Netherlands, where both the male breadwinner model and the EVS cross-national survey came to life. On the other hand, the weakness of the scale in the eastern bloc (and also in the Scandinavian countries) is probably due to the fact that these countries did not develop the same gender culture as the western countries, and hence these questions cannot really measure their being different. In a context where women were equally educated and employed, questions about sacrificing one's job for the family's sake would lose meaning alongside any measuring purpose.

The latest EVS survey wave added new items to the GR scale; these items are more or less innovative as they do not solely concern the traditional role assigned to women, which focuses on family duties, but also take into consideration jobs that you can do in public. The new items have respondents make comparisons between women and men in civil society – that is, they ask if men are better businesspeople than women, if they make better politicians and if they deserve to be highly educated more than women[48]. Cronbach's alpha reliability tests were repeated for the last EVS wave as well, first by averaging the score across countries (the results of which are reported in the table below), then by checking one country at the time so as to see whether the GR scale can work for every country more or less in the same way[49].

---

[47] See Table 29 in the Appendix.
[48] For further information regarding the exact wording of the question see Table 1.
[49] The results for each country are reported in the Table 30 of the appendix.

Table 7 Cronbach's alpha reliability test scores for Wave 5; all countries participating in the wave were considered

Wave 5	
Item	alpha
preschool	0,85
womenwant	0,85
familysuffers	0,85
mansjob	0,83
maleleaders	0,84
uniboys	0,85
businessmen	0,84
jobscarce	0,86
Test	0,86

From the Cronbach's alpha tests, it was immediately evident that the reliability in the last wave is a lot higher, on average, with respects to the previous waves (*see* Table 7). Here, the overall test gave a score of almost 0.9 – a very good result, considering that the previous editions failed to even get to the threshold value of 0.7 (or even to 0.6 for that matter). Moreover, in Wave 5, the countries also all pass the reliability threshold score, with the sole exception of Albania, which scores slightly below 0.7 (0.68); still, all results can be taken as reliable.

The results suggest that the 2017/2018 GR index is as good as it can get and can be employed in the analysis as it is; more so, it is measuring GR better than any other GR scale has done in the past. Still, gender roles are not a one-dimensional concept, and a good GR index needs to grasp this multidimensionality; for one, GR separately involve women and men and differently articulate the private from the public, which already makes a total of four dimensions. While previous survey waves only focus on the acceptability or the rejection of the private role of women, combining two dimensions into one, the latest GR scale seems to be introducing another point of view, or at least attempting to do so. With the introduction of public roles in 2017, the suspicion of an extra latent dimension joining in led us to perform exploratory factor analysis on all items concerning gender roles, including, of course, the new entries. Principal components factor analyses were then performed again in all countries participating in the last EVS survey wave, so as to assess whether the factorial structure of the scale is stable across countries. The results of all analyses are reported in the table below.

Table 8 Exploratory factor analysis and factor loadings.

	FI	F2
All in all, family life suffers when the woman has a full-time job	.856	
When a mother works for pay, the children suffer	.836	
A job is alright but what most women really want is a home and children	.739	
A man's job is to earn money; a woman's job is to look after the home and family	.623	.538
On the whole, men make better political leaders than women do		.835
A university education is more important for a boy than for a girl		.766
On the whole, men make better business executives than women do		.867

The principal components factor analysis established that the scale is not one-dimensional, but that the underlying concept (gender roles) actually includes two dimensions. The first-dimension gathers all items that allude to whether women should have a job besides being mothers and housekeepers; as they mainly pertain to the privacy of the household, so we will refer to these items as 'family items' or as 'family GR'. The second dimension brings together all items that talk about the public environment and that also mention men; for this reason, they will be referred to as 'public items' or as 'public GR'. Only one item loads on both factors, i.e., 'A man's job is to earn money; a woman's job is to look after the home and family', and indeed it alludes to both the household and the public sphere, joining the two roles in one statement; however, as it predominantly focuses on the work/private life balance, which is first factor material, and also loads better on dimension one, it will be hence considered a part of it.

Both the first and the second factor explain more than one third of the variance each – respectively 35.7% and 35.4% – and more than 70% of the total variance when joined together. They also explain about the same amount of variance in all countries. According to the first factor put forward to explain the variance, two main groups are identifiable, as demonstrated in the table below; however, these groups are quite heterogeneous and there is no clear geographical pattern. The first group is the largest and includes almost all of the post-Soviet countries in the sample, the Asian countries of Armenia, Azerbaijan and Georgia, and the Scandinavian countries of Sweden, Finland, and Norway. Here, the factor 'family gender roles' has the biggest eigenvalue, and in countries like Serbia, it explains about 40 percent of the total variance. The second group is more random and includes Spain, Great Britain, Denmark, Latvia, Iceland, Italy,

Lithuania, Romania, the Netherlands and Austria. In all of these countries, the variance in the gender role scale is first explained by the 'public gender roles' factor.

Table 9 Explained variance of the first factor put forward, by Country.

First factor	Country	% explained variance
Family GR	Albania	30.0%
	Armenia	33.7%
	Azerbaijan	33.2%
	Belarus	33.4%
	Bulgaria	34.4%
	Croatia	37.5%
	Czech Republic	33.7%
	Estonia	35.1%
	Finland	38.5%
	France	35.2%
	Georgia	28.1%
	Germany	34.4%
	Hungary	38.2%
	Norway	35.1%
	Poland	37.9%
	Russian Federation	33.6%
	Serbia	39.7%
	Slovakia	33.3%
	Slovenia	33.9%
	Sweden	37.4%
	Switzerland	34.8%
Public GR	Austria	35.7%
	Denmark	35.1%
	Great Britain	35.4%
	Iceland	38.3%
	Italy	37.3%
	Lithuania	32.3%
	Netherlands	33.7%
	Romania	34.3%
	Spain	38.7%

The variables correlate similarly throughout the sample, revealing a stable factorial structure that maintains similar factor loadings and explained portions of variance across countries. In fact, in all countries, the factors explain at least 30% of the total variance each, sometimes with peaks of about 40%. This is good and contrasting novelty in comparison with previous literature and analyses concerning the earlier EVS waves (e.g., Lomazzi 2018; Voicu and Tufiş 2012), which reported fewer heart-warming results regarding the multidimensionality of the GR scale, alongside extremely low reliability levels of this measurement. The overall picture here looks pretty good, and this

is especially due to the implementation of the new items on public GR. Hence, allowing for a wider perspective on gender roles, and one that, for example, encompasses both genders and both roles instead of only focusing on women in the private sphere, results in a positive methodological addition. Moreover, reliability checks on the two factors taken separately revealed that both can be used singularly as variables; in fact, an index built by adding only family items together has a Cronbach's alpha of 0.84, while one built on public items has a Cronbach's alpha of 0.82. The two factors were then used separately in multilevel regression for the last part of this analysis.

2.5.4   The role of gender

The generational gender-convergence hypothesis (H1f) expected the gender gap to have narrowed across birth cohorts and hence to find younger women and men to be more or less equally rejecting private gender roles. Instead, the generational gender-gap hypothesis expected women to be more egalitarian not only than their older counterparts, but also more than younger men with respects to public gender roles (H1e). For these reasons, the models in Table 10 study the average effects of gender, cohort, religiosity, education and employment on attitudes towards private roles and Table 11 does the same for public roles.

In both tables, Model 0 is the intercept-only model and gives us an idea of how the variance is distributed across levels. Model I introduces the individual-level variables, namely gender, cohort, age when completed education, employment (as opposed to inactivity) and level of religiosity; it fundamentally seeks to see whether women are more egalitarian than men on average, all other things considered. Model II implements the interaction of gender and cohort so as to check whether our hypotheses regarding the gender gap narrowing or enlarging across generations are true. Models III, IV and V introduce the interaction term of education, employment and religiosity with gender, and will hence re-test on both factors the hypothesis according to which education and employment enhance levels of egalitarianism, while religiosity decreases them, especially for women as compared to men (H1b).

To account for variability across countries, individuals will be considered as nested within countries, and hence on level one, while countries will stand on level two of our hierarchical models. The models considering private and public GR respectively

involve 42,120 and 40,360 individuals nested in 30 countries[50], and the likelihood ratio tests confirmed on both occasions that the two-level random intercepts models are a better fit than their single-level counterpart[51].

---

[50] See participating countries in appendix.
[51] Private GR: two-level model *versus* single-level counterpart ($\chi2$ = 12607.27, p < 0.000). Public GR: two-level model *versus* single-level counterpart ($\chi2$ = 12990.55, p < 0.000).

Table 10 2-Level multilevel regression on the 'Family items' index from Wave 2 to Wave 5. Effects of cohort, education, employment and religiosity interacting with gender.

Category		Model 0	Model I	Model II	Model III	Model IV	Model V
Individual variables							
Female			0.04***	0.05***	0.02***	0.03***	0.03***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Cohort *(ref: <1949)*							
	1950-1959		0.02***	0.03***	0.02***	0.02***	0.02***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	1960-1969		0.03***	0.04***	0.03***	0.03***	0.03***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	1970-1979		0.04***	0.06***	0.04***	0.04***	0.04***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	1980-1989		0.05***	0.07***	0.05***	0.05***	0.05***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	1990-1995		0.08***	0.08***	0.08***	0.08***	0.08***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education			0.18***	0.18**	0.16***	0.18***	0.18***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Employed			0.04***	0.04***	0.04***	0.03***	0.04***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Religiosity			-0.14***	-0.14***	-0.14***	-0.14***	-0.14***
			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female*cohort *(ref: <1949)*							
	1950-1959			-0.01			
				(0.00)			
	1960-1969			-0.01*			
				(0.00)			
	1970-1979			-0.02**			
				(0.00)			
	1980-1989			-0.02*			
				(0.00)			
	1990-1995			-0.00			
				(0.00)			
Female*years of education					0.03***		
					(0.00)		
Female*employment						0.02***	
						(0.00)	
Female*religiosity							-0.01
							(0.01)
Constant		0.56	0.43	0.42	0.44	0.43	0.42
		(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)
Random effects							
Country variance		0.015	0.014	0.014	0.014	0.014	0.014
Individual variance		0.048	0.042	0.045	0.042	0.042	0.042
N respondents		42,120	42,120	42,120	42,120	42,120	42,120
Countries		30	30	30	30	30	30

[a]$p<0.1$ *$p<0.05$ **$p<0.01$ ***$p<0.001$

Table 10 investigates how attitudes towards *private* GR change according to gender, cohort, employment, levels of religiosity and education. Models I to V all report that women are, on average, rejecting traditional female roles more than men and that this disparity is statistically significant even when controlling for birth cohort, age when completed education, employment and the level of religiosity. However, although the levels of egalitarianism are increasing with cohort – individuals born in the 1990s score, on average, 8 percentage points more than those born before the 1950s (see Model I) – the gender gap is decreasing across generations and does so significantly for the central birth cohorts (as seen in Model II). Instead, it increases with education and employment (of 3 and 2 percentage points respectively) as expected, while the level of religiosity has no effect (Models III to V).

Religiosity has still a strong effect but only when taken alone, and so does education – individuals score, on average, 18 percentage points more for each additional year of school and 14 percentage points less the more religious they are – whereas employed individuals score an additional 3 percentage points on average when compared to their inactive counterparts (see Model I). On a final note, it seems that these individual differences count more than country-level disparities, as the individual variance amounts to about 0.05 and that the country variance is of 0.02. Still, the ICC score is pointing to a non-residual variability across countries (24%) that we are accounting for, and that justifies the use of a hierarchical model.

Table 11 2-Level multilevel regression on the 'Public items' index from Wave 2 to Wave 5. Effects of cohort, education, employment and religiosity interacting with gender.

Category	Model 0	Model I	Model II	Model III	Model IV	Model V
Individual variables						
Female		0.08***	0.07***	0.05***	0.07***	0.10***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Cohort *(ref: <1949)*						
1950-1959		0.03***	0.02***	0.03***	0.03***	0.03***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
1960-1969		0.03***	0.03***	0.03***	0.03***	0.03***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
1970-1979		0.04***	0.03***	0.04***	0.04***	0.04***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
1980-1989		0.04***	0.02***	0.04***	0.04***	0.04***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
1990-1996		0.04***	0.02***	0.04***	0.04***	0.04***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education		0.11***	0.11**	0.08***	0.11***	0.11***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Employed		0.01***	0.01***	0.01***	-0.00	0.01***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Religiosity		-0.09***	-0.09***	-0.09***	-0.09***	-0.08***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female*cohort *(ref: <1949)*						
1950-1959			0.01			
			(0.00)			
1960-1969			0.02**			
			(0.00)			
1970-1979			0.03***			
			(0.00)			
1980-1989			0.03***			
			(0.00)			
1990-1996			0.04***			
			(0.00)			
Female*years of education				0.04***		
				(0.00)		
Female*employment					0.03***	
					(0.00)	
Female*religiosity						-0.02
						(0.01)
Constant	0.71	0.59	0.61	0.62	0.60	0.59
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Random effects						
Country variance	0.016	0.016	0.016	0.016	0.016	0.016
Individual variance	0.044	0.040	0.040	0.040	0.040	0.040
N respondents	40,360	40,360	40,360	40,360	40,360	40,360
Countries	30	30	30	30	30	30

[a]p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 11 studies how attitudes towards *public* GR change according to gender, cohort, employment, levels of religiosity and education. The partitioning of variance in Model 0 does not change much across private and public GR indexes; individual variance amounts here to 0.04 and the country variance amounts to 0.02. The ICC is slightly higher – 0.26 – possibly signalling a higher variability of opinions across countries. At first sight, not much seems to be changing at all from the previous table (on private GR): individuals are still more egalitarian when women, the younger their birth cohort, the more educated they are, when employed, and the lower their levels of religiosity (Model I). At a closer look, however, the gender discrepancy in attitudes is noticeably higher for public GR than it is for private GR, reaching a maximum of 10 percentage points in the last model. On the other hand, while education, employment and religion do preserve, respectively, their enhancing and mitigating influence on egalitarian attitudes towards GR, their effect on the public-items scale is weaker as compared to the previous models, as their regression coefficients are smaller in Table 11 than they are in Table 10. Instead, as opposed to private GR, the interaction terms are all stronger than those in Table 10 and statistically significant. In particular, egalitarian levels on the public GR scale seem to be broadening across generations for women more than for men; in fact, the interaction between the female gender and cohort is statistically significant and shows the existence of a generational gender gap, with younger cohorts of women becoming significantly more egalitarian than younger cohorts of men.

The generational gender gaps are compared in the Figure below. As evident from the figure, when we deal with family or private items, the gender gap does not open the younger the birth cohort, although women remain, on average, the most egalitarian. However, when we turn our attention to public gender roles, the discrepancy is obvious, and women's marginal gains with cohort are significantly higher than those of men. This is a novel result; in fact, we would not have been able to trace the generational gender gap if we had considered private GR exclusively. Likewise, as public GR were never taken into consideration before the last EVS survey wave, the generational gender gap on the public dimension might have always existed or changed in entity over time but ignored because of methodological shortcomings.
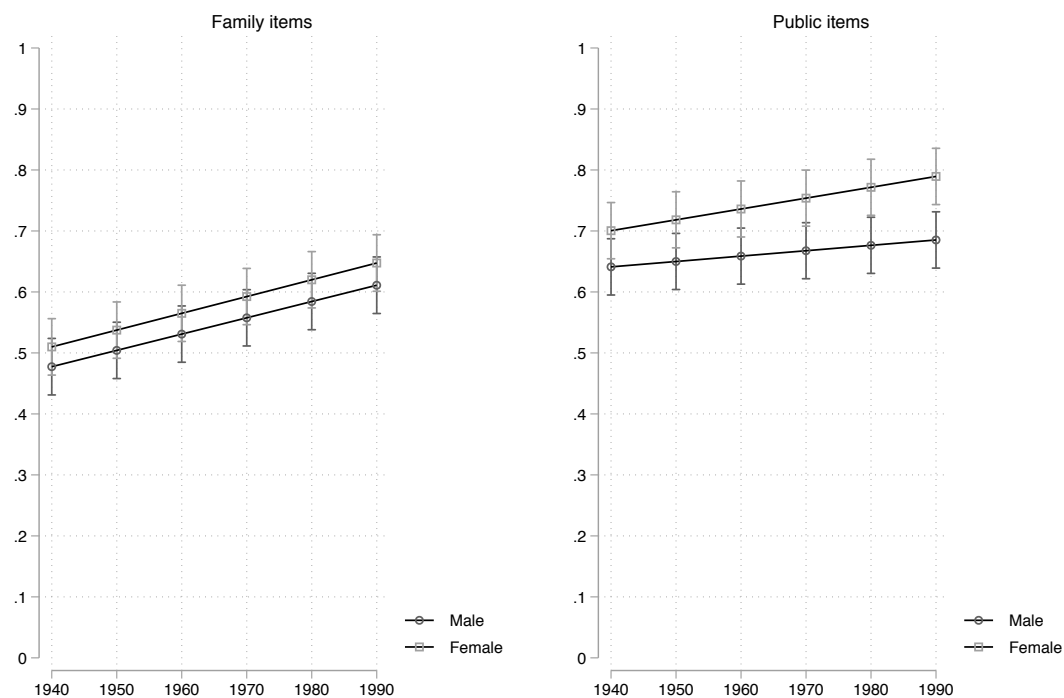
Figure 9 Marginal score increase for birth cohort and gender on the family GR scale (on the left) and on the public GR scale (on the right).

Although there is no generational gender gap with respects to family GR, the marginal increase in score across generations is quite high and the generational line steep for both genders; on the contrary, when we are testing the attitudes towards public GR, the marginal increases for cohort are small and the lines flatter – extremely flat if we consider that of men. So, on average, generations are actually more homogenous when asked about public GR, but the gender divergence of attitudes is real and growing with cohort; it is also growing with education and employment, whereas gender gaps are less evident in attitudes towards private GR. On the other hand, gender does not matter as much in the case of private GR, as women and men think along the same lines; but the generational conflict is rather fervent – more fervent, at least, than in the case of public GR. Also, the overall average score on the private GR scale is lower than that of public GR scale – about 0.56 versus 0.71, a good 15-percentage points difference (*see* Models 0 in Table 10 and 11); hence, individuals seem to be, on the whole, more sympathetic with public rather than with private gender equality.

2.5.6 A geography of gender roles

Despite having a lot in common, the factors behave differently on some crucial covariates, and this somewhat confirms that they are measuring two different aspects of gender roles; this also implies that the same individual can have different opinions about the two; it also implies that the same country can have contrasting average scores on the two different GR scales. Hence, the two factors seem to suggest that there are four ways of being egalitarian (at least, this is what the data allows for at the moment): you can either 1) reject traditional GR, whether they are public or private; 2) agree with traditional roles, whether they are public or private; 3) disagree with equality of roles in the private environment but accept it in the public sphere; or 4) disagree with equality on the public sphere but weirdly accept it behind the household's closed doors (unlikely). The results hence allowed us to create a typology of gender roles and to catalogue countries according to their average scores on both factors. Average scores were taken from the intercept-only model and are presented in the figures below. The 0 line stands for the grand mean; bars growing on the right side of it represent countries that score above-average, while, on the contrary, bars growing on the left side of it represent below-average scores. Although most countries follow the same trend on both factors, there are some dissimilarities.
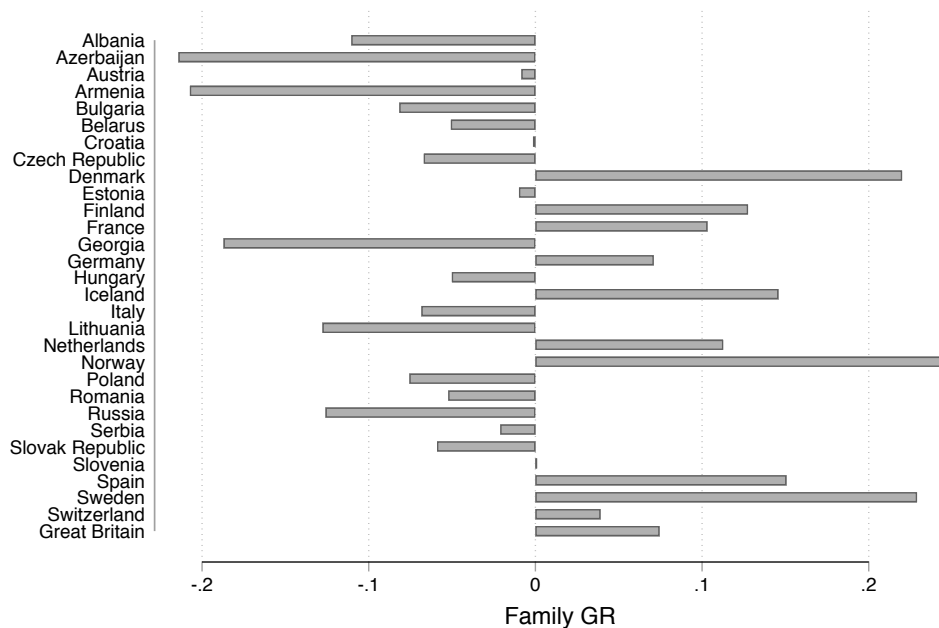
Figure 11 Average score on the public GR scale for each country. N 30 countries, 55910 individuals.

Figure 9 shows that the score on the family roles scale can fluctuate from -0.2 points and below in the most traditional countries (e.g., the three Asian countries), to almost 0.3 points above the grand mean in the Scandinavian countries (e.g., Denmark, Sweden and Norway). All other countries stand somewhere in the middle of these two extremes, but a geographical pattern is recognizable. The countries with a less egalitarian and more traditional perspective on family GR, and who thereby stand below the European average mainly come from the eastern side of Europe, with the exception of Italy and Austria, which are generally included among the Western European countries. Conversely, countries that adopt a more egalitarian perspective on family GR, and who thereby stand above the European average all come from the western side of Europe, with the sole exception of Slovenia (which is only slightly above average).

Figure 10 shows that the score on the public GR scale ranges from well under -0.2 points (lowest point represented by Armenia and Azerbaijan) to only-just over 0.2 points above the average in Norway and Sweden. Although the extreme values resemble those of the family GR index, the countries standing within this range have reshuffled. While in Figure 9, all of the eastern bloc, with the sole exception of Slovenia, lied on the left-hand side of the bar graph, in the public GR scale, Albania and Croatia join Slovenia in the

committee of countries who seem to have more egalitarian perspectives. All other eastern European countries keep their traditional perspective on public GR. On the other hand, all western European countries have above-average scores, and this time, Italy is included among them. The countries follow almost exactly the same patterns in both indexes, except for Croatia, Albania and Italy. In order to have a spatial understanding of how all countries place themselves on the typology following their average scores on the GR scales, a graph is provided below. Public GR stand on the X axis and Family GR on the Y axes. Point (0;0) represents the grand mean. The coordinates of each point are given by the average score that each country achieved on X and Y, and hence on the two GR scales. The upper-right quadrant of the chart collects egalitarian countries, that is, the countries that score above average in both GR scales; the lower-right quadrant gathers together the countries that have had an above-average score on the family GR scale, but a below-average score on the public GR scale; the lower-left quadrant includes the countries that scored below-average in both GR scales; and the upper-left quadrant would show countries that ranked below-average on the public GR scale, but above-average on family GR scale, had there been any.
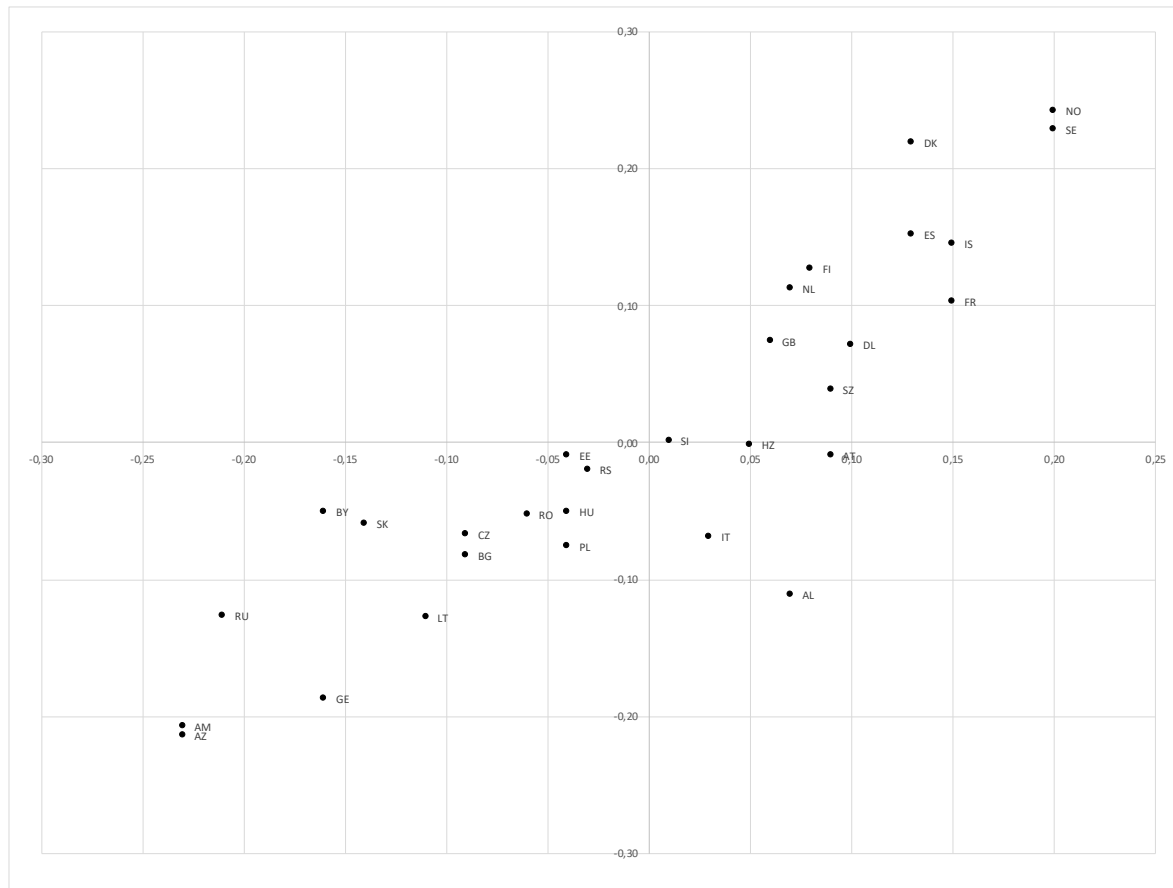
Figure 12 Spatial account of how countries place themselves in the typology according to their average scores. Public GR are on the X axis and Family GR are on the Y axes. Point (0;0) represents the grand mean.

A clear geographical pattern is visible from the chart; the northern countries sit at one extreme (top right of the chart) and the Asian countries plus the Russian Federation sit at the opposite extreme (bottom left). All other European countries score between Scandinavia and Asia. The Eastern European countries generally score below average on both indexes, while Western European countries score above average on both indexes. As already mentioned, Italy and Austria are outliers among the western countries: they score above average for public roles, but below average for family roles. Their behaviour is hence closer to that of Albania, Croatia and Slovenia, which are outliers of the eastern bloc instead. These countries rank above the mean score on the public GR scale but rank below the mean score on the Family GR scale, except for Slovenia, which, however, scores only above average in both GR scales and will be added to this group for spatial proximity.

5. Discussion and Conclusion

The first part of the analysis was dedicated to investigating how the structural changes in women's lives that have occurred in both the 20th and 21st centuries have had an impact on GR attitudes. We studied the effects on attitudes towards GR of education, employment and level of religiosity both on the individual and contextual level, investigating for the latter the influence of the changing rates of women in employment in time and space, together with the average time women spend in education and the national level of secularization. We expected education and employment to be promoting gender equality on all levels (individual and contextual), and higher religiosity to have the opposite effect, although we had pre-empted these effects to be only marginal. In fact, literature had already pointed to a slowdown in the run towards equality (Inglehart and Norris 2003; Shorrocks 2018), and our challenge was to reason this halt by observing whether the factors that should influence equality are still serving their purpose.

In order to simultaneously estimate the individual, the longitudinal and the cross-sectional influences on GR attitudes, a three-level random intercepts model was fitted to the data, where individuals are clustered within country-waves, clustered within countries in turn. Results show that employment and education have preserved a necessary positive effect at least on the individual level; in fact, the analysis provides evidence of employed and highly educated individuals rejecting the old-fashioned conventions more than their uneducated and inactive counterparts. Women are more egalitarian than men, which is consistent with the profitable literature on attitudes towards GR (Inglehart and Norris 2003, Bolzendahl and Myers 2004, Shorrocks 2018); they also remain more egalitarian all other things considered, and characteristics such as 'being educated' and 'employed' have a stronger effect on them than on men. In fact, employed women are more egalitarian than employed men, and the longer they stay in education, the stronger their rejection of traditional roles as compared to their male counterparts. On the contrary, religion appears to have the opposite effect, as higher levels of religiosity reduce egalitarian attitudes in women more than in men. However, the total gender gap does not reverse because of this single, negative effect; in this case, it just narrows. This can be taken as evidence that women *per se* are not a homogenous block, especially as regards to the topic of gender roles. In fact, they seem to be more polarized on issues of gender equality, which is consistent with previous findings

(Rhodebeck 1996). Indeed, the individual level predictors have shown to be more effective in predicting women's attitudes with respect to those of men.

Nevertheless, our intuitions were partially confirmed when we turned to the macro-level. Let us consider the longitudinal perspective first; so far, literature has reported that the rise of feminist attitudes is especially due to the growing levels of human and economic development (Inglehart 1997) and to the rise of women's presence in the public sphere (Bolzendahl and Myers 2004). It has also consistently found in the rising numbers of women in employment and in education the main promotors of cultural change. Although the growing proportion of women in education and employment definitely promote gender equality, falling numbers may lead to the opposite effect – and this is what appears to be going on in our data to some extent. This does not concern education, which has preserved its positive effect in the long run; in fact, our results show that attitudes towards gender roles have become more progressive as women choose to spend more time in education over the decades. On the other hand, the rate of women in employment has dropped over time, and this has had detrimental consequences on the levels of egalitarianism. In fact, countries that have suffered a larger loss of women in employment appear to be going back to a 'traditional family' preference. Hence, female employment definitely has a strong effect on attitudes towards GR, just not the one we had expected.

As unjoyful as this might sound, the negative effect that the declining rate of women in employment has had on egalitarian attitudes is an important finding. In fact, our results locate this drop around 2007 and 2008, and hence ascribe it to the economic crises that came to be during those years. As our analysis is the first to track attitudes towards GR in the crisis aftermath, the negative impact that the economic crisis has had on structural features such as employment, and the implications this has had in the levels of egalitarianism had not been yet traced in previous research that uses EVS data. It is true that the drop of women in employment might also be a consequence of young high-school graduates nowadays choosing to proceed to higher education instead of entering the labour market directly after school[52]. However, ignoring this fact would not consider the consequences of the spill over of women from the labour market on to education,

---

[52] This was tested; we selected the population of over 25s in every survey wave, so as to allow everybody in the subsample the chance to have finished their educational path, and the coefficient turned out to be non-significant. Still, it was under the 10% significance threshold, so that the chances of it being random are still very little.

which has necessarily brough down the number of women in employment[53]. Yet, whatever the reason, the decreasing number of women in employment over time does appear to have, under every circumstance, a detrimental effect on gender equality in the long run – one that the increase of educated women can only partially compensate. This is definitely a matter that future research, together with public policy, need to address.

Results partially confirmed our intuition about structural forces losing influence on attitudes towards GR when we analysed their effect on the country level as well. In fact, gender equality seems to be nationally promoted only by the higher rate of women in employment, whereas higher percentages of women in education, together with the degree of secularization, have, respectively, a negative influence on egalitarian beliefs, or no effect at all. That the rate of women in employment is positively associated to liberal attitudes is consistent with the exposure-based explanations, according to which women develop a higher sensitivity to gender equality on the bases of them being more exposed to inequality in the workplace (Bolzendahl and Mayers 2004; Davis and Robinson 1991; Klein 1984; Rhodebeck 1996). Instead, the negative effect on egalitarianism of higher national rates of women in education could be a partially spurious effect and due to the fact that men and women, although more educated today than in the past on average, have segregated in academic and career paths that recall the characteristics associated to their gender role (i.e., nurses and engineers, as seen in Cejka and Eagly 1999; Fox 2017; Koenig and Eagly 2014; Wood and Eagly 2012). This might contribute to reiterate and reinforce traditional gender patterns, but with no available variable to indicate the exact occupation or university degree individuals hold, our conclusion can only be speculative at this stage.

On a final note, processes of secularization do not appear (surprisingly) to have had any effect on attitudes towards gender roles. The national average level of religiosity does not seem to count much either, as previously mentioned. The findings show that religiosity is affecting individuals' values directly but has a marginal effect on the contextual level. This means that religious people around the world share more similar views among themselves than among their non-religious fellow citizens. This finding is quite concerning and makes us reconsider for a moment the allegedly strong relationship between religiosity and conservatism of gender structures. In fact, if decreasing levels of

---

[53]Individuals in the sample are within the legal age limit to start working (15). If the threshold is taken to 18, the education coefficient would still be significant.

religiosity are not significantly contributing anymore to changing the attitudes towards gender roles, then gender traditionalism – or the endorsement of the male-breadwinner/female-carer family model – does not necessarily spur from a religious thought. This suggests that conservative ideas about GR are related to gender cultures rather than to religious dogmas. As such, they spread out to a larger portion of the population and are particularly pervasive and difficult to tackle.

The second part of the analysis was dedicated to investigating how opinions on GR change across generations and survey years. For this purpose, a 2-level random intercept model was fitted to the data, where individuals are nested in countries. Our results confirmed our hypothesis – rather than unbeatably becoming more egalitarian across birth cohort, attitudes towards gender roles appear to be particularly subject to exogenous shocks of feminist thought. Indeed, the levels of egalitarianism are increasing slowly across birth cohort and almost linearly, if it were not for a few, circumscribed birth cohorts who break from their predecessors with above-average marginal increase. These individuals, who appear to be more feminist than their immediate predecessors, are born around the 1940s, the 1970s and 1990s. Undeniably, attitudes towards GR consistently liberalized up until the 1970s, but then little seems to have occurred in the subsequent cohorts, with the sole exception of the youngest one. This is partly consistent with what some other authors have proposed on the topic; indeed, Schnittker, Freese, and Powell (2003) identify as the most feminist the cohort of individuals who were born between 1936 and 1955, and who were young adults during the second-wave feminist movement. Subsequently, Shorrocks (2018) identifies as the 'feminist generation' the cohort of individuals who were socialized during the second-wave feminist movement, and who were hence very young in the period of time that approximately goes from 1950 to 1970. Instead, the upward turn in the levels of egalitarianism in the individuals who were born during the 1990s, is a newer result and has not received as much attention in literature so far.

What is most interesting about the renovated interest in feminist stances on behalf of the youngest cohort is that we were only able to observe it in the last EVS wave, which dates to 2017 and 2018; it was not traced before this date. This is partly because this generation was too young to interview; but it is also because in the EVS survey wave that was run before this most recent one, and hence around 2007 and 2008, this birth cohort almost appeared to be developing *more conservative* thoughts than their

immediate predecessors. This change of sentiment in the years that occurred between the last and the second-to-last EVS survey wave can be due to a mixture of factors and more research is definitely needed on the matter. As for now, we will reason this change on the basis of our own hypothesis, according to which generations become more feminist when aided by feminist exogenous shocks. In fact, the rise of the fourth-wave feminist movement, the effort of which started in 2016 by promoting an intersectional, active and community-oriented agenda, might have reinfused some of its most fervent principles in especially this latter generation. And it might have done so in a more direct way – via social media and networks – conveying value change in record time. It is indeed in this generation – which constitutes the second half of the Millennials generation – that we can trace the highest levels of online activity (so far).

The last part of this chapter was dedicated to studying the implementation of a new GR scale in the most recent EVS survey wave. The EVS GR scale has historically proved to be an unreliable measurement of attitudes, especially for Eastern Europe, up until very recently. In fact, designed as it was, gender roles appeared to be conceptualized as one-dimensional – actually they appear to be just one, women's role in the private sphere. However, in the last wave (2017/2018), the GR scale has had acceptable reliability scores in all countries, and it may be due (at least in part) to the fact it introduced a new perspective on gender roles, as well as a new dimension – that of public gender roles – alongside the most frequently used indicators of private gender roles. The two dimensions were then used as separate dependent variables in distinguished 2-level hierarchical models that studied the attitudes towards both private and public GR.

Curiously, the two GR scales related differently to some key predictors of egalitarianism, in particular, to gender and birth cohort. Indeed, when we question people on whether men make better politicians or businesspeople than women, or whether they deserve education more than women, the gender contrast is particularly marked and growing across generations, as women are becoming more egalitarian across birth cohort, but men are not. On the contrary, when we talk about women working and managing family life, gender differences are not particularly marked, but the generations are growing more egalitarian one birth cohort after the other. So, birth cohorts of women and men are becoming homogenously more egalitarian when we speak about family life, whereas younger women are significantly more egalitarian than their male counterparts when we turn our attention to gender roles on the public sphere.

Moreover, while the average attitudinal score on the public GR is rather high (0.71, *see* Model 0, Table 11), which means people are quite on board with women and men being equal in public life, that of private GR is 15 percentage points lower (0.56 *see* Model 0, Table 11), which in turn means that equality has difficulties emerging in the private realm.

To make sense of these results is challenging. In some respect, this pattern resembles the development of gender roles in recent history; in fact, from the male breadwinner family model, many households evolved to dual-earner couples, especially in the west of Europe. On the one hand, this arrangement assured that women could more easily have a career alongside a family if they wanted; on the other hand, women continued to be the main caretakers of the family wellbeing, and actually ended up dealing with the double burden of paid and domestic work. In the eastern part of Europe something similar (but with opposite results) happened – on the one hand, both women and men were following a policy of full employment under the communist regime; on the other hand, only women were in charge of the household. Hence, when the communist regime fell, many women left their job positions so as not to face the double burden of both taking care of the family and working full-time. This development of gender roles, and the higher normativity that is placed on the family role assigned to women, hint to the fact that endorsing equality in the public environment is not sufficient to tackle the problem. Although much has been done to promote equality and increase women's participation in education, the labour market and in political institutions, inequality survives at its strongest in the household, where gender family roles seem to be the most resilient towards change. Indeed, while most people think that women are as fit as men in public and managerial roles, a smaller portion thinks that women can neglect their family duties. And the fact that also many women endorse their traditional role instead of rejecting it is additional proof of how much the gender hierarchy is internalized and still supported. The biggest challenge for the gender equality agenda is then to promote parity in the private realm, which practically means ensuring a fair division of housework and family duties among couples of the opposite sex. Until equality is reached indoors, legal and institutional reforms can only do so much in changing people's perceptions about what women and men should be doing in society.

To study geographical variation on attitudes towards GR in a multidimensional manner, the private and public dimensions of GR were used to classify the countries

according to their average scores. Five clusters emerged from the analysis, and the countries within each do not only share the same gender culture but they are also located in geographical proximity. The five clusters can be summarized as follows: 1) "Asia", or the Asian zone, represents the Asian countries included in the EVS sample, namely Azerbaijan, Armenia, Georgia and the Russian Federation; 2) the "East bloc", which gathers together most of the post-Soviet European countries that took part in the survey and that score below average on both GR scales but not as low as the ultra-conservative Asian countries; 3) the Western European countries plus Spain (generally thought of as a Mediterranean country), which score abundantly above average on both indexes; 4) the Nordic countries or 'Scandinavia', which sit the extreme end of the right-hand quadrant and unsurprisingly turn out to be the most egalitarian; and 5) the "Adriatic" cluster of countries that score below average on the family GR scale but above average on the public GR scale (or just-above both scales).

The latter category is a new, underexplored group of countries that emerges only when clustering according to the country's gender culture; it includes Italy, Albania, Austria, Croatia and Slovenia, which were labelled 'Adriatic' given the proximity to the Adriatic Sea (though Austria does not face onto the coast). In fact, Austria and Italy would be generally considered as members of western Europe, whereas Slovenia, Albania and Croatia are more related to the Balkan countries. How come they fall in the same cluster? Italy and Austria below-average score on the family GR scale is justified by their having conservative welfare regimes (Esping-Andersen 1990), where the family – and especially the mother – is responsible for intergenerational obligations. In fact, the male-breadwinner arrangement of gender roles – or a part-time working-mom version of it – is still quite frequent in both Italy and in Austria (Haas 2005; Zagheni, Zannella, Movsesyan and Wagner 2015), and the lack of thorough policy to encourage mothers to remain in the labour market is especially damaging (as it happens in Italy, *see* Saraceno and Keck 2011). On the other hand, Albania, Croatia and Slovenia's scores on the public and private GR scale might be a residue of the communist propaganda that had women and men equally educated and employed but did little to fight inequality within the household (Voicu and Tufiş, 2012). The reason for why they differ from neighbouring countries with whom they shared a Soviet chapter in their history, Romania for example, is a lot less clear, as well as a starting point for future research of gender cultures in the area. The increasing conservatism in the Balkans might be due to a lack of gender equality

policy that has women either handling families and jobs single-handed, or just resigning to household duties. However, one can only guess at this stage, and although fascinating, this matter departs from the purposes of this thesis.

Spain could also be seen as an 'odd one out' of its category, but wrongly so; in fact, it scores quite high above average, placing as a runner-up after Scandinavia, but it is not often accredited among the most progressive countries. However, after the collapse of the right-wing authoritarian regime led by Franco, Spain transitioned to a well-established democracy in a short time span, and this had positive repercussions on the cultural and political understanding of the division of labour between women and men (Bustelo 2016). In fact, after Francoism, which was strongly influenced by the Catholic Church and firmly based on the male-breadwinner model, Spain developed and consolidated 'avant-garde' policies, devoted to promoting gender equality (*see* Valiente, 2008). Spain is not as conservative as some might think – in fact, it also scores above-average on the Gender Equality Index – an indicator of a country's gender performance, released by the European Institute for Gender Equality (EIGE) in 2013 for the first time, and every two years from then. In fact, most of our results back up those of the EIGE.

The Gender Equality Index is formed by combining gender indicators across six core domains (work, money, knowledge, time, power and health), which is then used to measure how far (or how close) the 28 European Member States are from achieving gender equality. The latest results (dated to 2019 but released in 2020) are hereby provided; a score of 1 means total inequality and a score of 100 represents full equality. The EU-28 line represents the European average line; bars above it represent above-average egalitarian countries and bars sitting below it characterize conservative countries.
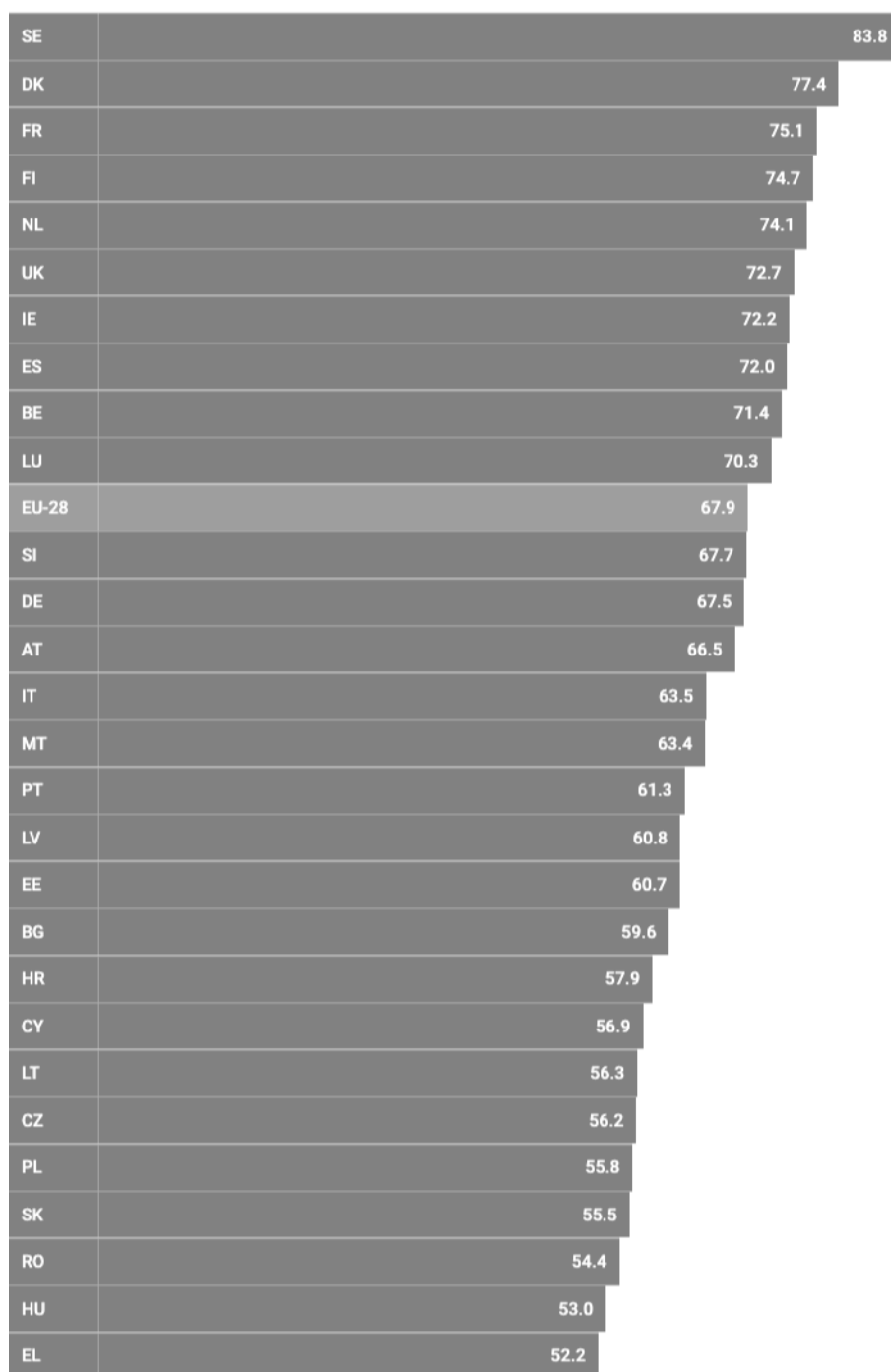
Figure 13 Gender Equality Index 2019, European Institute for Gender Equality

Spain, as already mentioned, scores above average, and does so in our analyses as well. The same goes for Belgium, the United Kingdom, the Netherlands, Finland, France,

Denmark and Sweden. Slovenia basically stands on the average line – just like we highlighted in our analyses – while Italy and Austria, together with all eastern and central European countries score below average; the EIGE measures confirm exactly what we have found and said so far.

To conclude, this research has provided an adjourned state-of-the art on the effects of longitudinal and cross-country factors on attitudes towards gender roles. It also provides a generational and gender-sensitive analysis of attitudes towards both private and public GR. It does have, however, a few limitations. In delivering a reliable way of operationalizing cross-sectional and longitudinal variables so that their effects can be studied simultaneously, the overall analysis might come across as restricted in the choice of predictors. The effects of more variables (e.g., the changing rate of married couples or of children per couple) could be studied contextually and simultaneously, by borrowing the methods hereby employed, and we encourage future research to do so. Moreover, although geographical patterns are analysed in the typology of gender cultures, a closer look to how gender and generational attitudes towards private and public GR are differently evolving across specific geographical areas is needed, and hence we leave this matter to future developments.

Chapter 3:

Gender gaps in political knowledge: an experimental approach

3.1 Introduction: ask me about maternity leave instead

In Chapter 1 we highlighted a theoretical shortcoming in literature that takes on the topic of political gender gaps; it often fails to recognize that institutional politics is a male domain of expertise and hence women simply do not have the same chances of providing a correct answer to a question concerning political institutions. In fact, they often feel so misplaced when questioned about it that they refrain from answering at all. Women's lower chances of getting the answer right is giving advantage to men, and research on political knowledge should address this probability gap more than the informational one. Instead, institutional politics is considered as 'neutral', appealing to all with no distinction of gender, and hence the choice of topics in surveys of political knowledge remains, still today, rather limited. This results in the distortive image of men appearing more knowledgeable than women on all aspects of politics, when instead, data can only show us that they are more knowledgeable about institutions and national politics. On the contrary, data shows little to nothing about how women are participating in politics and what they might know about it.

Male and female domains of political expertise are a consequence of the different social role women and men are assigned to, a social organization that is unequal and resilient to change. The secondary analysis on attitudes towards gender roles that was developed in Chapter 2 was fundamental so as to back up this statement with data and to show that, although attitudes are changing in time, the role of women is still connected to the social expectation of them creating a family eventually. Hence, women know less about institutions because it is not directly relevant to their gender role. On the contrary, men are not as linked to their reproduction or caring functions and have fewer social expectations to dedicate to family life. They can move in the public sphere without feeling inadequate or misplaced and often succeed in prestigious roles, such as that of governing the country, in higher numbers than women. This is also why they end up knowing, on average, a lot more about institutions than women.

There are many other topics that concern politics and that could serve as content to a political knowledge question – public policies, for example. Some of these might also be better known to women than to men or more appealing for women to answer. Harassment policies, childcare and welfare services could be, for example, issues that women are more familiar with because they are more relevant to their social experience. Nevertheless, the attempts to make political knowledge questions more relevant to women have only been a few and have often been moderate. Some have tried asking about institutional politics with a focus on facts about women, but results have been mixed (see Dolan 2011; Hooghe, Quintelier and Reeskens 2007; Stolle and Gidengil 2010). Sometimes women seem to know about the same as men and on other occasions they keep knowing less, but the fact that men know more about institutional facts and figures is systematic. So as to understand what women know about politics, one should find a systematic equivalent – that is, an area of expertise that can replicate steady results about women knowing as much or even more than men. While we cannot afford a systematic study of how women answer to questions about political topics that concern them, the least we can do is try to renovate old-fashioned methodologies that have been proven to be partial.

The social experience of gender roles cannot be overlooked in surveys that are dedicated to measuring the political life of respondents. Indeed, just because women are participating less in institutions does not mean that they are unconcerned with politics altogether. By ignoring the topics that women know about politics, research on political behaviour is failing to acknowledge that women are participating in the public sphere, and that their interests and expertise are different but still political. This chapter will be dedicated to looking for political topics that can be relevant to women first of all (or as well), a rather under-investigated area in research on gender gaps. It will do so by paying attention to how the different social experiences of women and men lead to different areas of expertise. With this, it will also try highlighting that knowledge of institutions is not 'neutral' political expertise, but gender oriented, and favoured by men. It will also consider how the propensity of women to answer questions about politics changes when they are confronted with topics that are more relevant to them and a format that encourages them to answer. The hypothesis is that women will tell if questioned directly. The ultimate aim is to offer female-relevant content to add to the political knowledge questions pool and deliver a fairer measurement to future research.

The intention here is to neglect none of the sources that can lead to privileging men in their responses. However, although there is no reason to exclusively support traditional methods of data collection, and hence limit the selection to topics that men prefer, there is no reason to abandon institutional politics either. The key is to also feed respondents with questions on other types of political information – that women have about the same or a better chance of learning – and this is what gathering original data allowed us to do. The experiments reported in this chapter were designed so as to use sociological theory of gender roles for the choice of question content, and then pair content with different formats and DK protocols so as to have a comprehensive study of the effects that different factors have on men and women's level of knowledge when taken singularly and in combination. About 200 students from the University of Milan were asked to voluntary fill in an online questionnaire on political knowledge, interest and opinion between the Spring of 2019 and that of 2020. The questions they were tested on included a variety of topics, from historical political happenings to current public policies. Two questions were asked for every section, a "traditional" question (hence male-relevant) and a female-relevant one. The format varied from open-ended to closed-ended, and the DK response was randomly discouraged.

The aim of this section is not to demonstrate that women know as much or more about politics than men, but to highlight how social expectations connected to the roles women and men are told to occupy in society have their consequences on political learning – i.e., how much we know about what. This is why it is so crucial to intervene on the antecedents of political power, as they can show to what extent inequality is channelled from the social to the political sphere – and this is why we focus on knowledge here. The ability to learn about politics, to understand how it affects our lives and to express one's political ideas must be exercised; it requires intellectual engagement and dedication. If women are never encouraged to learn how to speak their minds about politics, they will grow up without that skill and will be necessarily cut off from a decision making that they are unable to discuss. The choice of working on political knowledge was made precisely for this reason – it is a crucial predictor of action and participation (among many other things) and also leads to conscious voting and careful citizenship. Still, political knowledge is not alone in this task, and other factors that promote political awareness, such as interest, will be revisited in this chapter as well.

3.2 Three dimensions for Question Content

In large scale surveys, political knowledge is generally computed through items that test the citizen's familiarity with certain principles of the democratic culture, and this is precisely what Delli Carpini and Keeter did in their telephone survey of 1993 in the US (Delli Carpini and Keeter 1993). Questions such as majority rule, the separation of powers, the two-party system, and other features concerning the American political structure and organization were asked together with knowledge on political leaders, parties and contemporary alignments. The relevance of these topics above all others was justified on the basis of a previous and florid literature that considered the democratic citizen one "informed in political affairs" (Berelson, Lazersfeld and McPhee 1954), aware of "what government is and does" (Barber 1969) and concerned with "the basic structure of government" (Neuman and Neuman 1986).

Although knowing about how political institutions work is fundamental and should be included in surveys that want to measure the population's level of political expertise, confining the content to institutional politics disregards the multidimensionality of the concept of knowledge. Becasue Delli Carpini and Keeter's popular 5-item index (1993; 1996) was using one-dimension of politics as a proxy for knowledge, it came to be heavily criticized. Knowledge can grow out of textbooks and interest but can also come from necessity or practical tasks we either passively or actively learn how to do. Knowledge of any topic can be, for example, *conceptual*, when derived from theory, or *situational*, when it comes from case-based reasoning; it can also be *procedural* and come from a series of actions we learn how to perform, or *strategic*, because of a previous problem we had to solve (De Jong and Ferguson-Hessler 1996). Disregarding the complexity of knowledge of any topic – let alone politics – can only provide a partial picture of what citizens (as well as different groups of citizens) actually know.

Among the authors who criticised Delli Carpini and Keeter's measurement, Barabas, Jerit, Pollock and Rainey (2014) highlighted that the standard 5-item was ignoring the "temporal dimension" of political knowledge (*static* versus *surveillance*) as well as the "topical dimension" (*general* versus *policy-specific*); in fact, as formulated by the authors, the index was only accounting for knowledge about structural features that seldom change (and that are 'static' and 'general'), when it should have included

questions that could measure citizen's awareness of recent happenings as well (that require 'surveillance' and are 'policy-specific'). In fact, alongside the idea of conscientious citizenry introduced by Delli Carpini and Keeter (1996) – that of knowing the constitutional features of democracy – Barabas and colleagues (2014) wished to give justice to the model of citizenship introduced by Micheal Schudson in his book The Good Citizen (1998) – that of a citizen interested in fresh news and current political developments.

Although overly used, the traditional index was also failing to account for the dimension of gender. Indeed, by measuring familiarity with constitutional and electoral politics, survey questions were (and still are) choosing topics were that were only relevant to men and that men had higher chances of knowing (Frazer and Macdonald 2003). In their study, Barabas and colleagues (2014) make an interesting point on the way we come to learn about facts that have been in circulation for quite a time, and about news that is current and developing; indeed, it looks like the dimension of gender could be mixing with the topical one, so that the choice of temporality affects men and women differently. For instance, the means to acquire knowledge in one or the other field differ and could have gender-implicated effects. While the authors mention many routes to acquire past and seldom-changing information, they point to the media as the primary means people use to learn about recent developments. Yet, the mass information environment is not neural to gender, but appears to be dishing out information to women and men in different ways; some studies have confirmed that women are less likely to be exposed to news on all media sources (Aalberg, Blekesaune and Elvestad 2013) and media content and production are targeting men more than women (Curran et al. 2014; Ross and Carter 2011). In fact, when women do get the information – e.g., through a deliberative occurrence (Fraile 2014b), or an experimental manipulation (Jerit and Barabas 2016) – they experience larger gains in knowledge than men. Following this argument, we could expect women to have a higher chance of knowing about facts that have been circulating for a while on more sources of information instead of recent facts covered primarily by the media. Still, data on gender gaps has systematically shown that it much rather depends on the topic that is asked, and when we ask about institutions, the static elements of constitutional politics are a disadvantage for women just as much as the recent ones (e.g., Barabas et al. 2014). The suspicion is that the temporal dimension alone cannot account for the dimension of gender.

More recently, however, researchers have debated that the gap is due to a biased choice of topics rather than to a lack of interest on behalf of women. Hence, the dimension of gender seems to be mixing with the topical dimension as well. Institutional and electoral politics is not neutral ground for women, who are not socialized towards a leadership role, or one that can accurately move in competitive environments. Socialization of gender roles suggests, regardless of their specific societal roles, that women and men performed gender in communal and agentic ways, respectively (Schneider and Bos 2019). This has implications for women at all stages – they are less likely to run for office, have lower levels of political ambition (Lawless and Fox 2005, 2010), and when they run for office, they are subject to either stereotypes regarding their inability to successfully fulfil leadership expectations, or judgments about them not complying with their gender role traits (as argued in social role theory, *e.g.,* Eagly, Wood, & Diekman, 2000; Wood & Eagly, 2012; Schneider, Holman, Diekman and McAndrew 2016; Schneider and Bos 2019; Steele, Spencer, and Aronson 2002).

The fact that most politicians are men is another detail for which women might lose interest in the subject of elections and institutional politics altogether (Campbell and Wolbrecht 2005; 2006; Verba, Burns, and Schlozman 1997); they might feel as if this type of knowledge is not for them and or that they do not require it at any point in their lives. On the contrary, the masculinity of political institutions is enhanced by the fact that men dominate political positions globally. Moreover, political leaders are linked in popular opinion to a power dimension of agency, pursuing status, self-promotion, and recognition (Schneider et al. 2016), all of which are characteristics that are related to the male gender. Hence, women's disadvantage in questions about institutional politics is well documented and persists even when they are asked to identify a female politician (Stolle and Gidengil 2010[54]). And while the gap might be reduced on questions about institutional politics that focus on women in institutions – e.g., women's representation in national government (Dolan 2011) – men still seem to have an overall advantage if other questions are administered alongside.

So, clearly the size of the gap depends on the topic of the question asked. In fact, women are seen scoring as high as men on all questions on government programs and services, and outperforming men on questions regarding health and childcare – i.e., the

---

[54] Stolle and Gidengil (2010) report that men still knew more than women when it came to conventional political knowledge, although respondents were also questioned on the names of two important female political figures (namely Canada's governor general, and a female cabinet minister).

cost of screening tests and where to go to report of a child being abused (Stolle and Gidengil 2010), or where to go to obtain a health card (Ferrin, Fraile and García-Albacete 2017). Women require this sort of 'practical political knowledge' for their everyday activities (Stolle and Gidengil 2010), and the fact that they seem to know more about these issues than men is congruent with their social role (Stolle and Gidengil 2010; Campbell 2004; Ferrin, Fraile and Garcia-Albacete 2017), as well as with social role theory. In fact, women may not be as curious as men about all the constitutional figures and procedures because of the small impact this type of information has on their lives; on the other hand, their gender role involves, for example, taking care of children or an elderly relative, for which practical information about work/family life balance policies, childcare and welfare services is crucial (Stolle and Gidengil 2010). Hence women opt out of national politics because of their lack of learning resources and their exclusion from it. Instead, issues that directly affect family, schooling and community are most hospitable, female-relevant areas of knowledge (Stolle and Gidengil 2010; Campbell 2004). However, these issues are seldom asked in large-scale surveys[55].

3.2.1 Hypotheses on Content

From reviewing the literature, three dimensions of question content emerged – the temporal, the topical and the gender-relevant[56]. We expect to see both a) intra-group variation, where women and men react differently according to content and b) inter-group variation, where women and men react differently to the same content. We expect women to perform better on questions about female-relevant topics as opposed to male-relevant, and on questions that are policy-specific as opposed to general (i.e., institutional politics). We expect to observe the reverse situation in men. Instead, because temporality alone cannot account for the dimension of gender, we are unable to make conjectures about the intra-gender variation on the topical dimension at this stage. As for the gender gap, when we use traditional questions of political knowledge, which employ 'general', 'static' and 'male-relevant' institutional matters as proxy for political

---

[55] Take as an example the CSES, which provides longitudinal and cross-sectional data for political knowledge. The questions on political knowledge are mainly about institutional politics.
[56] In the literature about gender gaps, most authors label as 'gender-relevant' the aspects of politics that are significant to women. Here, gender-relevant is used to represent the dimension of content that encompasses both male-relevant and female-relevant questions.

knowledge, we expect women not to know as much as men. On the contrary, if we consider what people learn on the field out of necessity – e.g., public policies – there may not be such an evident difference between women and men – if any at all. The hypotheses go as follows:

H1a (women's intra-group variation hypothesis): women are more likely to provide correct answers to female-relevant questions than to male-relevant questions and to policy-specific questions than to general questions about institutional politics.

H1b (men's intra-group variation hypothesis): men are more likely to provide correct answers to male-relevant questions than to female-relevant questions, and to general questions about institutional politics than to policy-specific questions. Instead, they as likely to provide correct answers to static questions as to questions that require surveillance

H1c (content knowledge gap hypothesis): the gender gap will exist for questions that tackle general institutional politics, male-relevant issues and static facts. It will not exist if we ask about public policies, female-relevant issues and historical facts.

3.3 Thre Operationalizations of Knowledge.

Apart from materially and structurally keeping women from participating in institutions or even knowing much about them, the presence of traditional roles also creates a sort of 'gendered psyche' (*see* Lawless and Fox 2010:13) – that is, an inherent feeling of inadequacy on behalf of women and a sense of self-assurance on behalf of men – in places that are not private or hidden. This can happen in public environments in the broadest sense (one example is the labour market) but is especially magnified in the political arena, where the male exclusiveness of institutions and the cultural attitudes towards female leaders both suggest it is inappropriate for women to join the public administration committee. The feeling of inadequacy on public grounds is acquired at a very young age, again, via primary socialization, and ends up impairing women's political ambition and participation in the long run, as well as many other behaviours that have to do with politics and that require less exposure than a candidacy (*see* Pereira, Fraile and Rubal 2014). Indeed, women appear to be hesitant in even the smallest of activities,

from debating about politics with a friend, to sharing an opinion about a certain policy or even answering a question on political knowledge (Karpowitz, Mendelberg and Shaker 2012; Fraile 2014b). This uneasiness translates in a tendency of women not to provide a substantial answer before survey questions about politics, but to respond "I don't know" instead; this often happens out of insecurity and more so than men, who tend to display a higher "propensity to guess" than women (Atkeson and Rapoport, 2003; Frazer and Macdonald, 2003; Kenski and Jamieson, 2000; Lizotte and Sidman, 2009; Mondak and Anderson, 2004; Mondak and Canache, 2004).

These diverging and gendered patterns of behaviour that occur around the DK response category threaten to conflate in knowledge estimates, so that women seem even less informed and men even more (Ferrin, Fraile and Garcia-Albacete 2017; Luskin and Bullock 2011; Mondak and Anderson 2004; Miller and Orr 2008; Prior 2014). So as to address this problem, scholars have distinguished three operationalizations of political knowledge (Fortin-Rittberger 2016; Frazer and Macdonald 2003). The first, also known as the Positive Knowledge Scale, assumes that knowledge is discrete – you either know the answer or you do not; hence, correct answers to a question are coded 1 and both incorrect and DK answers are coded 0. This is the most commonly used operationalization of knowledge; however, it does not take into consideration women's tendency not to answer and neither men's propensity to guess. The risk of conflating gendered psychological attitudes and knowledge in one measurement is that knowledge gaps appear to be bigger than they actually are – with women being penalized by their reticence and men advantaged by their risk-taking attitudes. A second scale of political knowledge, termed the Political Expression Scale, was formulated to show exactly this – that women and men behave differently before questions about politics. In fact, this scale awards respondents a score of 1 for a valid answer, be it correct or incorrect, and 0 for a DK, so as to capture both the propensity of citizens to say something (anything) about political matters, as well as that to abstain from doing so. Literature also delivers a third operationalization, the Political Accuracy Scale, which counts only the proportion of expressed answers that are correct, and hence also addresses the concern that women and men's propensity to guess is different. In this approach to scoring answers, correct answers are scored 1, incorrect answers are coded 0, and DKs are ruled out of the measurement.

The previous analyses that compared the effects of gender on these three operationalisations of knowledge show that men generally tend to score higher than women on all scales, but that the gender gap is especially large with regards to the Positive Knowledge Scale, while it is smallest (and not always significant) in the Political Accuracy Scale (*see* Frazer and Macdonald, 2003; Fortin-Rittberger 2016; Fraile 2014). Results also confirm that women are more likely to choose the DK response category as compared to men, so that the scoring scheme that is most commonly used (the Positive Knowledge Scale) is systematically penalizing them (and their levels of knowledge). However, when the content of the question does not concern institutions or electoral politics, the effects of gender change. Men provide equal percentages of correct, incorrect, and DK answers as women when the questions concern issues that they both like (e.g., the name of the minister of education, Fraile 2004), and more incorrect answers when topics are female-relevant (as in the question about the place where Spaniards can obtain the health card, Ferrin, Fraile and García-Albacete 2017). This is preliminary evidence in favour of the hypothesis that part of the gender gap is a function of what is defined as knowledge (*as said in* Dolan 2011).

3.3.1   Hypotheses on Knowledge

Because of their tendency not to provide a valid answer, together with the widespread usage of the Positive Knowledge scale, women systematically come across as less knowledgeable. Neglecting women's hesitancy leads to producing deflated estimations of how accurate the answers they provide actually are, and inflated estimates of how little they know when compared to men. Distinguishing three methods to measure political knowledge is a good way of accounting for women's lower propensity to answer to political knowledge questions. However, we predict this psychological tendency to change according to the topic of the question. We expect women's tendency not to answer to be especially evident before items that deal with institutions, and that this has harming consequences on their levels of knowledge when we measure it in a traditional manner (that is, via the Positive Knowledge scale). On the contrary, women will not be as disheartened before questions that concern political issues that are relevant to them as well; for such questions women will provide the same ratio of valid answers as men and the same ratio of correct answers as men. Finally, on topics that are directly relevant

to women, women will provide more correct answers than men, regardless of the scale that is used, but not necessarily more valid answers; in fact, men are confirmed to be higher 'risk-takers' than women on all occasions, so we assume that their propensity to answer will be the same on all topics. The hypotheses of this section go as follows:

H2a (gender positive knowledge gap hypothesis): when we use the Positive Knowledge scale, the gender gap in favour of men will be restricted to questions about institutional politics. There will be no gender gap on the other topics.

H2b (the gender expression gap hypothesis): the gender gap in propensity to answer will be present for questions about institutions but not for questions about policies or that are directly relevant to women.

H2c (gender accuracy gap hypothesis): when the Accuracy scale is used, the gender gap in favour of men on knowledge about institutions disappears.

H2d (reversed gap hypothesis): when topics are directly relevant to women, women have higher chances of providing accurate answers than men and the same chances of expressing a valid answer.

3.4 A combination of effects

As documented in the literature review in Chapter 1, surveys largely fail to account for women's lack of confidence when speaking about something as male coded as politics (*see* Dolan 2011; Coffé 2013; Stolle and Gidegil 2010; Fraile 2014). In fact, the tendency not to answer questions about politics is especially evident before certain survey design choices, such as a DK-encouraging protocol, which actually invites respondents not to answer if uncertain. Women's tendency to avoid questions about institutional politics can also be eased via methodological solutions, for example, one can get rid of the "Don't know" option (or discourage it) or accompany the knowledge question with a list of possible answers to choose from, but this is said to boost guessing among men (Mondak and Anderson 2004; Ferrin, Fraile and Garcia Alabecete 2017). This makes the task of minimizing gendered patterns around item format quite hard; however, we must bear in

mind that most of the literature on the topic has only tested women and men's attitudinal tendencies before questions about institutional politics. In fact, literature has seldom paid attention to the fact that format and content might work in combination, so that it is not sufficient to control for the one issue when the other can make just as much damage.

So as to take research on the gender knowledge gap a step forward, we must wed the debate on survey methodology to that on question content, and test how women and men react to the different combinations of format and topic. Indeed, it could be possible that women's risk aversion and men's propensity to guess are magnified by methodological choices in so far as the content of the questions touches issues of national and constitutional politics. Instead, if we provide respondents with questions that do not concern men only, these psychological attitudes might not be as evident. An interesting contribution in support of this debate is that of Miller (2019), who administers to her sample a questionnaire with a wider and more inclusive spectrum of political topics and combines question content with different DK protocols. Respondents are randomly assigned to a DK-encouraging treatment and are asked knowledge questions about a) "rules-of-the-game", b) governmental services and policies, and c) what is labelled as 'gender-relevant' issues, which are actually facts about women involved in institutions[57]. Results show that women underperform men on traditional knowledge questions but only when this is paired with a DK encouraging protocol. Instead, no significant sex-based differences are found for female-relevant items, and women even outperform men on policy issues, regardless of whether the DK option is available or not.

As a matter of fact, women are reported to be particularly sensitive to DK protocols, and tend not to disclose what they know because of self-doubt and risk aversion unless encouraged to do so (e.g., Mondak and Anderson 2004; Ferrin, Fraile and Garcia-Albacete 2017). However, discouraging DKs might help women reveal hidden knowledge but can also push men to guess, and the effects of guessing depend on the mix

---

[57] In fact, while the first index of her three asks respondents to identify, among other things, the U.S. Secretary of Defence, a male politician, and to approximate the majority party in the U.S. Senate, the latter asks to identify the Ohio Lieutenant Governor, a female politician, and the percentage of congressional seats held by women. The 'Traditional' index also asks respondents to approximate the majority needed to override a presidential veto, as well as to identify the branch of government that declares laws unconstitutional, while the 'Gender-Relevant/State Index' also asks for the majority party in the Ohio House of Representatives. The 'Programmatic Index' instead asks for the age up to which dependents can remain on a parent's health insurance under the Affordable Care Act, the government program that offers health insurance to the poor, and the meaning of "Common Core".

of open- versus closed-ended knowledge items. Literature has produced quite varied results about the effects on gender of combining different DK protocols to question format. Some studies have reported that format *per se* is not relevant in explaining the gender gap (Pereira, Fraile and Rubal 2014: Ferrin, Fraile and García-Albacete 2017); others have demonstrated that men's propensity to guess amplifies gender differences in the presence of closed-ended items, but is useless before open-ended items, so that gender differences tend to vanish when the latter format is used instead (Ferrin, Fraile and García-Albacete 2018). In fact, guessing is easy in closed-ended items, as people just need to select any other response option from the small menu provided by the questionnaire; if we discouraged DK answers in closed-ended items, guessing might come even more naturally, especially to men, and gender differences would be even larger. Instead, if we discouraged from saying DK on open-ended items, a small part of respondents might be able to retrieve relevant information from memory, but a larger part will either keep saying DK because they cannot begin to guess, or do guess instead, but incorrectly. So, discouraging DKs can be effective in closing the gender gap only when the questions of political knowledge have an open-ended format – which would mean that women are concealing more than they share, and that the increase of correct answers comes disproportionately from them. Yet, we have proof of the contrary – on open-ended items, according to which the gap should be smaller, discouraging DKs actually widens the gender gap, producing a distinctly larger increase in correct answers from men than from women. Conversely, for closed-ended items, according to which the gap should be larger, discouraging DKs narrows the gender gap because it uncovers more hidden knowledge among women (Luskin and Bullock 2011).

We are left with very scattered and inconsistent findings regarding the combined effects of format and protocol, so that it is difficult to predict the outcome of adding question content to the equation. However, the questions in Luskin and Bullock's piece were traditional items (2011), and consistently with their findings, Miller (2019) demonstrated that the gender gap disappeared on multiple-choice and traditional questions only when they were accompanied by a DK-discouraging protocol. We hence expect the DK-discouraging protocol and the closed-ended format to narrow the gender gap; instead, the same treatment on open-ended items will help men uncover more hidden knowledge than women and hence enlarge the gender gap. Yet, if we wish to be consistent with the hypothesis that predicts gendered patterns to be aggravated by

methodology only before traditional question content, we might predict men and women to perform in very similar ways before unconventional and more female-friendly question content, despite receiving a DK-discouraging treatment or the changing question format. The last hypotheses go as follows:

H3a: the gender gap is reduced before questions with traditional content, only when respondents are fed a DK-discouraging treatment to closed-ended items.

H3b: the gender gap enlarges when respondents are fed a DK-discouraging treatment to open-ended items.

H3c: No gender gap is present and due to methodology when the content is unconventional.

3.5 Data and Methods

When drafting the questions on political knowledge for the experiment here reported, all three dimensions of political knowledge were considered – the temporal, the topical and the gender-relevant. First, a total of four subgroups of questions were created – the static-general and static-specific, the surveillance-general and surveillance-specific. Secondly, the dimension of gender was added to each subgroup. Two questions were asked for every subcategory of political knowledge, for a total of 8 questions. One of the two questions per section was 'male-relevant', while the other question focused on 'female-relevant' political issues instead.

The three dimensions of political knowledge resolved in questions on a) institutional politics *versus* policy issues, b) static events *versus* events that require monitoring, and c) male-relevant *versus* female-relevant issues, and go as follows:

- Section 1 (static and specific). Respondents were asked a) a male-relevant question; in what decade does the so-called 'First Republic' ends? [1990s] and b) a female-relevant question: in what decade was the referendum on Divorce held? [1970].

- Section 2 (static and general). Respondents were asked a) a male-relevant question; What office does Roberto Fico hold? [President of the Chamber of Deputies] and b) a female-relevant question: What office does Maria Elisabetta Alberti Casellati hold? [President of the Senate]

- Section 3 (surveillance and general). Respondents were asked a) a male-relevant question; In the current legislature, what is the percentage of seats held by the leading party? [about 35%)] and b) a female-relevant question: In the current legislature, what is the percentage of seats held by female Members of Parliament? [about 35%]

- Section 4 (surveillance and specific). Respondents were asked a) a male-relevant question; What is the amount of the 'National Basic Income' for singles with no kids? [about 780€)] and b) a female-relevant question: How long does compulsory maternity leave lasts? [5 months]

Sections 1) and 3) have closed-ended items, while sections 2) and 4) have open-ended items. The choice of format was not casual but depended on the complexity of the questions; in fact, while the open-ended format is ideal for knowledge questions because it prevents respondents from guessing, the closed-ended format can aid students to go through the toughest knowledge items.

A random half of the sample was encouraged to provide a valid answer by receiving a DK discouraging treatment; the other half (the control group) was either encouraged to answer, "I don't know" (via a DK encouraging protocol), or neither encouraged nor discouraged from saying so (via a DK neutral protocol). In the treatment group in closed-ended items, we got rid of the DK button among the list of possible answers. Respondents were not obliged to answer, and questions could still be left vacant. Respondents in the control group were instead provided with the DK option, so that they could easily select it if they felt like doing so. Before proceeding to the open-ended questions, the students were (again) randomly sorted into two groups. Respondents in the control group were only given the instruction to fill in the blanks with the correct answer and received the following introduction: "Enter the answer you think is correct". Conversely, to discourage DKs to open-ended items, we asked them to provide

their best answer with the following prompt: "Thinking about what you have heard or read, how would you most likely answer the following questions?".

Because of time and budget restrictions, the experiments were pilot-tested on a convenience sample – a non-probability sample that was drawn from a population close to hand; however, so as to ensure internal validity, respondents were randomly assigned to the condition and control groups. The order of the questions was also randomized, although they did receive the multiple-choice block of question first, and then proceeded to answering the open-ended questions thereafter. We sampled about 200 students from the University of Milan, all of which are bachelor students that have more or less the same educational background – they either belong to the Department of Social and Political Sciences or to that of International, Legal, Historical and Political Studies. The majority of students were invited to complete the online survey in the lab just after class, during the months of June and July 2019, while others were given the link just after exams and were asked to kindly find time to fill it in at a later date or whenever possible. The data collection was mostly run from June 2019 to November 2019, although a small portion of students was also recruited during June 2020, when they were invited to participate to the online survey and hence provided with the link in virtual classes because of the Covid19 pandemic[58].

The experiment is divided into three major parts that will look to how question content, DK protocols and item format affect women and men's levels of political knowledge (alone and in combination). The first segment of the experiment concerns question content alone and was designed as a within-subject experiment. All respondents were administered a selection of topics that pertained to the three different dimensions of political knowledge (i.e., the temporal, the topical, and the gender-relevant dimension). The purpose of this initial part is to check whether respondents react differently to content because of their gender. Descriptive statistics in the form of cross-tabulations will be used at this stage. We will look for intra-gender variation, that is, how women and men respectively react to different content; this will allow us to see the topics that women and men know the most and the least. We will also check for some inter-gender variation, and hence compare the performances of women to those of men; this can help us see if women's levels of knowledge equate those of men or, on the contrary,

---

[58] The time difference and setting will be accounted for, although they do not seem to interfere sensibly with the experimental manipulation.

differ because of the content of the question.

Apart from knowing less, women seem to answer less in general. This tendency, together with the level of knowledge, might be due to question content. The second phase of the experiment tests this hypothesis by running logistic regressions and using the Positive Knowledge, the Expression and the Accuracy Scales as dependent variables. All of these variables take either the value of 0 or the value of 1. The logistic regressions were performed on the two open-ended questions about institutions, on the two open-ended questions about policy issues, and on the open-ended question about maternity leave. The Positive Knowledge Scale assigns a score of 1 to whoever knows at least one item or both and gives 0 to whoever answers incorrectly or admits to not knowing both items; the Expression Scale gives the value of 1 to whoever provides two valid answers and 0 to those who express at least a DK; the Accuracy Scale assigns 1 to respondents who answer at least one of the two items correctly and 0 to those who answer to both incorrectly[59]. Gender was regressed on all three scales for each topic in the form of a dummy variable (where 1 represents women).

The third and last portion of the experiment is dedicated to see whether women and men are affected by methodological choices only in the presence of traditional question content. To this end, the percentages of women and men answering correctly to both open and closed-ended items were compared across the control and treatment groups by using two-samples t-tests. The last part is dedicated to analysing the effect of discouraging DKs on closed-ended items after accounting for random and lucky guessing.

3.6 Why we can speak of internal validity

Experimental methodology within the frame of social survey is a relatively new though popular practice; it started expanding at the end of the last century and has been growing ever since (Druckman, Green, Kuklinski, and Lupia 2006). Researchers use experiments to address a causal question (Druckman, Green, Kuklinski, and Lupia 2011): they compare two situations, one in which there is an intervention of some sort, a 'treatment', and another where this does not happen (Druckman et al. 2011:20). As such, experiments are artificial: they are designed and organized by researchers. The aim is to

---

[59] Because of this coding choices, whoever knows at least something will be treated as knowledgeable and compared to who, instead, ignores all matters; similarly, those who say 'I don't know' at least once will be treated as hesitant and compared to who always provide a valid answer instead.

isolate the presumed causes of a certain phenomenon, minimise all other factors that have not been identified as causal, and hence see whether the expected change occurs (Webster and Sell 2014). When a change occurs, we can speak of *internal validity*, which basically refers to the validity of the results in that specific experimental case and precise sample. This means that we do not necessarily need a representative sample to say that a change has occurred – although the magnitude of that change cannot be discussed in detail. Experimenting on non-representative samples is very common in the social sciences, especially when the experiment is at a very primitive stage. In fact, running an experiment on a representative sample requires more time as well as a higher budget, so it is more difficult to achieve and not as common to read in scholarly literature. However, if able to run an experiment on a representative sample, one has the chance of quantifying the effect and saying something universal. You can claim, for instance, that the causal relationship that emerged in the experiment also applies to other populations (Shadish, Cook and Campbell 2002). This is the concept of *external validity* (Campbell, Stanley and Gage 1963:5), something we cannot aspire to here, given the nature of the sample.

Owing to time and budget restrictions, the experiments here reported were pilot-tested on a convenience sample – a non-probability sample that was drawn from a population close to hand. We sampled about 200 students from the University of Milan, all of which are bachelor students that have more or less the same educational background – they either belong to the Department of Social and Political Sciences or to that of International, Legal, Historical and Political Studies. The majority of students were invited to complete the online survey in the lab just after class, during the months of June and July 2019, while others were given the link just after exams and were asked to kindly find time to fill it in at a later date or whenever possible. The data collection was mostly run from June 2019 to November 2019, although a small portion of students was also recruited during June 2020, when they were invited to participate to the online survey and hence provided with the link in virtual classes because of the Covid19 pandemic[60]. Given these premises, we cannot speak of external validity, but we can still observe whether the treatment has had an effect or not – and if it has, we can call this valid. In fact, we can still speak of internal validity even though our recruited pool of respondents

---

[60] The time difference and setting will be accounted for, although they do not seem to interfere sensibly with the experimental manipulation.

does not constitute a probability sample, and especially because the units under investigation were randomly assigned to treatment. If each unit has instead the same chance of receiving treatment or sitting in the control group instead, the researcher can assume that the control group behaves as the treatment group would have behaved, had it not received the external stimuli (Druckman et al. 2011). Indeed, random assignment distributes the sources of error – personality traits, for example, and other factors that can have an influence on the respondent's reactions – evenly across conditions (Webster and Sell 2014), so that we can concentrate on whether the effect has manifested or not.

3.7 Results

3.7.1   A question of content

This first part of the experiment concerns question content alone and was designed as a within-subject experiment. Consequently, all respondents were administered a selection of topics that pertained to three different dimensions of political knowledge (i.e., the temporal, the topical, and the gender-relevant dimension). The purpose of this initial part is to check whether respondents react differently to content because of their gender. We will look for intra-gender variation, that is, how women and men respectively react to the different content; this will allow is to see the topics that women and men know the most and the least. We will also check for some inter-gender variation, and hence compare the performances of women to those of men; this can help us see if women's levels of knowledge equate those of men or, on the contrary, differ because of the content of the question.

To each gender their own knowledge – at least, this is what hypotheses H1a and H1b suggested. We thus expected women to provide more correct answers to female-relevant questions as opposed the male-relevant and to policy-specific facts as opposed to general questions about institutional rules and figures. We predicted the opposite situation for men. The results of the descriptive analyses are summarised in the tables below.

Table 12 Intra-group variation on male versus female-relevant content. Women (N) 136, Men (N) 63. The percentages of women and men was derived by averaging the percentages of women and men who answered the questions correctly across all female and male-relevant items.

	% correct			
	M-relevant	F-relevant	Gap	pvalue
Women	43.6	48.3	-4.8	0.437
Men	61.5	50.0	11.5	0.194

Table 12 shows that women provided more correct answers to female-relevant questions as opposed to the male-relevant ones (48.3% versus 43.6%), while men provided more correct answers to male-relevant questions as opposed to female-relevant ones (61.5% versus 50%). The intra-gender gaps are of about 5 percentage points and over 11 percentage points for women and men respectively; while this result was anticipated for both men and women, the intra-gender gap is not statistically significant for neither gender group.

Table 13 Intra-group variation on institutional versus policy/specific information. Women (N) 136, Men (N) 63. Percentages of correct answers for women and men were derived by averaging the percentages of correct answers across all items of institutional and policy matters.

	% correct			
	Institutions	Policy/specific	Gap	pvalue
Women	46.7	45.2	-1.5	0.804
Men	62.7	48.8	13.9	0.116

A similar situation can be seen in Table 13. We expected women to provide more correct answers to policy-specific questions than to questions about institutional politics and men to provide more correct answers to questions about institutional politics than to policy-specific questions. Instead, the results show that the percentage of women who answered the policy/specific questions correctly is very similar, in fact equal, to that of women who gave a correct answer to questions about institutions (45.2% versus 46.7%). As predicted, men appear to know more about institutions than about policies, but the intra-gender gap is not in any case significant. From the table we see that 62.7% of men knew the answer to the questions about institutions, whereas a smaller percentage, 48.8%, answered the policy/specific questions correctly. However, although the gap

seems to be non-residual (it amounts to almost 14 percentage-points) it is not statistically significant[61].

Table 14 Intra-group variation on static versus surveillance content. Women (N) 136, Men (N) 63. Percentages displayed in the table for both women and men are derived by averaging the percentages of correct answers across all static and current-news items.

| | % correct | | | |
	Static	Surveillance	Gap	pvalue
Women	54.0	37.9	16.2	0.007
Men	72.6	38.9	33.7	0.000

We had no predictions about how women and men would perform if administered a question about current news instead of a question asking them for information that had been circulating for a while. Nevertheless, Table 14 shows that both men and women appear to know more about static facts than about facts that require monitoring, and the intra-gender gaps are significant for both gender groups.

Because all of the hypotheses turned out to be inaccurate, we might conclude that women and men do not have sectorial interests and knowledge in politics, unlike the expectations. In fact, the variations across topics within the same sex category, although present and sometimes non-residual, are never statistically significant. The only exception is for historical occurrences, which both women and men seem to know more about than recent facts – but this is telling us that historical occurrences are just easier to recall for both. So, on the one hand, this suggests that women and men do not prefer one issue instead of the other; on the other hand, when we compare the percentage of correct answers between women and men on the same topic (so that we are looking for inter-gender differences), we observe statistically different amounts. Results are summarised in Table 15.

---

[61] Although the gap seems to be non-residual (it amounts to almost 14 percentage-points) it is not statistically significant. However, the *pvalue* is not so far off the threshold level of 0.05, and hence it would be interesting to doublecheck this performance on a more abundant sample.

Table 15 Inter-group variation and gender gaps for al subsections. Women (N) 136, Men (N) 63.

	% correct			
	Men	Women	gap	pvalue
Temporal				
Surveillance	38.9	37.9	1.0	0.893
Static	72.6	54.0	18.6	0.013
Topical				
Policy-specific	48.8	46.7	2.1	0.783
Institutional	62.7	45.2	17.5	0.022
Relevance				
F-relevant	48.3	50.0	-1.7	0.823
M-relevant	43.5	61.5	-18.0	0.018

The table shows that men know more about institutional politics than women, but not significantly more about policy-specific topics. The gender gap, however, does not seem to be limited to questions of institutional politics only. In fact, it is also large and significant on items that are static and male-relevant, while no statistically significant gender gap is traceable for topics that require surveillance, that are policy-specific and that are female-relevant. These results confirm the last hypothesis on question content (H1c).

Table 16 'Female-relevant' versus 'male-relevant' topics. Inter-group gaps. Women (N) 136, Men (N) 63. Percentages of women and men who answered correctly are listed for each item.

	% correct			
	Men	Women	gap	pvalue
Female-relevant				
Maternity	23.8	41.2	-17.4	0.017
Casellati	68.3	44.1	24.1	0.002
Divorce	73.0	75.7	-2.7	0.681
Female MPs	34.9	32.4	2.6	0.720
Average	**50**	**48.35**	**1.65**	**0.829**
Male-relevant				
Welfare	25.4	21.3	4.1	0.523
Fico	76.2	47.8	28.4	0.000
Republic	73	48.5	24.5	0.001
M5s	71.4	56.6	14.8	0.046
Average	**61.5**	**43.55**	**17.95**	**0.019**

Women do not seem to prefer a specific topic to the other but tend to score about the same on all question dimensions; men, on the contrary, most definitely prefer the items that ask about institutional figures (general topics), that look for text-book knowledge (and hence are static) and that are male-relevant; taken together, these three characteristics typically define the "conventional" knowledge questions that we so often use in questionnaires on political knowledge.

There is, however, an important factor that cannot be neglected – we are, after all, considering aggregated information, as most researchers do when measuring the average level of knowledge. However, if we disaggregate the data and take the proportion of women and men answering correctly to each item, we can also observe another interesting fact. Table 16 shows us that it does not really matter if questions about institutional figures concern women or men – men will always have a significant knowledge advantage. If we take the question about the President of the Senate, the gender gap is of a significant 24.1 percentage points in favour of men, despite the fact the President is a woman. The gap is significant for all other questions about institutions: on the question about the President of the House of Deputies, the gender gap amounts to a statistically significant 28.4 percentage-points difference, and men also averaged the share of seats of the leading party in Parliament with greater accuracy than women. However, there is no gender gap as regards to the question asking respondents to average the percentage of women in Parliament. Here, no gender group performed better than the other. Instead, the results show that women perform better than men on two questions – the one about the divorce referendum, although not significantly better than men, and that on maternity leave, and this time, significantly so. The percentage of women who knew the correct answer to the maternity leave question amounts to 41.2%, while only 23.8% of men knew how long compulsory maternity leave is. The knowledge gap is of 17.4 percentage points and is very significant.

3.7.2   What happens when answers are expressed

Apart from knowing less, women seem to answer less in general. The biggest driver of the so-called 'gendered-psyche' seems to lie in the topics under investigation; hence, when a question is about institutions, women might simply answer less, despite any given encouragement. One solution to this problem, as shown in the first section of this

analysis, is to offer respondents a selection of questions that cover different political matters and hence calculate knowledge estimates separately for each item; the underlying hypothesis is that women will answer more if questioned about topics that are more familiar to them. We will, of course, continue on this track in the second part of the analysis. However, counting only the correct answers to questions about institutions and policies while pairing DKs and incorrect answers in one indistinguishable amount does little to consider women's uneasiness before a question of political knowledge, as well as the accuracy of women's answers as compared to those of men.

A second solution is that of controlling this tendency post hoc during analysis, and the literature has suggested a few methods to do so. One of these methods is to also consider the chances of women and men to provide a substantial answer as opposed to a DK, as well as the odds of that answer being correct. For this reason, logistic regressions were performed by using the open-ended items on institutional politics, the open-ended items on policy issues and the open-ended question on maternity leave as 3 distinct dependent variables. Three measures of political knowledge were offered for each topic – the Positive Knowledge Scale, the Expression Scale and the Accuracy Scale.

Because the knowledge scales on, respectively, institutional politics and policy-specific matters pool together two items for each topic, the coding goes as follows: the Positive Knowledge Scale assigns a score of 1 to whoever knows at least one item or both, and gives 0 to whoever answers incorrectly or admits to not knowing both items; the Expression Scale gives the value of 1 to whoever provides two valid answers and 0 to those who express at least a DK; finally, the accuracy scale assigns 1 to respondents who answer at least one of the two items correctly and 0 to those who answer to both incorrectly. Because of these coding choices, whoever knows at least something will be treated as knowledgeable when compared to who, instead, ignores all matters; similarly, those who say 'I don't know' at least once will be treated as hesitant and compared to who always provides a valid answer instead.

By running separate models on three distinct dependent variables, we have the opportunity to test if gendered patterns of response indeed depend on whether the matter under investigation is male-biased (institutional politics), female-biased (maternity leave), or stands somewhere in-between (policy issues). As hypothesized earlier on in this chapter, we expect the knowledge gap to be present and in favour of

men, only when knowledge is measured via the Positive Knowledge scale and refers to male-biased content (H2a). We also expect women to have lower chances than men of *simply providing* a valid answer to male-biased content (H2b), but equal chance of providing a correct answer once a valid answer is actually expressed (H2c). We do not expect these gendered patterns of response to appear as evident when topics other than institutional politics are used, exception made for when we use questions that have female-biased content. For these questions, we expect women to have equal chance of providing a valid answer and higher chance of providing a correct answer once a valid answer is actually expressed (H2d).

Table 17 Logistic Regression coefficients (output in OR). Political knowledge question on institutions (open-ended).

	Institutional			Policy			Maternity		
	PO	EX	AC	PO	EX	AC	PO	EX	AC
Female	0.33 ***	0.23 ***	1.58	1.47	0.30 ***	2.91 ***	2.24 ***	1.42	2.21*
	(0.11)	(0.09)	(0.89)	(0.45)	(0.11)	(1.30)	(0.77)	(0.72)	(0.78)
Constant	3.20	5.33	6.86	0.70	4.73	0.14	0.31	8.0	0.36
	(0.95)	(1.36)	(2.77)	(0.18)	(1.56)	(0.06)	(0.09)	(3.20)	(0.11)
R	0.04	0.07	0.01	0.01	0.05	0.03	0.02	0.01	0.02
N	199	199	138	199	199	183	199	199	181

*p<0.05 **p<0.01 ***p<0.001

Table 18 shows the output of the logistic regressions[62], and also that most of the predictions were true: in fact, a knowledge gap in favour of men is present insofar as we are questioning respondents on institutional matters and using the Positive Knowledge scale to analyse results. In no other situation do men appear to know more about politics than women. If we pair the Positive Knowledge scale to policy issues or to the maternity leave question, the gender gap is either not statistically significant or in favour of women respectively. Hence, women know *as much* as men about policy issues and *more* than men about compulsory maternity leave. H2a is largely to accept.

On the other hand, women do come across as more hesitant and unsure, and generally provide fewer substantive answers than men. The table shows that it does not really matter if the questions are about institutions or policy issues – the gender gap on the Political Expression scale is statistically different from 0 and favouring men on both

---

[62] Results are in Odds Ratios, so anything above 1 means higher chances and anything below 1 represents lower chances. The value 1 represents equal chances per se.

occasions. H2b is partially to reject. Women appear to be as confident as men only when the question concerns compulsory maternity leave; here, they do not seem to say that they 'don't know' more than their male counterparts and the gap on the Expression scale is not statistically significant. This is the only item, out of the ones analysed, for which women feel as confident as men.

Last but not least, when we rule out the DK answers, and measure knowledge via the Accuracy scale, women do not appear to know less about politics than men; actually, they seem to know just as much about institutions and more about policy issues and compulsory maternity leave than their male counterparts. For the latter two topics, the gender gap on the Accuracy scale is favouring women and is significantly different from 0.

3.7.3   The content, the format and the hidden knowledge.

By treating respondents to a DK discouraging protocol, we expected the gender gap to shrink in the knowledge items that asked about institutional politics, provided that the questions were in a closed-ended format (H3a); instead, we expect the gender gap to enlarge when respondents are fed a DK-discouraging treatment to open-ended items (H3b). However, the suspicion is that women are hiding more knowledge when interrogated on something they do not feel adequate or entitled to answer, but when the topic of the question is less hostile, they behave in similar ways to those of men (H3c). We see all of this in this section.

Table 19 displays the percentage differences in correct answers of women and men in control and in treatment on closed-ended items. The entries for each topic (static, current, male and female-relevant) are percentages of men and women answering correctly, averaged across the two items that pertain to each category of knowledge. The table shows the differences between the control and the treatment groups.

Table 18 Percentages of men and women answering correctly to closed-ended items, compared across experimental groups. The gender gaps for each topic represent the percentage-point difference between men and women. When positive, the gap is in favour of men. When negative, the gap is reversed, so in favour of women. Two-samples t-test were performed to assess statistical significance. The overall gender gap (in bold) represents the average difference between women and men across all topics.

	Closed-Ended Items					
	Control (N 105)			Treated (N 94)		
	Men	**Women**	**GG**	**Men**	**Women**	**GG**
Static	68.5	61.5	7.0	76.4	62.9	13.5
Current	50.0	40.5	9.5	55.5	50.0	5.5
M-relevant	64.8	51.3	13.5	77.8	54.3	23.5
F-relevant	53.7	50.7	3.0	54.1	58.6	-4.5
Overall GG			*8.3*			*9.5*

* p ≤ 0.05 ** p≤ 0.01 *** p≤ 0.001

The DK discouraging treatment appears to have helped both men and women declare some hidden knowledge in, respectively, historical political happenings and current facts. In fact, when the DK option is not available, men perform much better on static items (76.4 versus 68.5 in control) but no better on current facts, while women register the opposite situation, and improve their score on the latter subject only (50 versus 40.5 in control). As a consequence, the gender gap gets wider with treatment on static items (13.5 as opposed to 7.0 in control) and smaller for current ones with respects to control (5.5 versus 9.5). The DK discouraging treatment also appears to have significantly uncovered some hidden knowledge on behalf of men for male-relevant topics, and on behalf of women for female-relevant topics. Treated men perform better on male-relevant items as compared to men in control (77.8 versus 64.8) but perform no differently when questioned about female-relevant issues (54.1 versus 53.7). Treated women, instead, provide more accurate answers on female-relevant questions in treatment as compared to control (58.6 versus 50.7), but only register a slight and negligible increase in knowledge on male-relevant topics (54.3 as compared to 51.3 in control). This results once more in the gender gap opening on male-relevant items with treatment (23.5 as opposed to 13.5) and reversing on female-relevant ones (-4.5 versus a positive 3.0) with respects to control.

The polarization of women and men in their relative fields of expertise is rather evident; when treated to a DK-discouraging protocol, men reveal more knowledge about male-relevant and static topics as compared to women, while women turn out to be more accurate than men on topics that are current and regard them primarily, though only

when prompted. Nevertheless, none of these differences across the experimental groups are significant, so we cannot say that treatment has had the desired effect. In fact, the overall gender gap does not change in any significant way; it goes from a difference of 8.3 percentage points in control to a 9.5 percentage-points difference in treatment, a negligible increase.

Instead, Table 19 shows the percentage differences in correct answers of women and men in control and in treatment on open-ended items. The entries for each topic (institutions, policy, male and female-relevant) are percentages answering correctly, averaged across the two knowledge items that pertain to each category of knowledge. The table accounts for the differences between the control and the treatment groups.

Table 19 Percentages of men and women answering correctly to open-ended items, compared across experimental groups. The gender gaps for each topic represent the percentage-point difference between men and women. When positive, the gap is in favour of men. When negative, the gap is reversed, so in favour of women. Two-samples t-test were performed to assess statistical significance. The overall gender gap (in bold) represents the average difference between women and men across all topics.

	Open-Ended Items					
	Control (N 99)			**Treated (N 100)**		
	Men	**Women**	**GG**	**Men**	**Women**	**GG**
Institutions	58.6	42.1	16.5	83.8	50.0	33.8***
Policy	25.9	28.6	-2.7	23.5	34.1	-10.6
M-relevant	44.8	31.4	13.4	55.9	37.9	18.0*
F-relevant	39.6	39.3	0.4	51.5	46.2	5.3
Overall GG			*6.9*			*11.6***

* p ≤ 0.05 ** p≤ 0.01 *** p≤ 0.001

The DK discouraging treatment appears to have helped especially men uncover some hidden knowledge on the topics that they know best. When encouraged to answer, men do extremely better on questions about institutional politics (83.8% in treatment as compared to 58.6% in control) and on questions about male-relevant topics (55.9% in treatment versus 44.8% in control). Treated men also score higher in female-relevant questions (51.5% as opposed to 39.6% in control) but no differently in questions about public policies (23.5% in treatment versus 25.9% in control). On the contrary, treated women perform slightly better on all topics as compared to women in control; percentages of answering correctly grow with treatment from 42.1 to 50% on

institutional politics, from 28.6 to 34.1% on public policies, from 31.4 to 37.9% on male-relevant issues and from 39.3 5o 46.2% on female-relevant ones.

Although, again, treatment seems to have helped women and men uncover some hidden knowledge on their respective areas of expertise, discouraging DKs to open-ended items ultimately appears to have had a significant effect on men only. In fact, because of their improvement with treatment, the gender gaps on institutional items and male-relevant issues grow in a significant way. Instead, women's increases in knowledge are not significant, although the gender gap on policy issues enlarges in their favour with treatment. The ultimate result is that the overall gender gap almost doubles when DK answers are discouraged to open-ended items.

For a more detailed picture of what happened after treatment on each item, Table 20 and Table 21 break down the percentages of correct answers for each closed-ended and open-ended item respectively and highlight how they change for each question as a consequence of treatment, alongside the gender gaps.

Table 20 Percentages of men and women answering correctly to each closed-ended question in control and in treatment respectively; gender knowledge gaps are displayed for control and treatment, together with the magnitude of their difference.

	% correct answers				Knowledge Gaps		*Diff (p.p.)*
	Control (N=105)		Treated (N=94)				
	M	W	M	W	C	T	
Female MPs	33.3	28.2	36.1	37.9	5.1	-1.8	6.9***
M5s	66.7	52.6	75.0	62.1	14.1	12.9	1.2
Divorce	74.1	73.1	72.2	79.3	1.0	-7.1	6.1***
First Rep	50.0	63.0	80.6	46.5	13.0	34.0*	21.0***

* p ≤ 0.05 ** p≤ 0.01 *** p≤ 0.001

As regards to closed-ended items, increase in correct answers came disproportionately from women on the two female-related questions – divorce and average number of women in Parliament. In fact, the gender gap in control is in favour of men, but reverses with treatment, and significantly so in both cases. Instead, when administered a DK encouraging treatment, men achieve a higher score as regards to the question about the First Republic, which was, as a matter of fact, addressed to them. On this item, the gender gap open significantly.

Table 21 Percentages of men and women answering correctly to each open-ended question in control and in treatment respectively; gender knowledge gaps are displayed for control and treatment, together with the magnitude of their difference.

	% correct answers				Knowledge Gaps		*Diff (p.p.)*
	Control		Treated				
	(N=99)		(N=100)				
	M	W	M	W	C	T	
Casellati	55.2	38.6	79.4	50.0	16.6	29.4**	12.8**
Fico	62.0	45.7	88.2	50.0	16.3	38.2***	21.9***
Maternity	24.1	40.0	23.5	42.4	15.9	18.9	3.0
Benefits	27.6	17.1	23.5	25.7	10.5	2.2	8.3**

* p ≤ 0.05 ** p≤ 0.01 *** p≤ 0.001

Instead, for closed-ended items, increase in correct answers came disproportionately from men on the two questions that asked to identify political figures – and especially on the question asking to identify a man (Fico). On the contrary, treated women gave more correct answers to the question about unemployment benefits, while there was no significant increase in correct answering on the question about maternity leave as compared to control. This last result partly matches what we discovered in the previous section – that women do not need to be encouraged to answer when questions are about something that concerns their needs. However, this is only true when questions of public policies are also female-relevant; indeed, when questioned about the unemployment benefit, women seem to be hiding more than they know, so that the extra help is very much appreciated. Conversely, when questions regard mainstream politics women refrain from answering even when pushed to do so; and they also continue to know a great deal less than men, despite the questions involve female politicians. Institutional and electoral politics are simply not female fields of expertise.

3.7.4   The content, the format and the propensity to guess.

Discouraging the DK option appears to emphasise women and men's different fields of expertise, and when combined to closed-ended items, it seems to help especially women uncover some hidden knowledge. However, as opposed to open-ended items, the implication of the closed-ended item format is that the increase in knowledge could be due, at least in part, to lucky guessing. Literature points to men being the greatest risk-takers, but our results show that the extra knowledge comes especially from women. It

is true that literature has only provided examples of men guessing more than women before knowledge questions about institutional or electoral politics; it has given no record of men or women's propensity to guess before issues that deal with other dimensions of politics.

So as to see who guessed the most on what topic, Table 22 breaks down the increase of correct answers for women and men in treatment into different components, so as to take into consideration the portion of knowledge stemming from lucky guessing. The first grouping of columns represents the percentages of correct answers of men and women in both control and treatment. The last grouping of columns shows the improvement over lucky guessing for both women and men. This was obtained by subtracting the expected percentages of correct answers of treated individuals (*'Expected with Blind Guessing'*) to the actual percentages of correct answers (*'Treated'*). The expected percentages were estimated by considering the DK answers in control as substantive but random answers in treatment and reallocating them equally across the remaining response categories[63]. This was done on the assumption that all DK responders in the DK-encouraging condition would have guessed randomly had they been treated to a DK-discouraging protocol[64]. Any improvement after the reallocation is then due, not to lucky guessing, but to real, hidden knowledge (*for similar methodology, see* Luskin and Bullock 2011).

Table 22 Percentages of men and women answering correctly to closed-ended items in control and treatment; expected percentages had all men and women in control guessed randomly when given the treatment; increase in percentages due to lucky guessing; and improvement over lucky guessing.

| | % correct answers | | | | Expected with Blind Guessing | | Increase in Lucky Guessing | | Improvement over Lucky Guessing | |
| | Control (N=105) | | Treated (N=94) | | | | | | | |
	M	W	M	W	M	W	M	W	M	W
M5s MPs	66,7	52,6	75,0	62,1	68,5	56,4	1,9	3,8	6,4	5,7
First Rep	63,0	50,0	80,6	47,0	65,7	54,8	2,8	4,8	14,8*	-7,8
Divorce	74,1	73,1	72,2	79,3	75,0	74,7	0,9	1,6	-2,8	4,6
Women MPs	33,3	28,2	36,1	37,4	38,9	34,9	5,6	6,7	-2,8	2,5

---

[63] The percentage of DK answers in the control group was divided by four, which equals the number of possible answers that respondents were presented with, once the DK option is ruled out. Results of this division fall under the column 4 (*'Increase in Lucky Guessing'*).

[64] There were no DK responders in the DK-discouraging condition, otherwise, they would have been subtracted from the total count of those who we assume are guessing.

* p ≤ 0.05 ** p≤ 0.01 *** p≤ 0.001

On the one hand, the treatment seems to have worked especially for men; in fact, improvement over lucky guessing is significantly large just for them in the case of the question asking to date the end of the so-called 'First Republic'. This is not surprising, as this item in particular pairs two content features that advantage men – male-relevance and staticity. Yet, it is the only item on which men perform exceptionally better than women. Improvement over lucky guessing is about the same for women and men on the question about the share of seats of the leading party in Parliament (the M5s), and the increase in knowledge is positive for women only (hence not for men) for both the 'female-relevant' questions – the one about the divorce referendum and that on the percentage of female MPs. Hence, men do not seem to be guessing so much on neither the topics that are male-relevant nor on those that are female relevant. They might have guessed a little on the share of female seats in parliament, which makes sense, as it is a topic that involves institutions, but they have definitely not guessed about the date of the referendum on divorce (men in control performed better than men in treatment). When we look at women, rather than guessing, treatment seems to uncover some hidden knowledge on female-relevant topics (plus the question about M5s MPs), while it does very little in the case of traditional, standard questions (which are male-relevant and "text-book" information).

3.8 Political interests and gender gaps.

This last section is dedicated to a side experiment we ran within the same online survey on women and men's political interest. Interest in politics is usually measured by having respondents self-assess their level, so it is difficult to discern objective from psychological perceptions. Previous literature suggests that women are, on average, less interested in politics but that they also underestimate their level of involvement, while men are generally more interested but instead overestimate their level of engagement instead (Preece and Stoddard 2015; Robinson Preece 2016; Pate and Fox 2018). This happens largely because 'interest in politics', just as knowledge in politics, is primarily understood as interest in 'national politics', which we know by now is a male domain of interest; the fact that women are not as engaged in it is not surprising at all. However, if we take the very general and vague concept of political interest and unpack it into more

specific areas of politics, women are not always less interested. Coffé (2013), for example, confirmed this by asking respondents to rate their interest in politics, local issues, national issues, and international issues. Her results showed that there is no gender difference in interest in local issues, and that, actually, once political efficacy is controlled for, women seem to be more interested in it than men.

While they might appear as less interested in general, women are actually just not as interested in national politics as men. A non-residual part of the gender gap in interest is also due to women's lower levels of self-efficacy, which make them feel as if politics was not for them. However, experimental manipulation has shown that it is possible to change the stated levels of interest by providing respondents with stimuli that can minimize their subjective impressions. One way, for example, is to feed respondents with a confidence boost; Robinson Preece's (2016) experimental setting showed that this was indeed sufficient to close the gender gap in political interest. After completing a multiple-choice test on political knowledge, respondents were either thanked for taking the test, given a positive feedback on their performance regardless of their score, or given accurate feedback. Immediately after receiving this feedback, respondents were asked how interested they were in governmental and political affairs. The author found that positive feedback increased women's level of political interest enough to close the gap but had no effect on men. Instead, accurate feedback depressed men's levels of interest enough to close the gap but had no effect on women. This shows that perceptions of how women and men fit into the political realm are different – women are too self-conscious when talking about politics and men are overconfident – so that having respondents self-assess their levels of interest might produce biased estimations. However, it also shows that self-perceptions are malleable, and that women are particularly sensitive to encouraging stimuli, while men are not.

A treatment that boosts confidence in one's own cognitive abilities in political-related tests increases the level of interest for women but not for men. On the contrary, a treatment that casts doubt on personal perceptions related to politics has a negative effect on men but not on women. In a similar way, when forced to rate their interest in specific areas of politics, women appear more interested than men in some sectors. The experiment here reported wanted to stimulate respondents to think about politics in other ways than its traditional understanding. The aim was to disconnect the general term of 'interest in politics', to its specific understanding of 'interest in institutional

154

politics'. For this reason, the self-placing, standard question, "In general, do you follow politics with a lot, quite a lot, a little or no interest?", was administered to all respondents but in different places within the questionnaire. About half of the respondents, randomly selected for the control group, received the question straight after the political knowledge items, while the treated group first had to go through a battery of provocative statements on political issues. In fact, all respondents were invited to express their level of agreement on 14 items, half of which were quite standard issues of political opinion we often have the chance of discussing, while the other half invited respondents to reflect on female-relevant issues in particular. However, only the treated group received the question about political interest after having spoken their minds on the political opinion battery (which will hence be considered the treatment in this experiment).

We expect women to be less interested than men, on average, but that their perceived level of interest is malleable. In fact, having women express their political opinion on a selection of current and so-called 'gender' issues can be a way to raise the threshold of female attention and interest. The hypothesis is that women in treatment would feel more involved in the political debate and hence show a higher degree of interest than the women in the control group. The first two hypotheses can be summarized as follows:

H4a (the interest gender gap hypothesis): women are, on average, less interested than men in politics, despite being in the control or the treatment group; and

H4b (the increasing interest hypothesis): treated women are more interested in politics than women in the control group.

Instead, predicting the behaviour of the male population is a more laborious task and can lead to two alternative hypotheses. While on the one hand the opinion battery may be perceived as an opportunity to talk about politics and hence raise the general interest, on the other hand the unusual presence of female-relevant issues may discourage the political debate among men. As literature suggests that men tend to be less sensitive to stimuli that encourage participation – because they already receive as many from the external environment on a daily basis – treatment should not produce differences in the level of interest among men. If, on the other hand, the mix of standard

and unconventional political topics proves to be a disincentive, because it rediscusses what we usually mean by 'political interest', then treatment would cause a decrease in the level of interest among men. Hence:

H4c (the no effect hypothesis): treatment has no effect on men, so that men in the control group have the same levels of interest as men in the treatment group.

H4d (the lowering interest hypothesis): treatment has a discouraging effect on men, so that men in the treatment group appear as less interested than men in the control group.

Finally, if we consider the combined effect of treated women and men – that is, we take women to state more interest and men to declare either less interest or no change – we expect to observe a decrease in the gender gap on political interest. The last hypothesis goes as follows:

H4e (the closing interest gender gap hypothesis): the gender gap on political interests narrows in the treatment group.

3.8.1   The broader the concept, the frailer the interest.

All respondents were asked to self-declare their level of interest by saying whether they were very interested, fairly interested or not at all interested in politics. The control group was asked to do so straight after answering to the questions about political knowledge. The treated group was, instead, first administered a battery of 14 political statements, where respondents were asked to rate their agreement on each item (from complete disagreement to full agreement) [65]. While half of the items were dedicated to political topics we are quite used to talking about – i.e., euthanasia, immigration and worker's conditions – another half had a clear focus on women's issues; we hence asked respondents for their opinion on issues such as abortion, the tampon tax and sexual assault. Results are presented in the table below.

---

[65] See Appendix for the battery of political opinion.

Table 23 *Percentages of men and women on the political interest scale, for both control and treatment.*

	Control (90)		Treated (109)	
	M	**W**	**M**	**W**
Very interested	51.7	8.2	26.5	8.0
Fairly interested	27.6	57.4	58.8	57.3
Not interested	20.7	34.4	14.7	34.7
	Pr = 0.000		Pr = 0.011	

On average, men say they are more interested in politics than women are, both in the treatment and the control group, as anticipated in H4a (which is hence confirmed). Gender differences are observable on both groups and significantly different from zero, especially if we concentrate on the individuals who claim to be "Very interested". Among the latter, the gender gap amounts to 43.5 percentage points in control (51.7 for men versus 8.2 for women) and to 18.5 percentage points in treatment (26.5 versus 8.0) and is always in favour of men. It seems that having forced a random half of the sample to concentrate on a wide array of political topics has narrowed the gender gap among those who rate their level of interest the highest – although not in the way we expected. In fact, the experiment has had no effect on women at all, but while women's levels of interest remain exactly the same, men's tragically fall. Because of treatment, men seem to abandon the top category of interest and moderate their interest levels instead: the percentage of "very interested" men goes from 51.7 in the control group to 26.5 in treatment – a significant 25.2 percentage-points loss. Hence, the reduction in the gender gap on political interest in our sample is not due to women understating their engagement in control, but to men reconsidering their level of interest after treatment.

Treatment only decreased the gender gap on political interest as a side-effect of men lowering their self-reported levels of interest; as a consequence, H4e (the closing interest gender gap hypothesis) and H4d (the lowering interest hypothesis) are confirmed at the expense of H4b (the increasing interest hypothesis) and H4c (the no effect hypothesis). The reasons why this has happened are mainly two. The first, is that treatment might have been successful in eroding a little the tendency to think about 'politics' as 'national politics' exclusively. In fact, respondents were able to broaden their traditional understanding of the term when offered a variety of topics that are not usually defined as political, inasmuch as they are considered 'gender-issues', and hence a niche of politics (if even). A second feature that can help explain this result is that the control

group received the question on political interest immediately after the open-ended questions on political knowledge, which focused on topics that men prefer for the most part. In fact, two of the open-ended items on political knowledge were about institutional figures – which we know advantage men, including when asking about female politicians – narrowing the number of female-relevant questions down to one (i.e., the question on maternity leave). It is possible that this disproportion of topics in favour of men in the last section of the knowledge questions has either worked as a confidence boost – men generally perform well on questions such as these – or reinforced the understanding of political interest as 'interest about institutions' (or both). Both of these explanations suggest that the result of this experiment on interest can be taken as further evidence of the fact that the word 'politics' evokes just one precise section of the subject.

3.9 Discussion and Conclusions

This chapter had set itself two goals: that of showing that respondents develop different interests and separate areas of expertise depending on their gender; and that of highlighting the limitations of not considering this binary division of knowledge patterns in social research on political gender gaps. In fact, women and men mature a political gender alongside the social expectations connected to their social gender role; this results in them learning about different topics and taking at heart distinctive issues. A strongly gendered social life leads to a specular segmentation of expertise in politics, so that women come to know about issues such as parental leave, and men are more engaged in institutional happenings and political leadership. These issues do not stand on the same level. In fact, the so-called 'gender-issues' appear to concern only women, and hence are taken as a political (and sometimes even just a social) niche; instead, institutional politics is considered to be universal knowledge, when it is only a section of politics. This allocates what men and women know and are interested in, in a hierarchical order.

Far from being neutral territory, institutional politics is a section that men prefer and know about far more than women. While it is important to know about other aspects of politics as well, we often take constitutional politics as representative of all that politics means. Because of this conceptualization of politics, social and political research only consider the latter when collecting data on political behaviour. This almost

intentionally leaves out women's political experience from the picture, while the measurement disguises itself as impartial. So, we interpret the gender gaps in political engagement as political apathy at the hands of women, when we could read them instead as a lack of data. Luckily, we now have the evidence to suggest that the latter interpretation is very likely the correct one. To show that women and men have preferences over political topics, and that institutional politics is a male domain of expertise, we put together a wider array of questions than usually seen in questionnaires, and hence tested how gender interacted with each one. We considered three dimensions of political knowledge – a temporal dimension, a topical dimension and a gender-relevant dimension, for a total of 8 questions. We expected gender to interact with question content in two ways: by creating a) intra-gender variation, i.e., differing knowledge levels across topics within the same sex category; and b) inter-gender variation, that is, differing knowledge levels of the same topic across the two sex categories.

As regards to the intra-gender variation, we predicted that women would perform better on female-relevant questions and on questions about public policies (H1a), and we expected men to know more about male-relevant issues and about institutional politics (H1b). Both of these hypotheses had to be rejected; in fact, the variation across topics within the same sex category, although present, was never statistically significant. This seemed to suggest that women and men do not prefer one issue instead of the other. This went against the initial hypothesis; however, it is worth mentioning that the intra-gender gap for men was considerably (and significantly) larger than that of women on all contrasting topics (i.e., male versus female-relevant, static versus surveillance and general versus policy-specific). This somehow suggested that while women might not prefer male-relevant over female-relevant issues, nor institutional politics over policy-specific issues, men most certainly do. And men also prefer static to changing information to a greater degree than women.

Some gratification (and proof) came in the analysis of the inter-gender differences, where we correctly hypothesized that men would know more than women about institutions, male-relevant issues and static facts but no more than women about policy issues, female-relevant issues and news that requires surveillance. And indeed, the size of the gender gap in favour of men turned out to be greater on items that asked about institutional figures (general topics), that looked for text-book knowledge (and hence are static) and that were male-relevant; taken together, these three characteristics typically

define the "conventional" knowledge questions that we so often use in questionnaires on political knowledge. But the results also show that if we considered other characteristics of political facts when formulating questions about politics – they could be current and circumscribed to one policy or event or related to women's life experiences – women would not lag behind men but would have equal levels of knowledge. This is undeniable evidence that the questions about political knowledge currently in use have a strong male-bias, and that alternative and fairer questions can be formulated by considering other aspects of politics. The fact that question content has never been renovated, despite literature has pointed out the conceptual limitations of current methodology on many occasions, implicitly means that politics is still perceived as a man's game, as well as a synonym of electoral and partisan politics in research and public opinion. If knowledge, on the other hand, could also encompass diverse political areas and issues, such as gender issues, civil rights or social policies, then the differences between men and women would be reduced.

More detailed and important findings emerged when we analysed the disaggregated data, and hence the percentages of women and men answering correctly to each item taken separately. First, the results demonstrated that on the question asking to identify the President of the Senate, a woman, men still achieved a higher score than women. This shows that it does not matter if the political figure we are asking respondents to identify is a woman – men will always have a significant knowledge advantage on their female counterparts on questions like these. Hence, it cannot be called 'female-relevant' content whatsoever. Men also achieved higher scores on all other questions about institutional facts and figures, which shows that topics like these are strongly male-coded, so we simply cannot expect women to perform as well as men. There is, however, one important and non-negligible exception: when women and men were asked to average the percentage of female members of Parliament, neither gender group performed better than the other. This exception might be due to the fact that asking respondents to average the share of seats women MPs occupy in Parliament combines both male and female areas of expertise. In fact, although the question refers to institutions, it is also female-oriented, and while it refers to the so-called 'rules if the game', it is not such a 'text-book' question after all. One can, indeed, infer the percentage of women in representational roles from the knowledge they have about politics and its inequalities.

As regards to the temporal dimension, our results suggested that both women and men knew more about historical facts than about current news, and that men significantly knew more about 'static' information than women. Instead, no gender gap was found on the items that tackled 'surveillance' news. However, when we disaggregated the data, it became evident that men's advantage on 'static' items was only circumscribed to the male-relevant item. In fact, women performed better than men on the question about the divorce referendum, which was the 'female-relevant' item amid the questions of historical politics, although not significantly. Instead, women achieved a higher score on the question about compulsory maternity leave, and this time, the knowledge gap in their favour was large and significant. It is true that literature had already spotted the one combination of topics that could show a women's field of expertise – and one for which they seem to have a knowledge advantage on men. In fact, both female-relevant content and public policies are referred to in literature as areas of knowledge that women have equal or higher chance of knowing, and, indeed, when combined, the gender knowledge gap reverses. This works just like when the gender gap is in favour of men because static, institutional and male-relevant contents are combined. In a similar way, questions that combine different elements of female political knowledge (female-relevant and policy issues) will show that women are more knowledgeable on these topics than men. Therefore, the gender gap – either in favour of men or in favour of women – that we can interpret as a clear divergence of interests as well as of a lack of knowledge at both ends. It then looks that only when female and male-relevant dimensions of knowledge are combined the gender gap disappears.

The second section of the analysis demonstrated that knowledge gaps are inflated by both the choice of topic and the way we decide to operationalize knowledge. We had hypothesized that women's uneasiness to reply would be especially large before questions that use a traditional conceptualization of politics, while it would expire when presented with familiar issues (H2b). For this reason, we expected the gender gap to be inflated on items of institutional politics when no measure to control women's propensity not to answer was taken into consideration (H2a), but to be inexistent when women's tendency was accounted for (H2c). Moreover, when this tendency was accounted for and the topic of the question was female-relevant, we expected the gender gap to be in favour of women (H2d). We discovered that this was partly true after using logarithmic models on three variables of knowledge – one male-biased, one female-

biased, and one somewhere in-between – and three operationalization scales – the Positive knowledge scale (0 to incorrect and DKs and 1 to correct answers); the Political Expression scale (0 to DKs and 1 to valid answers); and the Political Accuracy scale (0 to incorrect and 1 to correct answers).

If we had considered only the Positive Knowledge Scale, which is what researchers normally do, then we would have concluded that women have lower chances of providing a correct answer to a question about institutions when compared to men. However, the analysis showed that women know less than men only when questions about institutional politics are paired with the Positive Knowledge scale. In fact, this first operationalization of political knowledge cannot account for women's tendency to provide DKs more than men (it treats DK answers as incorrect) and produces inflated estimates of the gender gap in political knowledge. We discovered this when we re-measured the gender gap by employing, this time, two additional knowledge scales that could account for this 'gendered-psyche' – the Expression and Accuracy scales. Via the Expression Scale, which measures the propensity to answer a question about politics, we determined that women were indeed significantly more likely than men to say, 'I don't know'; and via the Accuracy scale, which ignores all DK answers, we demonstrated that women have the same chances as men of getting the answer right, once they provide one.

It seems that women's disadvantage lies especially in their propensity not to answer a question about politics rather than in an unjustified lack of knowledge. In fact, their tendency not to provide a valid answer is so strong it can be observed also before questions that women are likely to know – for example, policy-specific issues. In this case too, women have higher chances of providing a DK instead of a substantive answer, something we were not able to predict correctly. The 'gendered psyche' gap is, against expectations, present on questions about policy matters as well, and not only limited to matters of institutional politics. When we do not account for this tendency not to reply, then women know just as much as men about policy issues, but if we do, then women know more. This looks as if the 'gendered psyche' gap might be completely responsible for the knowledge gap, and that it should be addressed more seriously in research – maybe via post-hoc analysis, by using the framework we provided in this chapter. Finally, the results show that there is only one combination of topics that has women answering at rates equating those of men – female-relevant and policy-specific. In fact, apart from knowing more about topics that concern them primarily, women also feel less risk-

averse when answering them, to the point they even correspond to the confidence levels of men.

Research had already focused on question content, arriving to somewhat similar conclusions, although it had never identified male and female dimensions of knowledge in so great detail. Moreover, it has seldom linked the issue of question content to that of item-format, which is also reported to disincentivize women to answer. Instead, the two matters were combined in the third part of the analysis. In fact, the third part of the experiment tested whether the choice of DK protocol and item format was affecting women and men in diverging ways (H3a & H3b); it also studied whether gendered patterns of behaviour were systematic across different topics, or, conversely, only present before traditional items of political knowledge (H3c). The results reported that discouraging DKs appears to polarize women and men on their preferred fields of expertise, instead of taming the differences as hypothesised. In fact, treatment affected men in the same way it affected women: when incentivized to answer, both performed better on the issues they respectively liked the most. However, the magnitude of the effect changed according to whether the questions were in an open or closed-ended format.

We found out that discouraging DKs to open-ended items widens the gender knowledge gap in favour of men. In fact, it helps men more than women uncover some hidden knowledge, so that the additional correct answers come disproportionately from them – although only on the topics they prefer (which are male-relevant, static and about institutional politics). Women do uncover some hidden knowledge, but not enough to equate the levels of men. It was interesting to notice that, when prompted to answer, women did not significantly increase their knowledge on the question about maternity leave, which suggested that women do not need to be encouraged to answer when questions are about something that concerns their needs. Instead, on the question about the universal basic income, women seem to know about it but to fail to answer; in fact, the extra push really helped uncover their knowledge. Conversely, when prompted to answer, men were able to uncover some knowledge on 'female-relevant' issues as well, although a deeper analysis made us notice that the increase in correct answers were related only to the question asking to identify the President of the Senate. Again, this shows that questions of identification are more about institutions than about women even when they ask to identify a female politician.

As regards to closed-ended items, additional knowledge came from both women and men's behalf. In fact, they both guessed more and knew more about their particular fields of expertise, and the knowledge gap narrowed, although only marginally and not in a significant way. When prompted to answer, men could more clearly identify the end of the first republic and women uncovered some hidden knowledge about the divorce referendum and the percentage of female MPs. Instead, both men and women did not attempt to guess about topics they did not know.

Against our expectations, women and men are not only sensitive to item-format and DK protocols before questions of institutional politics and of male-relevance. In fact, even their sensitivity is parted, and when encouraged to answer, men uncover some hidden knowledge on male-relevant issues, and women provide more accurate answers on topics that concern them. from all of our results, it is very clear that the gender gap is rather a polarization of knowledge, rather than a disparity. Question content seems to be pivotal to knowledge patterns and gaps; it is, indeed, the leading effect. In fact, it cannot be changed only marginally, as other research has done, by offering, for instance, a question about women in institutions. Hence, we expect future surveys on political knowledge to consider very carefully their topics of choice.

Conclusions: To future studies on gender and political knowledge

This research aims to place itself within the fervent debate around why, as social researchers, we should conduct our research in a more gender-aware manner. Gender and its social constructions are, as a matter of fact, pervasive and enduring in public opinion as well as in social research and are deeply discriminatory. Throughout this dissertation, the higher socio-political position of men with respect to women, together with the reach of gender inequality, have been discussed and exposed by primarily considering two macro-fields of investigation – that of attitudes towards gender roles and gender gaps in political knowledge. While the connection between these areas of study might not always be crystal clear – and also difficult to empirically justify with no data at hand – we tried to demonstrate the existence of a link, so as to encourage future studies to adopt a more gender-sensitive approach to data collection and measuring. Specifically, we have argued and demonstrated that despite greater normativity is put on the gender role assigned to women – that of mothers – research in political knowledge fails to consider as equally legitimate everything that this entails. And hence topics like parental leave or childcare services are not considered universal enough to be asked in large-scale political knowledge quizzes; rather they fall under the umbrella of 'gender-issues', a specificity of politics, a niche of expertise. On the contrary, institutions and constitutional politics, although heavily male-dominated and coded, appear to make good content for questions, and are systematically used to measure women and men's knowledge indistinctly.

Now, it is true that knowing about institutions, and how the political power is handled, is essential in order to have your rights represented; it is also true that women know less about it than men. This is not thrown into doubt and can be justified by the fact that women were, for a very long time, explicitly excluded from taking part in the ruling class and are still recruited less often than men. They also do not develop a thirst for leadership, while men are encouraged to do so. Women and men cannot always be treated as an aggregated mass, especially in research on political behaviour; because they deal with discriminatory normative expectations and unequal accessibility to resources and power, their social conditions, opinions and behaviour can vary significantly. In fact, just like in society, women and men undergo contrasting social expectations that has

them behaving in a way that is perceived as fitting for their gender; it is easy to see how this can shape their social as well as their political experience.

Gender diversifies women and men's social, political, and personal life to the point it structures a different social experience for each, and these diverging viewpoints cannot go unnoticed in social research. In fact, social and political disparity go hand in hand and do so for many reasons. First, if women focus on the house and kids, their social role is rather 'a-social'. They end up having fewer political resources like time to dedicate to the public life of the country or to discuss about politics with their peers, hence would rather delegate this task to men. In fact, processes of socialization and social expectations, connected to mainly women's gender role, are among the causes that keep women from fully engaging in national politics. And although we may think that much has changed in women's social conditions, we realized here that their traditional role is still structurally and culturally endorsed.

We tried to prove this first point in Chapter 2, where our analysis demonstrated that normative expectation based on gender are still very evident – especially as regards to the gender role assigned to women. Indeed, some crucial predictors of egalitarianism have started to lose their relevant impact – for one, processes of secularisation are not influencing opinions on any macro level and the effect of women spending more time in education is not always positive as expected. Other factors that promote gender equality have just lost ground – female employment has collapsed over time, posing a threat to liberal attitudes. The fact that contextual features such as the average level of secularisation of a country, or the average years spent in education on behalf of women are not as linked to egalitarian ideas of what women and men should be doing in society, is concerning. In a way, it is suggesting that the male-breadwinner/female-carer family model is not exclusively a lingering feature of conservatism; rather it is internalised to a point that it still represents an important cultural institution that speaks to all and that is loosely connected to political ideologies. For this reason, gender cultures and norms are especially hard to contest. In fact, the effect of birth cohort is also rather feeble, and generations are not systematically becoming more egalitarian in time; so as to become significantly so, they need an exogenous shock, a political awakening that can change their attitudes towards gender roles.

The waves of the feminist movement have definitely had more leverage in predicting attitudes towards GR than some structural modifications; precisely, the

second and fourth have had a positive influence on egalitarian stances, and the third, a moderating one. The fact that political mobility can have this reach in influencing the public opinion is of course positive, although the negative side of the coin is that the power that these movements have in promoting feminist ideals run by a ticking clock. It seems that the relevance of gender equality needs to be cyclically put under question, and this is very descriptive of the whole struggle and fight for equality – it is never strong enough (or, we might say, political enough) to challenge traditional roles for good. In fact, despite the revolutionary changes that women and men have gone through in the last decades, we keep finding ourselves in a stalemate situation, where overt or internalised discrimination are still on the loose.

From our analysis it appears that promoting female employment can be a way forward. Employment for women on both the micro and macro-level is crucial for abandoning traditional views on women's role in the family. This is in line with what literature has already expressed on the matter. In fact, literature has been consistent in showing that working women are the most likely to develop feminist attitudes and consciousness. Indeed, they witness injustice every day in the workplace, they mostly earn about half of what their male co-workers get, and are seldom selected for top job positions, although perfectly qualified. Men benefit from female employment as well, and in a rather direct way; if partnered, they can live off two salaries instead of one. Hence, employing women in larger numbers can make both women and men more firmly reject the traditional male-breadwinner model; it also seems to be about the only factor fostering this cultural change. Hence, employment is highly correlated to attitudes towards GR but has decreased over time and brought about conservative closure. Simply, this trend needs to be politically handled and hence reversed.

Chapter 2 also revealed that the emphasis placed on the private role assigned to women is exceptionally marked when people's attitudes about women and men within the family environment are compared to how people feel about gender roles in the public sphere. While seeing women in public roles is now normalized and socially accepted, it is still of common and cultural belief that women, however employed, must not transgress their duties towards their family and homes. In fact, as compared to public roles, family gender roles are far from being perceived as interchangeable. To be honest, neither public gender roles are perceived as interchangeable, especially on behalf of men; still, the fight for equality in public spaces seems a little more advanced, or alternatively,

at least subject to some extent to social desirability bias – people will answer in a more 'egalitarian' way, as failing to do so would be overtly discriminatory. This does not happen for private roles – people are overtly discriminatory but do not feel as such.

The division of attitudes between private and public roles had not been analysed with such a great detail before; in fact, many wide comparative studies that want to measure attitudes towards gender roles, do so by using indicators that fail to assess the multidimensionality of the concept. The GR scale in the EVS, for instance, has predominantly asked, up until 2010, for opinions about women balancing work and family duties, discarding any other role of women in society. They have also discarded the role of men in the family, so we have little data on how society thinks about that. In contrast with research on political behaviour, research on gender roles appears to be overemphasizing the role of women within the household and showing a conservative understanding of gender roles alongside. This reveals the presence of a conceptual (and hence methodological) bias that has its root in the strenuous and unavoidable gender culture we cannot rid of. And as men's private roles and women public roles are overlooked, so is the multidimensionality of the concept of GR. Designed in this way, gender roles appear to be conceptualized as one-dimensional – actually they appear to be just one, women's role in the private sphere; methodology seems to be re-enacting the faults of culture by overexposing women's duties in the house, whereas men, once again, are exonerated from definition. In fact, as soon as the last EVS wave introduced a pool of questions on the role of women and men in public, we were immediately able to see that people reacted differently to 'public gender roles' as compared to the more traditional 'family roles'. The emergence of two latent factors in the analysis proved that gender roles are indeed a multidimensional concept. They also allowed us to build a typology of gender roles and to observe a geography of gender cultures. They also brough to light the cultural proximity of a cluster of countries that are seldom considered together – which we labelled as the 'Adriatic area', and which we hope future research will be interested in analysing more in-depth.

So, women are still normatively pushed towards their traditional and private role as caregivers; this missed (or incomplete) emancipation from private life leads to thinking that the stabilisation of women in public roles is not necessarily bringing beneficial effects to the quality of women's lives. On the contrary, it implies that women have to deal with the double burden of working while taking care of the family alongside.

Moreover, this 'missed emancipation' does not really lead to freedom of choice. Maybe projecting themselves as mothers someday, women tend orientate their education towards university courses and professional careers that assure enough time to dedicate to the family. Some women might never end up entering the labour market or might abandon it as soon as they have a family hindrance (a pregnancy, an ill relative), or alternatively settle for a part-time contract. This leads to educational and occupational segregation, as well as to workplace inequalities such as the gender-pay gap and reinforces the hierarchical structure of gender roles. Fewer women will circulate in the labour market and fewer will get to top positions – quite the unfavourable environment to assure equal representation to female issues, as well as to build an egalitarian understanding of gender roles, as previously said. On the contrary, the lack of women in employment justifies and re-enforces the traditional division of labour within the household, and disincentivises the implementation of policy programs that can help them exit this vicious cycle.

This leads us to the discussion of why exploring the nature of gender normative expectations, and the consequences they imply, is an absolute priority in order to create fairer measurements of political knowledge. We have learnt that structural and cultural explanations of role segmentation in society and politics are never out of date, and we suspect that they still justify the reasons for why women have fewer opportunities than men to participate in, and hence learn about, governmental and parliamentary action. Ignoring this aspect would be discriminatory on the researcher's behalf. However, the direct connection of gendered social and political lives can only be theoretically constructed; in fact, there are serious limitations regarding the collection and the availability of empirical data regarding this relationship. First of all, no study up to now has included both attitudes towards gender roles and political knowledge questions in the same survey. This is a serious limitation, and this thesis has tried providing evidence to show why that is.

So here comes the first disclaimer. This research was not conducted without difficulties. While we wish to claim that women's knowledge about politics (among other things) is largely informed by the general emphasis placed on them accomplishing their private role and duties, the data that we would need to connect the dots is unavailable, and it is so for two reasons. On the one hand, gender-sensitive measurements of political knowledge are seldom found in large scale surveys. Take the Comparative Study of

Electoral Systems (CSES) as one example: the majority of the questions dedicated to political knowledge concern electoral politics, so that other dimensions are dismissed. Moreover, the scheme of the survey appears to be designed so as to use political knowledge as an independent variable mostly, and only rarely as an outcome one. Political knowledge is definitely an important predictor of political behaviour, and the scope of the study seems to embrace this aspect in particular, so that the antecedents of knowledge are often dismissed. That is probably due to the fact that they would mostly concern the social experience of the individual as opposed to their political one. Some are definitely there – e.g., marital status – but other key variables in the study of gender and politics – e.g., time dedicated to house or number of kids – are missing. Moreover, important (and gendered) political predictors – e.g., media consumption or internal self-efficacy – only appear in the last wave, when unfortunately, no data on political knowledge was collected[66]. Our research became quite challenging with so little material, as very little could be said on how the two spheres interact. Nevertheless, so as to overcome this obstacle, we decided to collect our own data and run the experiment we presented in Chapter 3.

In Chapter 3, we chose to measure political knowledge via a wider array of topics that could consider both women and men's experience of politics with all the constraint of their social gender roles. We started by arguing that institutional and electoral politics are a male domain of expertise, and hence a very limited mode of measurement. We then looked for other questions that could complement this traditional yet incomplete set of items. We thus selected other things one could know about politics and that are equally important indicators of knowledge – literature had pointed to public policy, for one. In fact, knowing about policies implies paying close attention to political news; it is also practical information that one learns on the field, out of necessity, rather than out of textbooks, curiosity or interest. Moreover, we wanted to make a clear reference to women's societal role and hence offer respondents a topic that could concern women in the same way institutional politics has to do with men. The literature that was used to shape and support this design, together with the data that emerged from our analysis of gender roles in Chapter 2, pointed to maternity as the ultimate and most important feminine social responsibility. Hence, we asked our respondents a question about compulsory maternity leave.

---

[66] Or published, to date.

Our results showed that the gender gap in political knowledge as traditionally understood (i.e., women knowing less about politics) was present only when respondents were asked some very traditional questions about political knowledge – i.e., the identification of a politician or 'text-book' information regarding constitutional and electoral politics. Instead, no gender gap appeared when respondents were asked about public policy and reversed – in favour of women – on the one question regarding maternity leave. Moreover, on this very question, not only women provided more correct answers than men, but they were also not withdrawing from answering to a greater degree than men (as it happened on every other item). Women felt that they could attempt to answer the question on maternity leave whether they knew the answer to it or not, because it concerned them directly.

Hence, women do not simply know less than men; sometimes they even know more. But traditionally, the gender gap is referred to in literature as the differential level of involvement in political institutions of men and women, and points to women as being, of course, the least engaged. As such, the gap is perceived solely as a quantitative difference – men are more (interested, knowledgeable, involved and so on and so forth) and women are less. This automatically implies that there is only one normative way of participating and learning about politics and that whatever women know is deviant from this most accredited standard, and well as not equally legitimate. On the contrary, this thesis provides enough evidence to state that the polarization of political knowledge between women and men is real. Gaps exist in quantity and in quality, as women and men learn and pay attention to different things about politics throughout their lives, and mostly in accordance with the gender role that is assigned to them.

Talking about differentiation instead of spill-over is problematic per se, as it reinforces the social construction of gender and limits everybody's field of action; however, a most problematic aspect would be ignoring this differentiation and the fact it spurs from unequal grounds. The qualitative segmentation of political expertise is a meaningful result for another reason, especially when we consider that the average age of the sample is of about 20 years of age; neither women nor men in this sample are likely to have a family of their own or are likely to have first-hand experienced a parental leave of any sort. Still, it looks like women pay more attention to something that could happen to them in the same way men pay more attention to how to get political power. Moreover, how women's response attitudes change according to question content has rarely been

traced in previous research on gender gaps in political knowledge, where the debate on question content and that on psychological attitudes before methodological choices have rarely been paired. It is, however, a crucial result, as well as a feedback mechanism that verifies that the content of this question is, at least, guaranteeing equal opportunity to answer to both women and men.

Because political knowledge is a fundamental tile in our level of engagement in politics, be it active (I am interested in politics) or passive engagement (I need this information for other purposes), it is important that we insist on measuring all of its nuances, as well as the relations these have with other political variables and the implications for all social groups. If we keep asking women questions about a highly male-coded environment, we will keep on highlight how little they know or how deeply they are taken aback by the topic to the point they refrain from answering. But women's interest in institutions and political power is not something that can grow overnight. If we, however, considered the ways women have joined and become closer to the political arena, we might be able to shed light on a wider variety of political practices and contribute to gradually turning the concept of politics into something more inclusive.

Similarly, counterarguing that institutional politics is more essential than knowing about other fields of politics such as parental leave, sexual harassment regulation and tampon taxation is pointless, as well as not true. It definitely serves another purpose, but the 'personal' knowledge – perceived as all that affects the family or women in particular – should be considered 'political' just as well. After all, men are also affected by sexual harassment regulation, and fathers (or future fathers) by the length of maternity leaves and childcare public services or daughter's goods taxation. The fact that a male domain of political expertise would be disguised as general and universal knowledge – something everyone should be aware of – clearly exposes the lack of a gender-sensitive approach in the study of political knowledge. A likely approach is also failing to recognize the power structure that stands at the origins of this divergence of expertise. By reducing the conceptualization of politics to a matter of political power, not only are we, as researchers, failing to collect data on women's behaviour and knowledge (as well as on men's familiarity with these topics); we are also responsible for eternally reproducing an empirical picture of politics that excludes women.

On a final note, it would be irresponsible to conclude this thesis without stating the limitations of this research in particular, as well as of research on this topic in general,

hoping that they will be addressed in the future. For one, finding the data to support the research question of this thesis was a hard task. In fact, as mentioned early on in the conclusions, it is difficult to find secondary data that encompasses sufficient social and political variables, so as to study the relationship between GR and political knowledge adequately. In fact, surveys that study women and men in politics might not always include the key variables that are necessary to observe and define in detail the gendered patterns of behaviour. This is data that is worth collecting separately. It is then important that we insist on collecting data on the social context of women in surveys about political behaviour, especially if we want to explore and develop this topic further.

Additionally, structural variables such as employment and level of education are often too raw; they cannot measure, for example, the segregation of women and men in education and employment. In this thesis we could only use variables such as 'years spent in education' or 'employed' as opposed to inactive, but they do aggregate a lot of information. It would be necessary to break down this data into more detailed information to control for what these people are graduated in, and what type of occupation they have. In fact, because of processes of socialization, women are oriented towards university degrees and working positions that do not require knowledge about institutional politics as much. So, assuming that they should now know about it as much as men because they are highly educated, employed and have broader access to political news is an overstatement. It is one thing to have access to information, it is another thing to be encouraged, able or required to use it.

This dissertation also lacks a qualitative perspective. In particular, there are two elements we could have borrowed (one partially was) from qualitative methodology to make this research more complete. The first element is rather technical; so as to have a clearer understanding on what topics women gravitate towards in politics, we could have implemented qualitative interviews and focus-groups to the experimental research. We could have deduced the topics that men and women consider as political from interviewing women and men first-hand. Qualitative research is often used for explorative research; it has, for one, proven to be very useful when defining indicators of survey methodology. This can be the direction to take for this research to grow.

A qualitative section would find breeding ground in this dissertation. In fact, some methodological concepts of qualitative research have already been somewhat applied in this thesis already – reflexivity is one of these. Reflexivity is often termed as the process

by which the researcher looks back upon their research and takes into account their presence within it. It is also said to be an opportunity of reflecting on existing ways of seeing and revising them in the light of new understandings (Weick, 2002; Alvesson, Lee Ashcraft, Thomas, 2008; Haynes, 2012). Reflexivity is often used in qualitative techniques of data collection such as ethnography, where the interference of the researcher's subjective feelings is high, and thus must be contained. In qualitative analysis and survey methodology, reflexivity is not necessary, as standardization is supposed to be guaranteeing an objective perspective. In fact, researchers often use the same indicators over and over again, maybe because they were proven to be a valid and reliable measure of the concept in previous research. However, this dissertation has argued that, although standard, the methods of survey research are at risk of biasing the estimates and following conservative conceptualizations of both gender roles and political knowledge. In fact, as soon new dimensions of the concepts were introduced in the surveys, results were able to provide a more complex picture of what women knew about politics, and of how people thought of women in public as compared to women in private.

Reflexivity is always a good exercise, despite the qualitative or quantitative aims of the investigation; it helps researchers see when the measurements are in need of renovation. We tried to show the obsolescence of methodology especially in the section about political knowledge, by running experiments and collecting original data. Unfortunately, as regards to the experimental manipulation, the sample is very limited in numbers and in socio-demographic variability; still, it managed to produce promising results. Therefore, the hope is that the concerns that this thesis has raised about methodology being biased, and the possible solutions it has offered to marginalize the conceptual limitations, will not fall on deaf ears but will be adequately addressed in large scale survey and future research.

Although eye-opening and essential, this research has only scraped the surface of gendered patterns of political knowledge. In fact, when it comes to gender, research has advanced alternative ways to measure it so that it is not restricted to the concept of sex. In conflating sex and gender, the risk is for gender to become prescriptive, whereas allowing gender measures on surveys to be truer to heterogeneity in gender identity can contribute to alleviating gender normativity (Bittner and Goodyear-Grant 2017). Gender scholars have already started exploring the heterogeneity of gender experiences, with an

eye to how these might become convenient in the research of public opinion. Hence, gender itself should be allowed to be multidimensional – a scope that goes beyond those of this dissertation, but one which I am sympathetic with. In fact, this may come as a big limitation in a framework that wishes to be gender sensitive; hence, another step further would be to explore the same issues we have addressed hereby with a different operationalization of the variable of gender; who knows what other important details of political knowledge we are cutting off by employing standard and narrow conceptualizations.

Literature

Aalberg, T., Blekesaune, A., & Elvestad, E. (2013). Media choice and informed democracy: Toward increasing news consumption gaps in Europe? *The International Journal of Press/Politics*, *18*(3), 281-303.

Abendschön, S., & Steinmetz, S. (2014). The gender gap in voting revisited: Women's party preferences in a European context. *Social Politics*, *21*(2), 315-344.

Alanen, L., & Bardy, M. (1991). *Childhood as a Social Phenomenon: National Report, Finland* (Vol. 36). European Centre.

Alvesson, M., Lee Ashcraft, K., & Thomas, R. (2008). Identity matters: Reflections on the construction of identity scholarship in organization studies. *Organization*, *15*(1), 5-28.

Anttonen, A. 1997 'The Welfare State and Social Citizenship', in K. Kauppinen and T. Gordon (eds) Unresolved Dilemmas. Women, Work and the Family in the United States, Europe and the Former Soviet Union,

Atkeson L. R., Rapoport R. B., (2003); The More Things Change the More They Stay the Same: Examining Gender Differences in Political Attitude Expression, 1952–2000, *Public Opinion Quarterly*, Volume 67, Issue 4, 1 February 2003, Pages 495–521

Banaszak, L. A., & Plutzer, E. (1993). Contextual determinants of feminist attitudes: National and subnational influences in Western Europe. *American Political Science Review*, 145-157.

Barabas, J., Jerit, J., (2009). Estimating the Causal Effects of Media Coverage on Policy-Specific Knowledge. *American Journal of Political Science*, 53 (1): 73–89.

Barabas, J., Jerit, J., Pollock, W., & Rainey, C. (2014). The question (s) of political knowledge. American Political Science Review, 108(04), 840-855.

Barber, J. D. (1969). *Citizen politics: An introduction to political behavior*. Markham Publishing Company.

Barisione, M. (2014). Debunking the myth of a "Traditional" gender gap in the electoral support for Silvio Berlusconi in Italy (1994–2013). *Electoral Studies*, *36*, 117-128.

Barone, C. (2011). Some things never change: Gender segregation in higher education across eight nations and three decades. *Sociology of education*, *84*(2), 157-176.

Bartels, L. M. (1996). Uninformed Votes: Information Effects in Presidential Elections. *American Journal of Political Science*, 40: 194-230.

Bartels, L. M. (2005). Homer gets a tax cut: Inequality and public policy in the American mind. Perspectives on Politics, 15-31.

Batalova, J. A., & Cohen, P. N. (2002). Premarital cohabitation and housework: Couples in cross-national perspective. *Journal of Marriage and Family*, *64*(3), 743-755.

Bell, D. (1967). Notes on the post-industrial society (I). The Public Interest, 6, 24.

Benesch, C. (2012). An empirical analysis of the gender gap in news consumption. *Journal of Media Economics*, *25*(3), 147-167.

Bennett, S. E. (2001). 'Reconsidering the Measurement of Political Knowledge'Revisited: A Response to Jeffery Mondak. *American Review of Politics*, *22*(3), 327-48.

Berelson, B. R., Lazarsfeld, P. F., McPhee, W. N., & McPhee, W. N. (1954). *Voting: A study of opinion formation in a presidential campaign*. University of Chicago Press.

Bisgaard, M. (2015). "Bias will find a way: Economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis". The Journal of Politics, 77(3), 849-860.

Blanchard, R. D., Bunker, J. B., & Wachs, M. (1977). Distinguishing aging, period and cohort effects in longitudinal studies of elderly populations. *Socio-Economic Planning Sciences*, *11*(3), 137-146.

Blossfeld, H. P., & Drobnic, S. (Eds.). (2001). *Careers of couples in contemporary society: From male breadwinner to dual-earner families: From male breadwinner to dual-earner families*. OUP Oxford.

Bologh, R. W. (2009). Love or greatness: Max Weber and masculine thinking.

Bolsen, T., Druckman, J., & Cook, F. (2014). The influence of partisan motivated reasoning on public opinion. Political Behavior, 36(2), 235-262.

Bolzendahl, C. I., & Myers, D. J. (2004). Feminist attitudes and support for gender equality: Opinion change in women and men, 1974–1998. Social forces, 83(2), 759-789.

Bourdieu, P. (1984). Distinction: A social critique of taste. Trans. Richard Nice. Cambridge: Harvard UP.

Bourdieu, P. (2001). Masculine domination. Stanford University Press.

Braun, M. (1998). Gender roles. In Van Deth, JW (Ed.), Comparative Politics: The Problem. of Equivalence. London, England: Routledge.

Braun, M. (2008). Using egalitarian items to measure men's and women's family roles. Sex roles, 59(9), 644-656.

Brewster, K. L., & Padavic, I. (2000). Change in gender-ideology, 1977–1996: The contributions of intracohort change and population turnover. Journal of Marriage and Family, 62(2), 477-487.

Brooks, C., & Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research*, *33*(1), 106-133.

Burns, Nancy, Schlozman, Kay Lehman, and Verba, Sidney (2001). *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Cambridge, MA: Harvard University Press.

Bustelo, M. (2016). Three decades of state feminism and gender equality policies in multi-governed Spain. *Sex Roles*, *74*(3-4), 107-120.

Campbell, A., Converse, P. E., Miller, W. E., & Stokes, D. E. (1960). *The american voter*. University of Chicago Press.

Campbell, D. T., Stanley, J. C., & Gage, N. L. Experimental and Quasi-Experimental Designs for Research. 1966Chicago: R. IL Rand McNally.

Campbell, D. E., & Wolbrecht, C. (2005). Do Women Politicians Lead Adolescent Girls to Be More Politically Engaged? A Cross-National Study of Political Role Models.

Campbell, D. E., & Wolbrecht, C. (2006). See Jane run: Women politicians as role models for adolescents. *The Journal of Politics*, *68*(2), 233-247.

Campbell, R. (2004). Gender, ideology and issue preference: Is there such a thing as a political women's interest in Britain?. *The British Journal of Politics and International Relations*, *6*(1), 20-44.

Carpini, M. X. D., & Keeter, S. (1993). Measuring political knowledge: Putting first things first. American Journal of Political Science, 1179-1206.

Carpini, M. X. D., & Keeter, S. (1996). What Americans know about politics and why it matters. Yale University Press.

Cassidy, M. L., & Warren, B. O. (1996). Family employment status and gender role attitudes: A comparison of women and men college graduates. Gender & Society, 10(3), 312-329.

Cavaghan, R. (2017). The gender politics of EU economic policy: Policy shifts and contestation before and after the crisis. In J. Kantola, & E. Lombardo (Eds.), Gender and the economic crisis in Europe: Politics, institutions and intersectionality (pp. 49–72). Basingstoke, UK: Palgrave

Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. Personality and social psychology bulletin, 25(4), 413-423.

Ciabattari, T. (2001). Changes in men's conservative gender ideologies: Cohort and period influences. Gender & Society, 15(4), 574-591.

Coffé, H. (2013). Women stay local, men go national and global? Gender differences in political interest. *Sex Roles*, *69*(5-6), 323-338.

Coffé, H., & Bolzendahl, C. (2010). Same game, different rules? Gender differences in political participation. Sex roles, 62(5-6), 318-333.

Connell, R. (1987). *Gender and power: Society, the person and sexual politics*. John Wiley & Sons.

Constantin, A., & Voicu, M. (2015). Attitudes towards gender roles in cross-cultural surveys: Content validity and cross-cultural measurement invariance. Social Indicators Research, 123(3), 733-751.

Cook, E. A. (1989). Measuring feminist consciousness. Women & Politics, 9(3), 71-88.

Coole, D. (2013). The body and politics. In *The Oxford Handbook of Gender and Politics* (p. 165). New York, NY: Oxford University Press.

Corrigall, E. A., & Konrad, A. M. (2007). Gender role attitudes and careers: A longitudinal study. Sex roles, 56(11-12), 847-855.

Cotter, D., Hermsen, J. M., & Vanneman, R. (2011). The end of the gender revolution? Gender role attitudes from 1977 to 2008. American journal of sociology, 117(1), 259-89.

Cunningham, 2008; Inglehart and Norris, 2003; Kraaykamp, 2012; Kroska and Elman, 2009; Motiejunaite and Kravchenko, 2008

Curran, J., Coen, S., Soroka, S., Aalberg, T., Hayashi, K., Hichy, Z., ... & Tiffen, R. (2014). Reconsidering 'virtuous circle'and 'media malaise'theories of the media: An 11-nation study. *Journalism*, *15*(7), 815-833.

Dahlerup, D. (1986). Is the new women's movement dead?: decline and change of the Danish movement.

Dalton, R. J. (1996). Citizen politics. Public opinion and political parties in advanced western democracies, 2, 157.

Dassonneville, R. and McAllister, I. (2018), Gender, Political Knowledge, and Descriptive Representation: The Impact of Long-Term Socialization. American Journal of Political Science, 62: 249-265.

Davies, C. (1995). Gender and the professional predicament in nursing. McGraw-Hill Education (UK).

Davis, N. J., & Robinson, R. V. (1991). Men's and women's consciousness of gender inequality: Austria, West Germany, Great Britain, and the United States. *American Sociological Review*, 72-84.

De Jong, T., & Ferguson-Hessler, M. G. (1996). Types and qualities of knowledge. *Educational psychologist*, *31*(2), 105-113.

De Vaus, D., & McAllister, I. (1989). The changing politics of women: gender and political alignment in 11 nations. European Journal of Political Research, 17(3), 241-262.

Dolan, K. (2011). Do women and men know different things? Measuring gender differences in political knowledge. *The Journal of Politics*, *73*(1), 97-107.

Dow, J. K. (2009). Gender differences in political knowledge: Distinguishing characteristics-based and returns-based differences. Political Behavior, 31(1), 117-136.

Druckman, J. N., Green, D. P., Kuklinski, J. H., & Lupia, A. (2006). The growth and development of experimental research in political science. American Political Science Review, 627-635.

Druckman, J. N., Greene, D. P., Kuklinski, J. H., & Lupia, A. (Eds.). (2011). *Cambridge handbook of experimental political science*. Cambridge University Press.

Dylko, I., Dolgov, I., Hoffman, W., Eckhart, N., Molina, M., & Aaziz, O. (2018). Impact of customizability technology on political polarization. Journal of Information Technology & Politics, 15(1), 19-33.

Eagly, A. H., & Diekman, A. B. (2006). III. Examining gender gaps in sociopolitical attitudes: It's not Mars and Venus. Feminism & Psychology, 16(1), 26-34.

Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. The developmental social psychology of gender, 12, 174.

Elomäki, A., Kantola, J., Koivunen, A., & Ylöstalo, H. (2019). Affective virtuosity: Challenges for governance feminism in the context of the economic crisis. Gender, Work & Organization, 26(6), 822-839.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton University Press.

Fairbrother, M. (2014). Two multilevel modeling techniques for analyzing comparative longitudinal survey datasets. Political Science Research and Methods, 2(1), 119.

Fairbrother, M., & Martin, I. W. (2013). Does inequality erode social trust? Results from multilevel models of US states and counties. Social science research, 42(2), 347-360.

Ferrín, Fraile & García-Albacete (2019). Adult roles and the gender gap in political knowledge: a comparative study.

Ferrín, M., Fraile, M., & García-Albacete, G. (2017). The gender gap in political knowledge: is it all about guessing? An experimental approach. *International journal of public opinion research*, *29*(1), 111-132.

Ferrin, M., Fraile, M., & García-Albacete, G. (2018). Is it simply gender?: content, format, and time in political knowledge measures. *Politics & gender*, *14*, 162-185.

Ferrín, M., Fraile, M., & Rubal, M. (2015). Young and gapped?: studying civic knowledge of girls and boys in Europe. Political research quarterly, 68, 63-76.

Fortin-Rittberger, J. (2016). Cross-national gender gaps in political knowledge: How much is due to context? *Political research quarterly*, *69*(3), 391-402.

Fox, J. (2017). The jobs most segregated by gender and race. Bloomberg View, 16.

Fox, R. L., & Lawless, J. L. (2010). If only they'd ask: Gender, recruitment, and political ambition. *The Journal of Politics*, *72*(2), 310-326.

Fox, R. L., & Lawless, J. L. (2011). Gendered perceptions and political candidacies: A central barrier to women's equality in electoral politics. *American Journal of Political Science*, *55*(1), 59-73.

Fraile, M. (2013). Do information-rich contexts reduce knowledge inequalities? The contextual determinants of political knowledge in Europe. Acta Politica, 48(2), 119-143.

Fraile, M. (2014). Do women know less about politics than men? The gender gap in political knowledge in Europe. *Social Politics*, *21*(2), 261-289.

Fraile, M. (2014b). Does deliberation contribute to decreasing the gender gap in knowledge?. *European Union Politics*, *15*(3), 372-388.

Fraile, M., & Gomez, R. (2017). Bridging the enduring gender gap in political interest in Europe: The relevance of promoting gender equality. *European journal of political research*, *56*(3), 601-618.

Fraile, M., & Gomez, R. (2017). Why does Alejandro know more about politics than Catalina? Explaining the Latin American gender gap in political knowledge. British Journal of Political Science, 47(1), 91-112.

Frazer, E., & Macdonald, K. (2003). Sex differences in political knowledge in Britain. *Political Studies*, *51*(1), 67-83.

Gal, S., & Kligman, G. (2000). The politics of gender after socialism: A comparative-historical essay. Princeton University Press.

Garcia-Albacete, G.M. (2014). Young people's political participation in Western Europe: Continuity or generational change? Basingstoke: Palgrave Macmillan

Garfinkel, H. (1967). Studies in ethnomethodology. Englewood cliffs. *Y.: Prentice-Hall*.

Geist, C. (2005). The welfare state and the home: Regime differences in the domestic division of labour. European Sociological Review, 21(1), 23-41.

Gidengil, E., Blais, A., Nadeau, R., & Nevitte, N. (2003). Women to the left? Gender differences in political beliefs and policy preferences. *Women and electoral politics in Canada*, 140-159.

Gidengil, E., Giles, J., & Thomas, M. (2008). The gender gap in self-perceived understanding of politics in Canada and the United States. *Politics & Gender*, *4*(4), 535-561.

Giger, N. (2009). Towards a modern gender gap in Europe?: A comparative analysis of voting behavior in 12 countries. The Social Science Journal, 46(3), 474-492.

Gilligan, C. (1982). New maps of development: New visions of maturity. American Journal of Orthopsychiatry, 52(2), 199.

Gillis, S., Howie, G., & Munford, R. (2007). Third wave feminism: Expanded.

Goffman, E. (1976). Gender display. In *Gender advertisements* (pp. 1-9). Palgrave, London.

Gronlund, K. and Milner, H. (2006). "The Determinants of Political Knowledge in Comparative Perspective." *Scandinavian Political Studies* 29(4): 386–406.

Guess, Andrew, Jonathan Nagler, and Joshua Tucker. 2019. Less than You Think: Prevalence and Predictors of Fake News Dissemination on Facebook. *Science Advances*, 5: online version

Gurin, P. (1985). Women's gender consciousness. *Public Opinion Quarterly*, *49*(2), 143-163.

Haas, B. (2005). The work-care balance: Is it possible to identify typologies for cross-national comparisons?. *Current Sociology*, *53*(3), 487-508.

Hanisch, C. (1969). The personal is political.

Haynes, K. (2012). Reflexivity in qualitative research. Qualitative organizational research: Core methods and current challenges, 72-89.

Heath, A., & McMahon, D. (1992). Changes in values. *British Social Attitudes*, 113-113.

Heitlinger, A. (1985). Women in Eastern Europe: Survey of Literature. In *Women's Studies International Forum* (Vol. 8, No. 2, pp. 147-152). Pergamon.

Hofstede, G. (1980) Culture's Consequences: International Differences in Work Related Values. London: Sage.

Hofstede, G. (1991) Culture and Organization: Software of Mind. London: McGraw Hill.

Hooghe, M., Quintelier, E., & Reeskens, T. (2007). How political is the personal? Gender differences in the level and the structure of political knowledge. *Journal of Women, Politics & Policy*, *28*(2), 115-125.

Hook, J. L. (2006). Care in context: Men's unpaid work in 20 countries, 1965– 2003. American Sociological Review, 71, 639–660.

Inglehart, R. (1984). The changing structure of political cleavages in western society. Electoral change in advanced industrial democracies: realignment or dealignment, 25-69.

Inglehart, R. (2007). Postmaterialist Values and the Shift from Survival to Self-Expression Values. In (Ed.), The Oxford Handbook of Political Behavior. : Oxford University Press,. Retrieved 27 Sep. 2018,

Inglehart, R. (2018). Culture shift in advanced industrial society. Princeton University Press.

Inglehart, R. & Norris, P. (2003). Rising tide: Gender equality and cultural change around the world. Cambridge: Cambridge University Press.

Inglehart, R. F., Norris, P., & Welzel, C. (2002). Gender equality and democracy. Comparative Sociology, 1(3-4), 235-264.

Inglehart, R., & Norris, P. (2000). The developmental theory of the gender gap: Women's and men's voting behavior in global perspective. International Political Science Review, 21(4), 441-463.

Inglehart, R., Norris, P., & Ronald, I. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.

Iversen, T., & Rosenbluth, F. (2006). The political economy of gender: Explaining cross-national variation in the gender division of labor and the gender voting gap. American Journal of Political Science, 50(1), 1-19.

Iyengar, S., Curran, J., Lund, A. B., Salovaara-Moring, I., Hahn, K. S., & Coen, S. (2010). Cross-national versus individual-level differences in political information: A media systems perspective. Journal of Elections, Public Opinion and Parties, 20(3), 291-309.

Iyengar, S., Hahn, K. S., Bonfadelli, H., & Marr, M. (2009). "Dark areas of ignorance" revisited: Comparing international affairs knowledge in Switzerland and the United States. *Communication Research*, *36*(3), 341-358.

Jerit J., and Barabas J. (2006). Bankrupt rhetoric: How misleading information affects knowledge about social security. *Public Opinion Quarterly*, 70(3), 278–303.

Jerit, J., & Barabas, J. (2016). Revisiting the Gender Gap in Political Knowledge. *Political Behavior*, *39*(4), 817-838.

Jerit, Jennifer, Jason Barabas, and Toby Bolsen. (2006). Citizens, Knowledge, and the Information Environment. *American Journal of Political Science*, 50 (2): 266–282.

Jern, A., Chang, K. M. K., & Kemp, C. (2014). Belief polarization is not always irrational. Psychological review, 121(2), 206.

Kanthak, K., & Woon, J. (2015). Women don't run? Election aversion and candidate entry. American Journal of Political Science, 59(3), 595–612.

Kantola, J. (2018). Gender and the economic crisis: Political parties as sites of feminist struggles. Social Politics: International Studies in Gender, State & Society, 25(3), 361-382.

Kaplan, H. B., & Johnson, R. J. (1992). Relationships between circumstances surrounding initial illicit drug use and escalation of drug use: Moderating effects of gender and early adolescent experiences.

Karpowitz CF, Mendelberg T and Shaker L (2012) Gender inequality in deliberative participation. American Political Science Review 106(3): 533–547.

Kenski, K., & Jamieson, K. H. (2000). The gender gap in political knowledge: Are women less knowledgeable than men about politics. Everything you think you know about politics... and why you're wrong, 83-89.

Kiernan, K. E. (1992). The impact of family disruption in childhood on transitions made in young adult life. Population studies, 46(2), 213-234.

Kittilson, M. C., & Schwindt-Bayer, L. A. (2012). The gendered effects of electoral institutions: Political engagement and participation. Oxford University Press.

Klein, E., (1984). Gender Politics: From Consciousness to Mass Politics. *Cambridge, MA*.

Kligman, S. G. G. (2000). *Reproducing gender: politics, publics, and everyday life after socialism*. Princeton University Press.

Knudsen, K., & Wærness, K. (2008). National context and spouses' housework in 34 countries. European Sociological Review, 24(1), 97-113.Lau and Redlawsk, 1997

Koenig, A. M., & Eagly, A. H. (2014). Evidence for the social role theory of stereotype content: observations of groups' roles shape stereotypes. Journal of personality and social psychology, 107(3), 371.

Larsen, K. S., & Long, E. (1988). Attitudes toward sex-roles: Traditional or egalitarian?. Sex Roles, 19(1-2), 1-12.

Lau, R. R., & Redlawsk, D. P. (2001). Advantages and disadvantages of cognitive heuristics in political decision making. American Journal of Political Science, 951-971.

Lawless, J. L., & Fox, R. L. (2005). It takes a candidate: Why women don't run for office. Cambridge University Press.

Lawless, J. L., & Fox, R. L. (2010). It still takes a candidate: Why women don't run for office. Cambridge, MA: Cambridge University Press.

Lee, K. S., Alwin, D. F., & Tufiş, P. A. (2007). Beliefs about women's labour in the reunified Germany, 1991–2004. European Sociological Review, 23(4), 487-503.

Lewin-Epstein, N., Stier, H., & Braun, M. (2006). The division of household labor in Germany and Israel. Journal of marriage and family, 68(5), 1147-1164.

Lipset, S. M. (1960). Party systems and the representation of social groups. *European Journal of Sociology/Archives Européennes de Sociologie/Europäisches Archiv für Soziologie*, *1*(1), 50-85.

Lizotte, M. K., & Sidman, A. H. (2009). Explaining the gender gap in political knowledge. *Politics & Gender*, *5*(2), 127.

Lomazzi, V. (2017). Testing the goodness of the EVS gender role attitudes scale. Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique, 135(1), 90-100.

Lomazzi, V. (2018). Using alignment optimization to test the measurement invariance of gender role attitudes in 59 countries. *Methods, data, analyses: a journal for quantitative methods and survey methodology (mda)*, *12*(1), 77-103.

Lombardo, E. (2017). The Spanish gender regime in the EU context: Changes and struggles in times of austerity. Gender, Work & Organization, 24(1), 20-33.

Lovenduski. (1986). Women and European politics: Contemporary feminism and public policy. Univ of Massachusetts Press.

Lupia, A. (1994). Shortcuts versus encyclopedias: Information and voting behavior in California insurance reform elections. *American Political Science Review*, 63-76.

Luskin, R. C. (1990). Explaining political sophistication. *Political Behavior*, *12*(4), 331-361.

Luskin, R. C., & Bullock, J. G. (2011). "Don't know" means "don't know": DK responses and the public's level of political knowledge. *The Journal of Politics*, *73*(2), 547-557.

Manin, B. (1997). *The principles of representative government*. Cambridge University Press.

Mason, K. O., & Lu, Y. H. (1988). Attitudes toward women's familial roles: Changes in the United States, 1977-1985. *Gender & Society*, *2*(1), 39-57.

Miller, M. K. (2019). Who knows more about politics? A dual explanation for the gender gap. American Politics Research, 47(1), 174-188.

Miller, M. K., & Orr, S. K. (2008). Experimenting with a "third way" in political knowledge estimation. *Public Opinion Quarterly*, *72*(4), 768-780.

Milner, H. (2002). Civic literacy: How informed citizens make democracy work. UPNE.

Mondak, J. J. (2001). Developing valid knowledge scales. *American Journal of Political Science*, 224-238.

Mondak, J. J., & Anderson, M. R. (2004). The knowledge gap: A reexamination of gender-based

Mondak, J. J., & Canache, D. (2004). Knowledge variables in cross-national social inquiry. Social Science Quarterly, 85(3), 539-558.

Mondak, J. J., & Davis, B. C. (2001). Asked and answered: Knowledge levels when we will not take "don't know" for an answer. *Political Behavior*, *23*(3), 199-224.

Morrison, Z., Bourke, M., & Kelley, C. (2005). 'Stop making it such a big issue': Perceptions and experiences of gender inequality by undergraduates at a British University. In *Women's Studies International Forum* (Vol. 28, No. 2-3, pp. 150-162). Pergamon.

Munro, E. (2013). Feminism: A fourth wave?. Political insight, 4(2), 22-25.

Neuman, W. R., & Neuman, W. R. (1986). The paradox of mass politics: Knowledge and opinion in the American electorate. Harvard University Press.

Norrander, B., & Wilcox, C. (2008). The gender gap in ideology. Political Behavior, 30(4), 503-523.

Norris, P. (1996). Mobilising the 'women's vote': the gender-generation gap in voting behaviour. Parliamentary Affairs, 49(2), 333.

Norris, P. (2002). Women's power at the ballot box. Voter Turnout Since 1945: A Global Report, 98-102.

Norris, P., & Inglehart, R. (2013). Gendering social capital. Gender and social capital, 73, 34-45.

Oakley A (1997) A brief history of gender. In: Oakley A, Mitchell J (eds) Who's Afraid of Feminism. London: Hamish Hamilton, pp.29-55.

Oakley, A., & Mitchell, J. (1997). Who's Afraid of Feminism?: Seeing Through the Backlash. London: Hamish Hamilton.

Parsons, T. and Bales, R.F. 1955 Family, Socialisation and Interaction Process, Glencoe, DL: The Free Press. Pedersen, S. 1993 Family, Dependence,

Pate, J., & Fox, R. (2018). Getting past the gender gap in political ambition. *Journal of Economic Behavior & Organization*, *156*, 166-183.

Pateman, C., (1988). The Sexual Contract. Cambridge: Polity Press and Stanford: Stanford University Press.

Pereira, M. F., Fraile, M., & Rubal, M. (2015). Young and gapped? Political knowledge of girls and boys in Europe. Political Research Quarterly, 68(1), 63-76.

Pfau-Effinger, B. (1998). Gender cultures and the gender arrangement—a theoretical framework for cross-national gender research. Innovation: The European Journal of Social Science Research, 11(2), 147-166.

Pfau-Effinger, B. (2004). Socio-historical paths of the male breadwinner model–an explanation of cross-national differences 1. The British journal of sociology, 55(3), 377-399.

Philipov, D. (2008). Family-related gender attitudes. In People, population change and policies (pp. 153-174). Springer, Dordrecht.

Piven, F. F. (1990). Ideology and the state: Women, power, and the welfare state. *Women, the state, and welfare*, 250-64.

Popkin, S. L., & Dimock, M. A. (1999). Political knowledge and citizen competence. *Citizen competence and democratic institutions*, 117-146.

Popkin, S. L., & Dimock, M. A. (2000). Knowledge, trust, and international reasoning. Elements of reason: Cognition, choice, and the bounds of rationality, 214-238.

Powell, B., & Steelman, L. C. (1982). Testing an undertested comparison: Maternal effects on sons' and daughters' attitudes toward women in the labor force. Journal of Marriage and the Family, 349-355.

Preece, J. R. (2016). Mind the gender gap: An experiment on the influence of self-efficacy on political interest. *Politics & Gender*, *12*(1), 198-217.

Preece, J., & Stoddard, O. (2015). Why women don't run: Experimental evidence on gender differences in political competition aversion. Journal of Economic Behavior & Organization, 117, 296-308.

Prior, M. (2014). Visual political knowledge: A different road to competence?. The Journal of Politics, 76(1), 41-57.

Putnam, R. D. (1992). *Making democracy work: Civic traditions in modern Italy*. Princeton university press.

Putnam, S. J. P. R. D. (2000). *Disaffected democracies: What's troubling the trilateral countries?*. Princeton University Press.

Quaranta, M., & Dotti Sani, G. M. (2018). Left behind? Gender gaps in political engagement over the life course in twenty-seven European countries. *Social Politics: International Studies in Gender, State & Society*, *25*(2), 254-286.

Read, J. N. G. (2003). The sources of gender role attitudes among Christian and Muslim Arab-American women. Sociology of religion, 64(2), 207-222.

Rhodebeck, L. A. (1996). The structure of men's and women's feminist orientations: Feminist identity and feminist opinion. Gender & Society, 10(4), 386-403.

Robinson-Cimpian, J. P. (2014). Inaccurate estimation of disparities due to mischievous responders: Several suggestions to assess conclusions. *Educational Researcher*, *43*(4), 171-185.

Robinson, R. V., & Bell, W. (1978). Equality, success, and social justice in England and the United States. American Sociological Review, 125-143.

Preece, J. R. (2016). Mind the gender gap: An experiment on the influence of self-efficacy on political interest. Politics & Gender, 12(1), 198-217.Ross, K., & Carter, C. (2011). Women and news: A long and winding road. *Media, Culture & Society*, *33*(8), 1148-1165.

Rotolo, T. (2000). A time to join, a time to quit: The influence of life cycle transitions on voluntary association membership. *Social Forces*, *78*(3), 1133-1161.

Ruppanner, L. (2010). Conflict and housework: Does country context matter?. European Sociological Review, 26(5), 557-570.

Sani, G. M. D., & Quaranta, M. (2017). The best is yet to come? Attitudes toward gender roles among adolescents in 36 countries. Sex Roles, 77(1), 30-45.

Sapiro, V. (1982). Private costs of public commitments or public costs of private commitments? Family roles versus political ambition. *American Journal of Political Science*, 265-279.

Saraceno, C., & Keck, W. (2011). Towards an integrated approach for the analysis of gender equity in policies supporting paid work and care responsibilities. *Demographic research*, *25*, 371-406.

Sayer, L. C. (2005). Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time. Social forces, 84(1), 285-303.

Schmitter, P. (2001). Parties are not what they once were. *Political parties and democracy*, 67-89.

Schneider, M. C., Holman, M. R., Diekman, A. B., & McAndrew, T. (2016). Power, conflict, and community: How gendered views of political power influence women's political ambition. Political Psychology, 37(4), 515-531.

Schneider, M. C., & Bos, A. L. (2019). The application of social role theory to the study of gender in politics. Political Psychology, 40, 173-213.

Schnittker, J., Freese, J., & Powell, B. (2003). Who are feminists and what do they believe? The role of generations. *American Sociological Review*, 607-622.

Schudson, M. (1998). *The good citizen: A history of American civic life*. Harvard University Press.

Scott, J., Alwin, D. F., & Braun, M. (1996). Generational changes in gender-role attitudes: Britain in a cross-national perspective. Sociology, 30(3), 471-492.

Scott, W. R. (2008). Approaching adulthood: the maturing of institutional theory. Theory and society, 37(5), 427.

Settle, J. E. (2018). Frenemies: How social media polarizes America. Cambridge University Press.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference/William R. Shedish, Thomas D. Cook, Donald T. Campbell*. Boston: Houghton Mifflin,.

Shapiro, R. Y., & Page, B. (1992). *The rational public: fifty years of trends in Americans' policy preferences*. Chicago: University of Chicago Press.

Sherkat, D. E. (2000). " That they be keepers of the home": The effect of conservative religion on early and late transitions into housewifery. *Review of Religious Research*, 344-358.

Sherkat, D. E., & Ellison, C. G. (1999). Recent developments and current controversies in the sociology of religion. Annual review of sociology, 25(1), 363-394.

Shorrocks, R. (2018). Cohort change in political gender gaps in Europe and Canada: The role of modernization. Politics & Society, 46(2), 135-175.

Smiley, M. (1999). Democratic citizenship: A question of competence?. *Citizen competence and democratic institutions*, 371-83.

Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In Advances in experimental social psychology (Vol. 34, pp. 379-440). Academic Press.

Stolle, D., & Gidengil, E. (2010). What do women really know? A gendered analysis of varieties of political knowledge. *Perspectives on Politics*, *8*(1), 93-109.

Stubager, R., Seeberg, H. B., & So, F. (2018). One size doesn't fit all: Voter decision criteria heterogeneity and vote choice. *Electoral Studies*, *52*, 1-10.

Sturgis, P., Allum, N., & Smith, P. (2008). An experiment on the measurement of political knowledge in surveys. *Public Opinion Quarterly*, *72*(1), 90-102.

Suter, E. A., & Toller, P. W. (2006). Gender role and feminism revisited: A follow-up study. *Sex Roles*, *55*(1-2), 135-146.

Thomson, K. (1995). Working mothers: choice or circumstance?. *BRITISH SOCIAL ATTITUDES*, 61-90.

Thornton, A., & Freedman, D. (1979). Changes in the sex role attitudes of women, 1962-1977: Evidence from a panel study. American Sociological Review, 831-842.

Thornton, A., & Freedman, D. (1979). Changes in the sex role attitudes of women, 1962-1977: Evidence from a panel study. *American Sociological Review*, 831-842.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, *185*(4157), 1124-1131.

Valiente, C. (2008). Spain at the vanguard in European gender equality policies. *Gender politics in the expanding European Union: Mobilization, inclusion, exclusion*, 101-117.

Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., De Vreese, C., Matthes, J., ... & Stanyer, J. (2017). Political communication in a high-choice media environment: a challenge for democracy?. *Annals of the International Communication Association*, *41*(1), 3-27.

Verba, S., Burns, N. & Schlozman, K.L. (1997). Knowing and caring about politics: Gender and political engagement. Journal of Politics 59(4): 1051–1072.

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

Verweij, J., Ester, P., & Nauta, R. (1997). Secularization as an economic and cultural phenomenon: A cross-national analysis. Journal for the scientific study of religion, 309-324.

Voicu, M. (2009). Religion and gender across Europe. social compass, 56(2), 144-162.

Voicu, M., & Tufiş, P. A. (2012). Trends in gender beliefs in Romania: 1993–2008. *Current Sociology*, *60*(1), 61-80.

Walby, S. (1994). Is citizenship gendered?. Sociology, 28(2), 379-395.

Webster, M., & Sell, J. (Eds.). (2014). *Laboratory experiments in the social sciences*. Elsevier.

Weick, K. E. (2002). Essai: Real-time reflexivity: Prods to reflection. *Organization Studies*, *23*(6), 893-898.

Welch, S. (1977). Women as political animals? A test of some explanations for male-female political participation differences. American Journal of Political Science, 711-730.

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & society*, *1*(2), 125-151.

Wilcox, C., & Jelen, T. G. (1991). The effects of employment and religion on women's feminist attitudes. *The International Journal for the Psychology of Religion*, *1*(3), 161-171.

Wolbrecht, C., & Campbell, D. E. (2007). Leading by example: Female members of parliament as political role models. American Journal of Political Science, 51(4), 921-939.

Wood, W., & Eagly, A. H. (2012). Biosocial construction of sex differences and similarities in behavior. In Advances in experimental social psychology (Vol. 46, pp. 55-123). Academic Press.

Zagheni, E., Zannella, M., Movsesyan, G., & Wagner, B. (2015). Socio-demographic and Economic Factors Affecting Intergenerational and Gender Relationships in Europe. In A Comparative Analysis of European Time Transfers between Generations and Genders (pp. 1-17). Springer, Dordrecht.

Zuo, J., & Tang, S. (2000). Breadwinner status and gender ideologies of men and women regarding family roles. Sociological perspectives, 43(1), 29-43.

Appendix

Table 24. EVS wave, Survey year, total observations in sample, percentage and cumulative distribution across waves.

EVS-wave	Survey Year	Freq.	Percent	Cum.
1	1981-1984	19,378	8,8	8,8
2	1990-1993	38,213	17,3	26,0
3	1999-2001	41,125	18,6	44,6
4	2008-2010	66,281	29,9	74,5
5	2017-2018	56,368	25,5	100,0
Total		221,365	100.00	

Table 25. List of countries and the EVS waves they participated in (1 "present", 0 "absent"), and total of waves they participated in.

			EVS wave			
Country	1981-1984	1990-1993	1999-2001	2008-2010	2017-2018	Total
Albania	0	0	0	1	1	2
Azerbaijan	0	0	0	0	1	1
Austria	0	1	1	1	1	4
Armenia	0	0	0	1	1	2
Belgium	1	1	1	1	0	4
Bosnia Herzegovina	0	0	0	1	0	1
Bulgaria	0	1	1	1	1	4
Belarus	0	0	1	1	1	3
Canada	1	1	0	0	0	2
Croatia	0	0	1	1	1	3
Cyprus	0	0	0	1	0	1
Northern Cyprus	0	0	0	1	0	1
Czech Republic	0	1	1	1	1	4
Denmark	1	1	1	1	1	5
Estonia	0	1	1	1	1	4
Finland	0	1	1	1	1	4
France	1	1	1	1	1	5
Georgia	0	0	0	1	1	2
Germany	1	1	1	1	1	5
Greece	0	0	1	1	0	2
Hungary	0	1	1	1	1	4
Iceland	1	1	1	1	1	5
Ireland	1	1	1	1	0	4
Italy	1	1	1	1	1	5
Latvia	0	1	1	1	0	3
Lithuania	0	1	1	1	1	4
Luxembourg	0	0	1	1	0	2
Malta	1	1	1	1	0	4

Moldova	0	0	0	1	0	1
Montenegro	0	0	0	1	0	1
Netherlands	1	1	1	1	1	5
Norway	1	1	0	1	1	4
Poland	0	1	1	1	1	4
Portugal	0	1	1	1	0	3
Romania	0	1	1	1	1	4
Russian Federation	0	0	1	1	1	3
Serbia	0	0	0	1	1	2
Slovakia	0	1	1	1	1	4
Slovenia	0	1	1	1	1	4
Spain	1	1	1	1	1	5
Sweden	1	1	1	1	1	5
Switzerland	0	0	0	1	1	2
Turkey	0	0	1	1	0	2
Ukraine	0	0	1	1	0	2
Macedonia	0	0	0	1	0	1
Great Britain	1	1	1	1	1	5
United States	1	1	0	0	0	2
Northern Ireland	1	1	1	1	0	4
Kosovo	0	0	0	1	0	1
Total	19,378	38,213	41,125	66,281	56,368	

Table 26 Sample size per country, used for longitudinal analysis. EVS pooled data.

|	EVS wave				
Country	1990-1993	1999-2001	2008-2010	2017-2018	Total
Albania	0	0	1222	1224	2446
Austria	918	0	113	1327	3375
Armenia	0	0	1254	1312	2566
Belgium	1694	1396	1388	0	4478
Bulgaria	716	674	104	1144	3574
Belarus	0	722	1179	1212	3113
Croatia	0	872	1095	1211	3178
Czech Republic	1495	1359	1047	942	4843
Denmark	704	693	1257	2951	5605
Estonia	0	630	1168	753	2551
Finland	345	732	679	885	2641
France	630	1232	1316	1473	4651
Georgia	0	0	1218	1914	3132
Germany	2023	1448	1562	1599	6632
Greece	0	901	1341	0	2242
Hungary	667	783	1352	1186	3988
Iceland	523	718	618	148	3339
Ireland	777	0	693	0	147
Italy	1461	1536	1014	1747	5758
Latvia	204	659	109	0	1953
Lithuania	0	618	889	986	2493
Luxembourg	0	822	1224	0	2046
Malta	0	911	1257	0	2168
Netherlands	737	844	1253	1963	4797
Norway	812	0	969	971	2752
Poland	784	898	1119	938	3739
Portugal	850	728	1226	0	2804
Romania	889	872	1167	1078	4006
Russian Federation	0	1676	1085	1324	4085
Serbia	0	0	703	112	1823
Slovakia	762	1022	1178	1169	4131
Slovenia	717	835	1136	895	3583
Spain	1847	813	1164	990	4814
Sweden	0	729	561	998	2288
Switzerland	0	0	922	2673	3595
Ukraine	0	831	1214	0	2045
Great Britain	949	558	1094	1611	4212
Northern Ireland	238	0	345	0	583
Total	20742	26512	41169	39076	127499
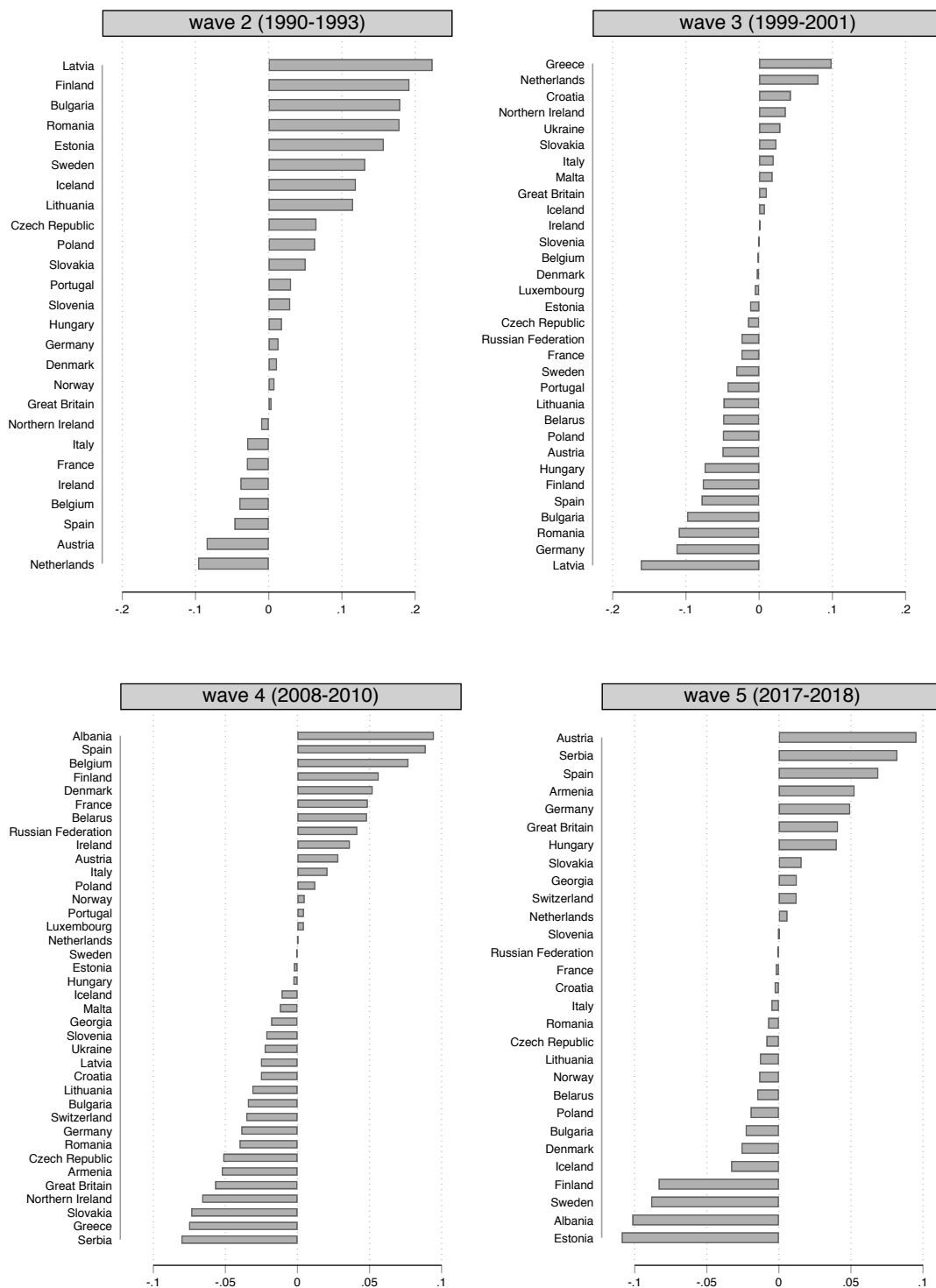
Figure 14 Fluctuations of female employment rate around the country mean, for each country. The 0 line is the average per country across wave. Every time the score is positive, it means there were more females employed in that year with respects to the average across years. When it is negative, it is the opposite: there were less females employed in that year with respects to the average across survey years.

195

Table 27 Percentage of employed men and women on over 25s. N. 172,689.

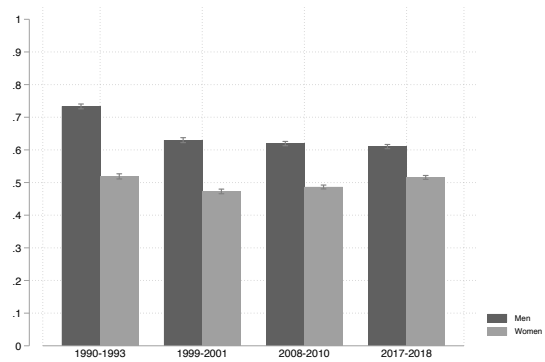| EVS Survey	GR index mean	
Wave	M	W
1990-1993	73.3	51.9
1999-2001	63.0	47.3
2008-2010	61.9	48.6
2017-2018	61.0	51.6

Figure 15 Proportion of employed men and women on over 25s, distributed per Wave. N 172,689.
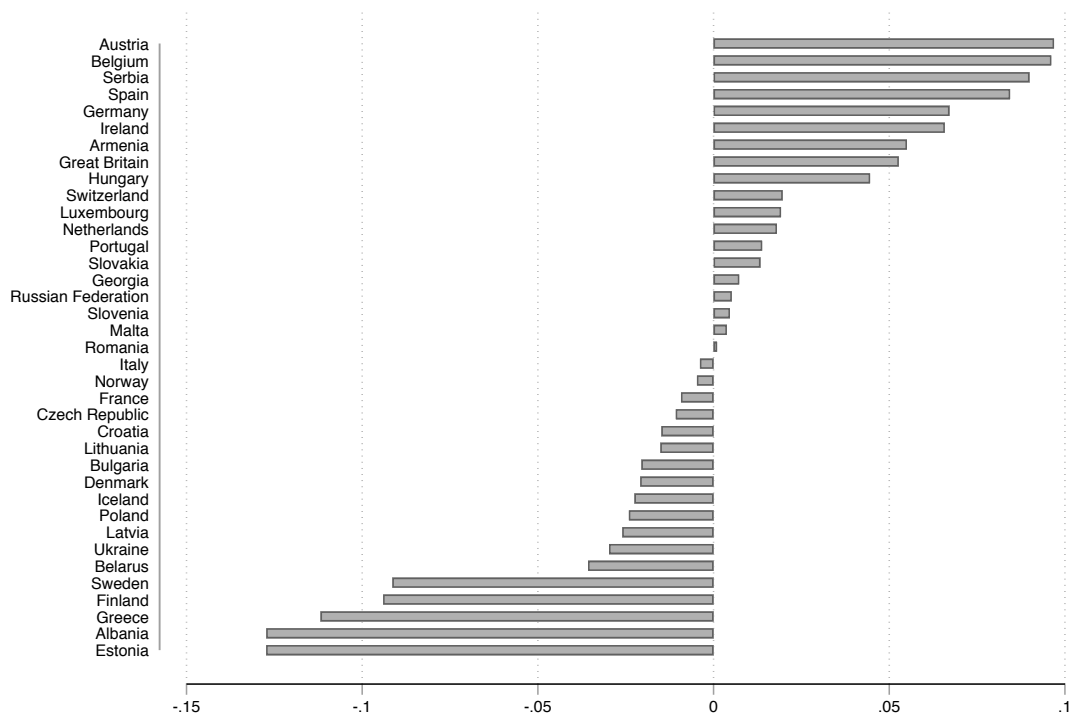

Figure 16 Increase or decrease of women in employment in Wave 5 as compared to the past waves, over 25s. N 65947.
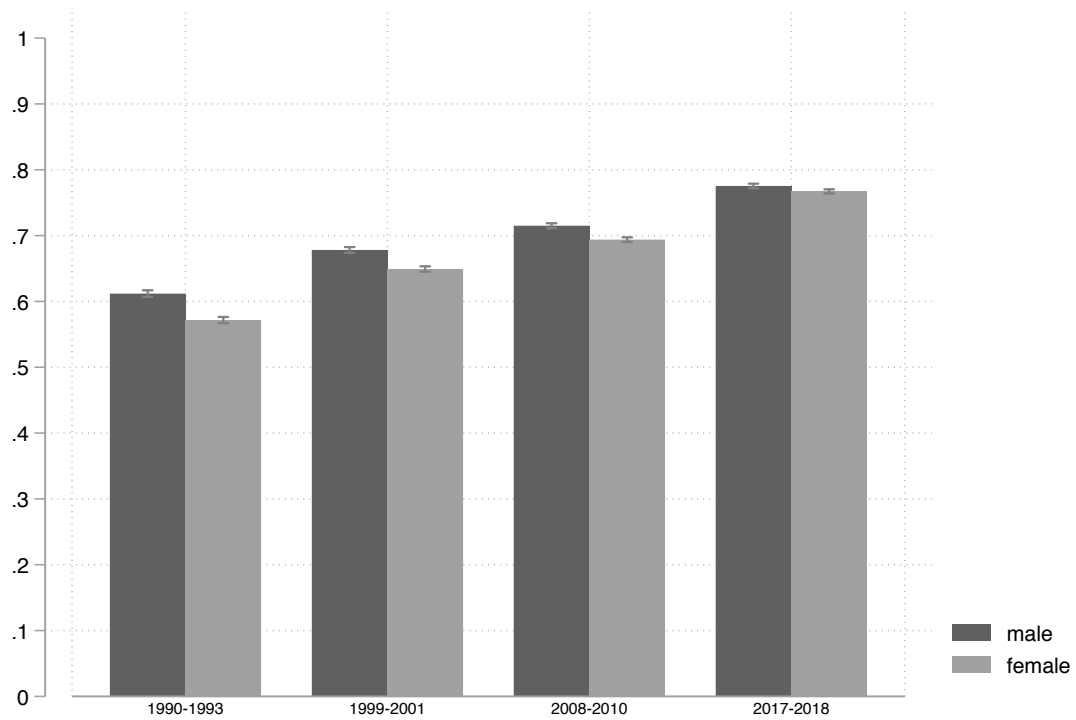
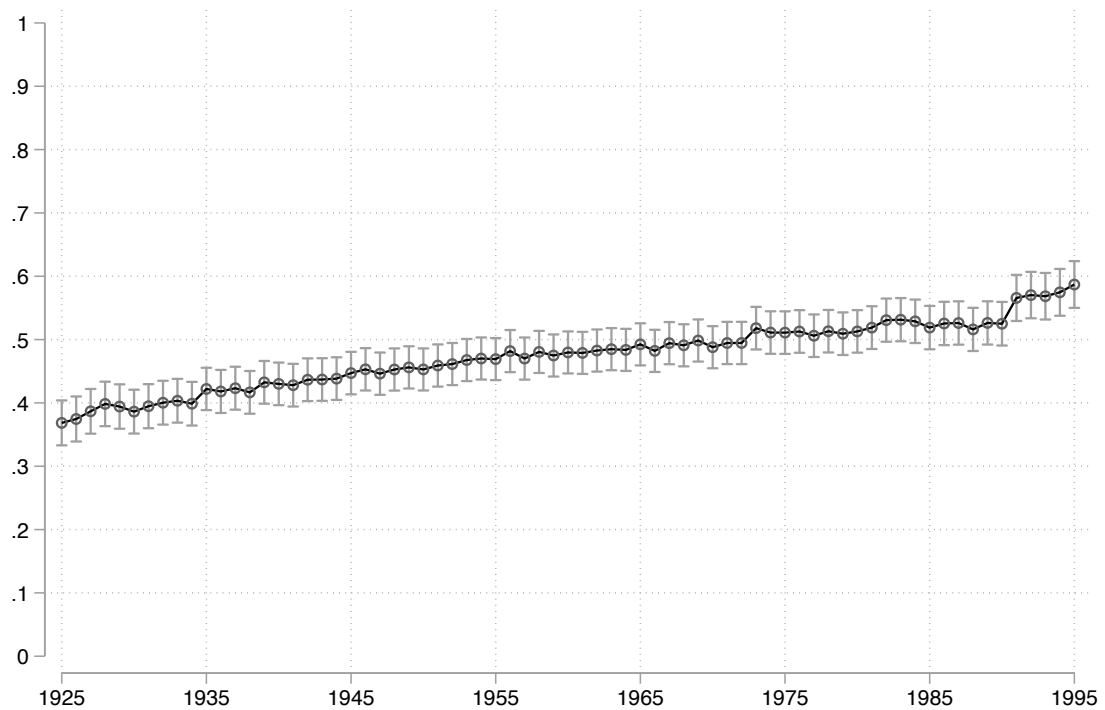*Figure 17 Average years of education over wave and gender. N 65947.*

Figure 18 Birth year regressed on GR index, controlling for level of education and employment, 2-level hierarchical model. N 139,556

197

Table 28 Cronbach's alpha and average score of countries that have participated to Waves 2, 3 and 4.

Country	Wave	N	Alpha	Mean
Belgium	2	2080	0.48	0.67
	3	1676	0.57	0.72
	4	1446	0.51	0.75
Bulgaria	2	897	0.48	0.64
	3	796	0.48	0.74
	4	1168	0.40	0.75
Czec Repubblic	2	813	0.36	0.73
	3	789	0.30	0.76
	4	1268	0.31	0.80
Denmark	2	813	0.58	0.73
	3	789	0.61	0.76
	4	1268	0.56	0.80
Finland	2	813	0.59	0.73
	3	789	0.52	0.76
	4	1268	0.62	0.80
France	2	809	0.58	0.71
	3	1403	0.56	0.73
	4	1427	0.56	0.78
Germany	2	2470	0.68	0.66
	3	1687	0.74	0.73
	4	1764	0.75	0.76
Hungary	2	822	0.45	0.64
	3	892	0.45	0.65
	4	1446	0.41	0.69
Iceland	2	599	0.47	0.64
	3	763	0.48	0.65
	4	669	0.46	0.69
Italy	2	1611	0.62	0.68
	3	1696	0.58	0.67
	4	1170	0.61	0.70
Latvia	2	623	0.40	0.62
	3	759	0.37	0.71
	4	11231	0.33	0.74
Lithuania	2	821	0.37	0.58
	3	801	0.29	0.67
	4	1089	0.31	0.67
Malta	2	274	0.44	0.57
	3	958	0.51	0.58
	4	1208	0.44	0.65
Netherlands	2	854	0.73	0.63
	3	918	0.64	0.67
	4	1356	0.61	0.68
Poland	2	804	0.40	0.62
	3	884	0.50	0.68
	4	1262	0.53	0.69

Portugal	2	1052	0.56	0.72
	3	903	0.50	0.71
	4	1363	0.51	0.71
Romania	2	963	0.23	0.73
	3	914	0.32	0.75
	4	1316	0.39	0.74
Slovakia	2	874	0.29	0.66
	3	1138	0.58	0.71
	4	1276	0.52	0.75
Slovenia	2	805	0.50	0.70
	3	889	0.55	0.73
	4	1241	0.45	0.73
Spain	2	2008	0.63	0.71
	3	934	0.63	0.72
	4	1206	0.69	0.76
Sweden	2	812	0.55	0.71
	3	863	0.57	0.77
	4	742	0.63	0.77
Great Britain	2	1227	0.61	0.67
	3	767	0.65	0.66
	4	1210	0.56	0.68

Table 29 Cronbach's alpha reliability test scores of all countries that participated to Wave 5.

Country	Cronbach's alpha
Albania	0.68
Azerbaijan	0.78
Austria	0.84
Armenia	0.78
Bulgaria	0.84
Belarus	0.78
Croatia	0.82
Czech Republic	0.80
Denmark	0.85
Estonia	0.81
Finland	0.86
France	0.83
Georgia	0.72
Germany	0.83
Hungary	0.83
Iceland	0.86
Italy	0.85
Lithuania	0.75
Netherlands	0.84
Norway	0.81
Poland	0.79
Romania	0.79
Russian Federation	0.79
Serbia	0.87
Slovakia	0.81
Slovenia	0.78
Spain	0.87
Sweden	0.86
Switzerland	0.85
Great Britain	0.85
all countries	0.86