Paola Paoloni Rosa Lombardi *Editors*

Gender Issues in Business and Economics

Selections from the 2017 Ipazia Workshop on Gender



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ISSN 2198-7246 ISSN 2198-7254 (electronic) Springer Proceedings in Business and Economics ISBN 978-3-319-65192-7 ISBN 978-3-319-65193-4 (eBook) DOI 10.1007/978-3-319-65193-4

Library of Congress Control Number: 2017955221

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The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

In a period characterized by a continuing trend of economic and social crisis and a clear need for policies on labor, social and economic revitalization needs to look at human capital as the real engine of sustainable and smart development. In this direction, "gender issues" play a central role: use of women's skills and attitudes can help to fuel the competitiveness of our companies and, more generally, the growth of the country.

Analyzing the feminine dimension in history and in enterprise means to explore and bring to light cultural and socioeconomic resources that generally are not taken into account. The survey of gender strategies adopted and tested by businesses and impact assessment for subsequent dissemination are fundamental objectives of "Ipazia" — the Scientific Observatory for Gender Studies (www.questionidigenere. it) — which was born with the aim of delineating a complete picture of constantly updated research, services, projects, and all initiatives related to women and gender relations at the local, national, and international levels.

In order to achieve this goal, the observatory intends to use the literature on gender studies as a basis for organizing and promoting initiatives of scientific focus such as workshops, seminars, conferences, studies, scientific laboratories at an interdisciplinary level.

In recent years, women have been involved in an economic phenomenon and social change that have greatly altered the working environment: taking on the role of the entrepreneur. This is a trend that involves both developed and developing countries and is continuing to gain greater importance. This evolution, however, has not been reflected in the literature. Until the early 1980s, in fact, scholars did not show a particular interest in discussing the potential role of women as entrepreneurs and the professional pathways from which the female presence is derived in business management.

The first signs of interest in women in the context of the study of gender, management, and organization (GMO) began in the late 1970s with research conducted mainly by scholars of Anglo-American origin (Schrier 1975). In the past, such studies were exclusively aimed at a vision of "male" entrepreneurs and the role of women in that context was completely overlooked or considered unusual and mar-

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ginalized (De Carlo and Lyons 1979). When, in fact, the figure of the entrepreneur was described, even without specifying gender, the personal characteristics were defined as typical male peculiarities (Welsh and Young 1982).

These studies have therefore been characterized by a clear androcentric tendency around the businessman's neutral figure that, though considered indistinct, intrinsically possessed — or was credited with — typically male characteristics and peculiarities (Schwandt 1994).

From existing literature the obvious and late consideration of the female presence in such studies is clearly derivative in nature — that is, derived from a previous model of inquiry centered on a male figure. Since its emergence, this double limitation has made interest in the study of gender, management, and organization unfinished and partially a monster.

In the early 1980s, interest in female entrepreneurship flourished and, along with it, the study of typical methodological tools of women's business developed. Therefore, the recognition of diversity emerged from observation of the ways women did business, identifying business practices that were typical of women and different from those used by men. The development of these issues, moreover, took root in various disciplinary disciplines. Studies on women have been conducted in many scientific areas (sociology, psychology, management, economics, organization, etc.) and also from an interdisciplinary perspective.

"Ipazia" — born with an economics—business heart — immediately recognizes the idea that the path of women in business and work is unraveled only if there is a clear emergence of the historical and social transformations, the paths, and the motivations of circumstances and occurrences. Gender inequalities in the public sphere and in private are now definitely diminished through the extension and diversification of female education and the presence of women on the Italian, European, and global public scenes. However, it is necessary to emphasize the importance of the paths and the wealth of events, using the past as a key to reading the present and the future

In pursuing the objective of a full understanding and transversal theme, we need interdisciplinary pathway research and complementary surveys on the entire female universe, enhancing the study of gender, management, and organization. This is why it is appropriate for those studying gender issues to consider this actively and to look to define it in research topics, at the same time analyzing its evolutionary dynamics.

Hence, this book is intended to monitor the progress of the studies and the potential of interdisciplinary inquiry. It is presented as a collection of different contributions in form and substance inorder to highlight the interdisciplinary character, building a dialogue between the various subjects and areas of science that are interrogated and encountered around a theme so wide and debated.

Rome, Italy
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Chapter 1 Social Accounting in Italy: The Pioneering Contribution of Women Scholars

Maria-Gabriella Baldarelli and Mara Del Baldo

Abstract The theme of women scholars' role and their contribution to initially promote social and environmental accounting and reporting is relatively new. Consequently there are many gaps to fill in concerning several topics developed within the aforementioned emerging research strand.

Starting from this premise, the aim of this paper is to present a discussion about women "master pioneers" of social accounting in Italy.

The research design develops through a deductive and inductive approach. The deductive approach is based on a literature review concerning social and environmental accounting and gender accounting. The inductive approach is empirically constructed and focused on the scientific and academic career of two Italian female scholars. The comparative analysis of the two cases helps to point out the relevance of women's contribution as well as to "disclose" their role in promoting social and environmental accounting and reporting in Italy.

Keywords Women • Accounting • Social and environmental reporting

1.1 Introduction

Gender equality is a fundamental principle of the EU, which assigned the task to investigate the gender balance in the research world to the experts of the Helsinki Group on *Women in Science* (WiS). Data show that women account for 45% of

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© Springer International Publishing AG 2018
P. Paoloni, R. Lombardi (eds.), *Gender Issues in Business and Economics*,
Springer Proceedings in Business and Economics,
DOI 10.1007/978-3-319-65193-4_1

researchers, 37% of senior lecturers and only 21% of full professors (EU, 2015¹). This "picture" is quite similar to that which has emerged in the previous 3 years (EU, 2012²).

Women's scientific productivity has been measured for the first time in the aforementioned latest report (European Commission, 2015) which includes data on scientific publications: women lag behind in terms of the number of papers produced compared to men and also appear less inclined to collaborate with colleagues from other countries (Fig. 1.1). Reduced access to funds for research, to crucial relationship networks and to social capital (Fletcher, Boden, Kent, & Tinson, 2007) generates a vicious circle: the difficulty of access to funds reduces the capacity to publish and thus to acquire, through the mechanism of citations, the same visibility as their male counterparts (Baldarelli, Del Baldo, & Vignini, 2016).

Addressing attention to the academic careers for women and men which is based on the International Classification of levels of education and university teaching (ISCED, 2011³)—professor, Grade A; associate professors, Grade B; researchers, Grade C; and holding grants of researchers, Grade D—the "scissor" trend, which widens further up the hierarchy, points out the well-known "glass ceiling" and "leaky pipeline" phenomena; during the path from graduation to PhD, at the top of the academic career, an ever-greater proportion of women stop at the lowest level, or women give up their research activity (Blickenstaff, 2005; Cotter, Hermsen, Ovadia, & Vanneman, 2001; Barres, 2006).

Focusing on Italy, data relating to the relevance and impact of women's scientific contribution "collide" with the data related to the presence of women in the academic curriculum, which regularly exceeds 50% of the reference population. However, in the transition from university to academic career, the presence of women decreases further up the hierarchy (Fig. 1.1).

This situation also characterises the scientific area of economics-statistics that includes the disciplinary field of business economics, on which our study is focused (Fig. 1.2).

In Italy, among the accounting scholar staff in 2015, out of a total of 755 academics, at least 67% of them belong to the male sex, while a modest 33% belongs to the opposite sex. This situation is very different from other countries, such as Australia, where the number of women academics is greater than that of men and there is the opposite situation (see Guthrie, Evans, & Burrit, 2014: 25).

Compared to these figures, few studies have investigated through a historical perspective the academic path and the role played by women in Italian universities or have "discovered" noteworthy women's profiles within specific scientific areas.

¹https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/she_figures_2015-final.pdf.

² http://ec.europa.eu/research/science-society/document_library/pdf_06/she-figures-2012_en.pdf.

³http://www.uis.unesco.org/education/Documents/isced-2011-en.pdf. European Commission— Women in Science (WiS) Questionnaire Guidelines.

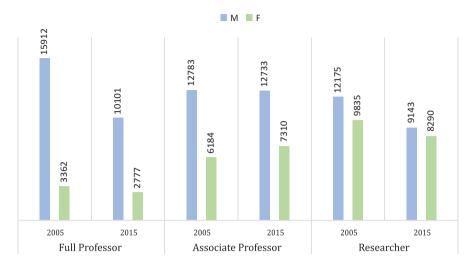


Fig. 1.1 University scholars by academic role. Source: MIUR—Office, Statistics and Study

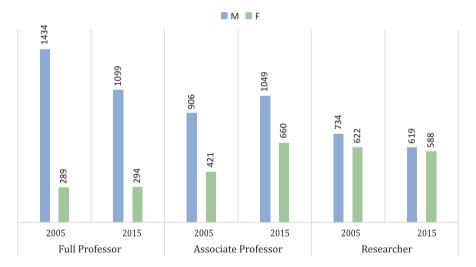


Fig. 1.2 University scholars by academic role—field of science: economics and statistics. Source: MIUR—Office, Statistics and Study

Notably, we can cite the works of Branciforte and Tazzioli (2002) and Frattini (2011). The first one is related to the University of Catania, where, from the 1920s to the end of the 1960s, teaching was distinctly male dominated in science sectors, technology, engineering and mathematics (STEM) except for some isolated cases, such as Pia Nalli, a full professor of mathematics who was a pioneer in a context in which women have always been removed due to horizontal segregation (which sees them more present in humanities sectors). The second study, focused

on the presence of women at the University of Cà Foscari in Venice (Frattini, 2011) and reported three crucial "joints" of the women's pipeline that affect the female presence and "absence":

- The women's college enrolment in science and technology, because of the presence of stereotypes and the lack of authoritative female models in this area
- The transition from a training phase to the access to the academic profession, which comes at a time of life when many women choose to become mothers: this choice very often conflicts with the mobility requirements related to new roles
- The transition from associate to full professor, connected to many difficulties to be faced to reach topmost positions

These aspects, investigated in relation to accounting scholars, will be presented and discussed on the theoretical level in the following paragraphs, after having briefly outlined the research design.

1.2 Research Design and Methodological Approach

This work is part of a research project to investigate, from a historical perspective, the presence and the role of women scholars in the scientific and academic field of accounting and provide further reasons for the gender imbalance (Baldarelli et al., 2016).

Notably, the study here presented aims to investigate what has been the contribution of women accounting scholars to the pioneering process of social accounting development in Italy. By keeping the historical-based perspective, attention is focused on the academic paths of the first scholars in the 1972–2000 period and their contribution to the development of a relatively innovative and still emerging branch within the accounting discipline. Currently, social accounting has triggered a relevant topic, particularly with the application of the Legislative Decree No. 254 of December 30, 2016, that implemented the European Directive 2014/95/EU in Italy on the nonfinancial and diversity information which large companies and business groups must include in their corporate reporting starting from 2016. This aspect, together with the widespread awareness of the socio-economic role of businesses, makes this field of study particularly interesting.

In particular, two reasons could be emphasised: on the one hand, social accounting is a new frontier with which the accounting discipline is still debated and which involves on an international level a growing number of experts in the field. On the other hand, gender literature widely recognises that women have a special sensitivity and ability to "capture" innovative and future trends which affect the social context. The creativity of women scholars in identifying emerging strands (which are important in theory as well as in the teaching and accounting profession) draws inspiration from women's ability to interpret social and environmental issues and is particularly accurate in identifying problems and prospects with a long-term vision that has a potential positive impact in terms of social innovation and business creativity (Green & Cassels, 1996; Kwaniewska & Neckar, 2004).

Therefore, the work aims to understand if and how this ability to "read and interpret the new" has contributed to the academic path of the women scholars, if it has been a distinctive feature and what factors have hindered or encouraged their academic career. Finally, in accordance with a previous study (Baldarelli et al., 2016), it aims to investigate whether social accounting is affected by male constructs and represents a male domain (Broadbent, 2016). To this end, the historical perspective is a fundamental key in understanding how the social and cultural factors act and to see if and how they have changed over time, since the survey is placed in the field of gender studies applied to a specific sectoral context (the universities and academic). Furthermore the study aims to assess how such factors regulate the accounting discipline and, within it, the social accounting, whose development is influenced by (and in turn influences) the social and cultural context of the period considered (1972–2000), as briefly described in the following section.

We decided to adopt a deductive and inductive approach using techniques of a qualitative nature typically employed in social research (Corbetta, 1999) but also widespread in the Italian tradition of study in the field of "business economics" and accounting (accounting and business administration) (Ferraris Franceschi, 1978, 1998). The deductive approach is based on literature concerning social and environmental accounting (Gray, 1999; Gray, Bebbington, & Walters, 1993; Gray, Owen, & Adams, 1996; Gray & Guthrie, 2005; Contrafatto & Rusconi, 2005) and gender accounting (Hopwood, 1987; Lehman, 1992; Kirkham, 1992; Cooper, 1992; Broadbent, 1998; Broadbent, 2016; Broadbent & Kirkham, 2008). The inductive approach involves the scientific contribution of two cases of Italian female scholars: Paola Miolo Vitali (University of Pisa) and Ondina Gabrovec Mei (University of Trieste).

In order to investigate the inequality factors in their scientific productivity and their university career opportunities, we then decided to perform a qualitative in-depth study based on semi-structured interviews addressed to the two women scholars who have been selected because they represent the first Italian social accounting scholars in the time frame posited for the study (1972–2000). Accordingly, their experience can be considered particularly representative with regard to their "role" as women pioneers and the first "women" masters within the Italian accounting discipline.

The source of data we used is derived from the personal story telling of the women scholars, using semi-structured interviews. The interviews were carried out in the months between May 2014 and March 2015 and were submitted using a face-to-face technique, conducted during telephone conversations lasting about half an hour each after having first contacted the interviewees for individual appointments. Using written notes, all information was subsequently validated. The topics covered by the interviews (based on a list of 15 questions) can be summarised into six main topics:

- 1. The brief description of the main steps in the academic career (in terms of years, roles and position)
- 2. The description and the personal evaluation of the most relevant difficulties, barriers and obstacles faced in entering the university context (if existent), in the academic career progression and in gaining scientific goals

- 3. The tools used, the stratagems and the choices adopted to face difficulties and to capture opportunities
- 4. The barriers/facilitations relative to accessing networks or relevant academic and scientific relationships on the national and international level
- 5. Their belonging (or not) to formal and informal networks of power and to male/ female masters' entourages and the consequence in terms of scientific production and freedom in selecting research areas to cultivate
- 6. Their relationships with male and female colleagues, competitors and students

Finally, this is followed by a concise evaluation of their experience and recommendations for young women currently working as accounting scholars. Moreover, we performed the documental analysis of the scholars' curriculum vitae and their main scientific publications (articles and monographs) on social accounting topics.

The narrative approach was useful in order to understand the institutional background concerning the period analysed. Namely, it is used to explore the choices, the quality and the use of accounting scholars in different research cultural contexts (Fletcher et al., 2007), also in a historical perspective (Guthrie et al., 2014), and has been considered consistent with the aim of identifying what the obstacles of gender equality are and what are the causes of these obstacles, the reasons and the effects of academia institutional changes. Literature points out that the "telling of a story" method (that in this research design can be appreciated as a "telling of her story") is useful both for research and teaching (Pfeffer & Sutton, 2006). Despite the current debate that divides different schools of thought (traditional and innovative) about the use of narrative accounting history (Carnegie & Napier, 1996), the relevance of self-reflection and auto-ethnography is spreading in social sciences and especially in accounting literature (Lawrence, 2014), as well as the use of the personal narrative of accounts (Samkin & Schneider, 2014) and the counter-narrative history (Persson & Napier, 2014). Biography and autobiography are useful in accounting studies to better understand social practices as well as the "accounting academic" (Samkin & Schneider, 2014: 7).

1.3 Theoretical Framework

1.3.1 Some Notes About the Origins of Social Accounting and Reporting in Italy

Social accounting relates to the presentation and measurement of overall performance of the enterprise (Contrafatto & Rusconi, 2005; Contrafatto, 2009). Therefore, it refers to the inclusion in the accounting processes of information on the "externalities" of the business, as we can read: Social accounting is the universe of all possible accountings, conventional accountings is a small subset of social

accounting; social accounting covers an enormous range of issues, not just all off accounting and finance but labour, law, ecology, carbon trading, theories of justice; the issues we are concerned with are exceptionally complex - the relationship between human culture, information, economics, business, morality, the planet and society (Gray et al., 1993).

In Italy the interest in social accountability and social reporting developed from the second half of the 1970s, and for over a decade, these themes have generated considerable attention (Matacena, 1984; Rusconi, 1988; Vermiglio, 2000; Hinna, 2002; Contrafatto & Rusconi, 2005; Pulejo, 1996), although they have not yet been clearly defined. In fact there are still many differences in the terminology (i.e. social report, societal report, social balance, social economic report and so on), as well as in the informative content and the functions carried out. Until the late 1980s and early 1990s in Italy, the theme of the social report did not find particular applications. On the practical and business level, the first case of producing a social report dates back to 1978 with the Merloni Group on the initiative of the "Istituto Battelle of Geneva", the promoter of a research project which envisaged experimentation with social reporting in four great for-profit Italian companies. Some years later, an attempt was made to make social reporting compulsory by law (Government Bill No. 1571 of July 22, 1981), by proposing the introduction, within a corporate information system, of social reporting containing information about employees' quality of life and actions to improve safety and hygiene in the workplace. Such an initiative however was not followed up. Social reporting still remains voluntary in nature. In the last 20 years, the diffusion of social reporting has been on the increase, however, especially in listed companies and medium- to large-sized corporations, whereas it is not so widespread among small-sized companies, although there is no lack of excellent cases.

Within the Italian doctrine, the debate and topics mainly developed around the definition and conceptualization of the social balance and the environmental report. Italian scholars who started to develop this research field were mainly men (Matacena, 1984; Rusconi, 1988), alongside whom a few women scholars distinguished themselves by their ability to open new paths and push the boundaries of knowledge, such as Ondina Gabrovec Mei (concerning social balance and added value) and Paola Miolo Vitali (concerning budget and environmental costs). During the 1980s, Italian scholars had to face many complex conceptual difficulties since there was neither a shared concept and language nor a doctrinal basis about the nature and purpose of these new tools (social report, corporate social responsibility and reporting disclosure) such as the conditions existing for annual financial statements or an organic and systematic theoretical and scientific program. It follows, therefore, that the contribution of those scholars who were the first in Italy to deal with scientific and methodological rigour the fluid theme of social report (Contrafatto, 2009) should be recognised and, in particular, it is important to highlight the significance of the female contribution, which has yet to be investigated.

1.3.2 Women and Accounting

Literature has developed several interesting currents of thought about why and how accounting is gendered. The first and the most prevalent focuses on aspects tied to gender and connected to cultural and social factors (Hopwood, 1987; Lehman, 1992; Kirkham, 1992; Lord & Robb, 2010).

The second current relates to biological factors and in particular physical aspect and maternity, which exclude, slow down or create discrimination against women accountants and their career in both public and private enterprises (Haynes, 2008a, 2008b: 344; Anderson, Johnson, & Reckers, 1994; Dambrin & Lambert, 2006a, 2006b; Ciancanelli, Gallhofere, Humphrey, & Kirkham, 1990; Duff, 2011; Komori, 2008).

Concerning the first current of thought, according to cultural and social factors, the "alternative history", provided by Lehman (1992), represents a first phase in integrating the literature on gender into our theoretical understanding of accounting and of how the accounting profession has been seen as unsuited to women but suitable to men.

Lehman underlines how accounting knowledge is influenced by a male domination in terms of content, definition and language, how it incorporates aspirations and male-constructed structures and how the ideological base remains firmly rooted in the male concept of economic rationality. Lehman proposes a reading from a historical perspective of levels of discrimination endured by women in the last century (from 1900 to 1992) both at an economic level—in which women's access to forms of economic support was either denied or made difficult—and at a social and ideological level (due to the presence of social and economic hierarchies).

Afterwards, the work by Lehman and Tinker (1987), through an analysis of literature which appeared between 1960 and 1973 in academic and economic journals (such as the *Journal of Accountancy* and the *Accounting Review* and *Fortune Review*), highlighted how accounting has been depicted as a passive service exclusively dedicated to the accountability of the economic reality, whereas they have underlined its cultural, social and symbolic value and its authentic social origins.

Kirkham, who takes up the very interesting work of Hopwood (1987), underlines the importance of not focusing just on those issues concerning the divide between the sexes (in this sense see Lehman, 1992 too). The issue of sex discrimination, such as analysed by Lehman, is important to understand the reasons. Nevertheless, according to Kirkham, we have to move the spotlight onto the relationship between culture and accounting knowledge and social customs (as was also said by Hopwood, 1987). This passage is fundamental in order to understand, in terms not of biological difference alone but rather in terms of gender (Lehman, 1992: 263), societal and structural motivations, which give rise to the causes of discrimination about which Lehman, herself, speaks.

It is not enough therefore, according to Kirkham and to us also, to let the investigation rest solely on biological differences. Rather we have to progressively come

to understand the dynamics established between accounting culture and social practices which have structured certain uses, customs and behaviours and therefore have settled a specific "culture" over time (Catturi, 2004; Lai, 2004). Only in this way can we really grasp and understand, what are the true motivations that led to a certain behaviour and, therefore, to a certain outcome.

Kirkham criticises the feminist approach of Lehman (as well as the results achieved with feminist theories) because she considers the cultural basis of accounting in itself, whether it be male chauvinist or not.

Understanding the theme of discrimination against women, therefore, may be specially obtained, according to Hopwood and Kirkham, via an analysis that goes deeper than the empirical results of a difference of sex. Moreover issues that deal with both a company's culture and practices are structured over time, in a certain country. Therefore, the qualitative-based research approach, founded on a microhistorical method (Parker, 1999; Williams, 1999) and based on the oral history and narratives of female scholars, is particularly useful to better understand the historical context and the relationship within the company and university culture (Fletcher et al., 2007; Virtanen, 2009; Lord & Robb, 2010).

As regards the second current of contributions on gender accounting, the deductive analysis focused on the literature of gender in French and Anglo-Saxon accounting journals developed by Dambrin and Lambert (2006a, 2006b) and highlights how the history of the accounting profession reveals a process of marginalisation of women, which has evolved over time moving from exclusion (horizontal segregation) to being restricted to subordinate roles (vertical segregation). The authors further underline that, adhering to the structural hypothesis of the "crystal ceiling" (Ciancanelli et al., 1990) faced by women in the accounting profession—also maintained by Barker and Monks (1998)—there are three kinds of obstacles: individual (relative to variables centred on the personality), organisational (structural discrimination) and social (prejudice of the dominant groups). The first kind of impediment has been developed by women themselves and regards features (such as know-how and motivation), behaviour and traits of the feminine personality (e.g. the varying capacity to tolerate stress, face risks and little self-confidence) which explain the differing career advancements. The second type includes obstacles existing within organisations that are the result of the perpetuation of stereotypes. These are the same barriers to the profession in the twentieth century that Lehman (1992) identified in her study. Consequently, the third one, which regards social obstacles, are the stereotypes associated with each gender, which explain the existence of the "glass ceiling", and are the reflection of values and norms perpetuated by society. In this sense, men incarnate power and women incarnate the affective sphere. These spheres are related to specific roles: the managers are "naturally" managers, women are "naturally" mothers, and those wishing to advance their careers must adopt masculine behaviour.

After having analysed the literature framework that helps to understand why and how accounting is gendered, in the next section, we will focus on the contributions and roles of women and men in the academic context.

1.4 Women and Social Accounting in Italy: Insights from Pioneering Experiences

As shown above, in the period considered (1972–2000), the presence of women in the university context in general and in the accounting discipline in particular was very limited. Among the few women, however, it is possible to distinguish the mentors, Professors Paola Miolo Vitali and Ondina Gabrovec Mei, who have distinguished themselves within the accounting (Baldarelli et al., 2016) and who were able to make a pioneering contribution in the field of social and environmental accounting (accounting and social and environmental reporting). Below their experience is presented by addressing attention to three main aspects: the career path, and reasons for the choice of contributing to the creation and development of social and environmental accounting and the contents of their scientific production. There follows the discussion of these issues under a gender perspective.

1.4.1 Italian Women Scholars' Pioneers of Social Accounting: Ondina Gabrovec Mei

Ondina Gabrovec Mei had been a full professor of accounting at the University of Trieste from 1987.

As she said: "Prof. Paganelli offered me the research topic of the degree thesis. When I received this proposal, I didn't immediately accept, as the Master wondered. My decision had been considered very strange, because in a few months the position of assistant professor would have been available in the same university. To refuse the proposal was tantamount to refusing any collaboration with the university. In fact, this decision stunned Paganelli, who did not expect it.

I thought the post of assistant could "wait" in the sense that, on the one hand, I had the perspective of working as a teacher of accountancy at Slovenian schools (who sought these skills), on the other hand I had clear ideas. I wanted to start a family and have children. I had already self-deleted. After that Prof. Paganelli became my Mentor and offered me the opportunity of teaching. After the departure of Prof. Paganelli, who returned to the University of Bologna, the competition for a post as lecturer of the University of Trieste was put out for a male colleague. However, I decided to participate in the exam and I won. In a list of 39 candidates I reached the 7th place".

When we asked how many difficulties she encountered in her carrier that are related to being a woman, she answered that she didn't have any difficulty related to the fact of being a woman. She continues her story: "I worked well despite having a family and children. I was administering exams, teaching, doing research ... Just a few days after the birth of my child, I had to examine as part of a commission. The work, however, was more satisfying. Today workloads have increased greatly.

I think that the presence of women can ameliorate the changing of the relationship in the academic context and to see how better the job can be tackled. Surely, it is fundamental and essential to have help from ones husband. Often my husband took care of our children when I was fully immerged in teaching activities. However, I wrote a lot in the evening. Moreover, I always remained at the University of Trieste that was quite far from other Italian scholars' circuits. I had no competition or conflicts. I had the chance to work with several colleagues belonging to my scientific discipline. In that period it was (and is) much simpler when working with friends. The most beautiful thing I've done is: One child and my family".

As a pioneer of social accounting, she wrote two very important works: the first titled *The Value Added of enterprise* (1984) and the second one *Quantitative methodology to measure the value added of the enterprise* (Gabrove Mei, 1986).

Her interest in social accounting matters derives from the influence of Prof. Ubaldo De Dominicis, who had been in Trieste. De Dominicis had been strongly influenced by German accounting theory.

She underlined her personal interest to deepening the research field of social accounting and ethical background.

Gabrovec Mei is one of the founders and current members of the GBS (Italian social reporting group). This group is developing in theory and in practice some important national topics (such as social reporting guidelines for different types of private and public organisations) related to social and environmental accounting and reporting.

She proposed the quantitative content of social reporting, in terms of production of value-added account and distribution of value-added account to stakeholders. In addition, she faced a relevant issue relative to the connection between value-added and the national accounting system; in this regard, she marked the urgent need to harmonise these two typologies of accounting. She stresses that the connection between business accounting and national accounting is advocated both by economists and by accounting scholars.

Concerning the calculation of the added value, Gabrovec posits that large and public companies are highly interested in the added value since they have to legitimise their activity and prove their contribution in generating and distributing economic, social and environmental wealth. She proposes two methods for determining the value added: the direct one which considers the production process and the indirect one, which examines the distribution process.

Regarding the production of value added, Gabrovec considers two possible methods, of which the first considers the difference between the value of production obtained and intermediate consumption. Such a method of calculation is more reliable, because in Gabrovec's view, it reflected the most reliable result. Moreover, this is the added value synthetically made by the increase of value to goods and services that were purchased. The system of bookkeeping that allows the direct calculation of this measure is the "current patrimonial system". Gabrovec also proposes another method of calculating the value added according to the production perspective that has been later emphasised by Catturi (2004).

The value added (Gabrovec Mei, 1984: Sect. 4.3) is considered the result that best meets the need to provide clear information to the various stakeholders and provides an additional core informative value to the traditional financial statement.

1.4.2 Italian Women Scholars' Pioneers of Environmental Cost and Environmental Accounting: Paola Miolo Vitali

The first woman scholar of environmental accounting in our country was Paola Miolo Vitali, full Professor of Business Economics at the Faculty of Economics of the University of Pisa from 1980 to 2010.

In the academic year 1966–1967, she graduated with honours in business and economics at the University of Pisa, with her Master Prof. Egidio Giannessi. He has been a professor of various teachings: general and applied accounting (1974–1980), public accounting (1972–1980), management and decision-making analysis, cost analysis and management and cost accounting in the following years.

Paola Miolo Vitali built a long and distinguished career, coming to occupy top positions within the University of Pisa, as well as at the institutional level, within the academia and the scientific community, both at the national and international level.

Drawing from the analysis of her *curriculum vitae* in terms of scientific production, Vitali had more than 50 publications from 1978 to 2010, including works carried out in collaboration with male colleagues and young scholars.

Concerning the research question at the base of this work, Miolo Vitali stands out as the author of two important works through which she paved the way for spreading and cultivating the knowledge of environmental accounting, thus opening up new frontiers. Namely, two key pioneering contributions should be marked: the article "Pollution: one looks at the costs", published in a scientific journal (Analysis, no. 2, 1979; Miolo Vitali, 1979), and a monograph: "Ecological problems in the management of enterprises" (Miolo Vitali, 1978). This scientific innovation was pursued at a time when no other scholar in Italy, including the masters, had shown interest in social and the topic of companies' environmental problems/issues (to which other scientific disciplines were rather more sensitive) continuously cultivating more traditional themes, in the vein of the accounting Italian tradition. Other works related to environmental accounting and the environmental costs followed in subsequent years in the theoretical context of nonfinancial reporting information and the relationship between businesses and the social system.

The second focus of the analysis concerns the "why" of this borderline choice, that is, the reasons for her interest in an innovative topic (environmental cost and environmental accounting) and then risk, previously never treated within the discipline. In order to understand Miolo's personal attributes which led to her courageous choice, drawing from the interviewee's words, there are two factors behind this strong sensibility: her intellectual curiosity and her ability to feel and understand ahead of time, anticipating the possible extent and significance of a phenomenon that would become over the years central in the national and international

debate, both in accounting and in an interdisciplinary perspective for the scientific and business world. In this respect, we directly quote Miolo's words:

"I had been intrigued by the spread of ecological phenomena, with particular emphasis on pollution, and the increasing number of studies in economics, commodity economics, biology, chemistry, the topic. From a brief bibliographic survey I understood that the research fervor of other disciplines on environmental issues was opposed by an almost total disinterest in business economics, and in particular in the Accounting of our country. I understood that no Italian accounting colleagues previously dealt with this topic. I found interesting references in international literature concerning Industrial Pollution, Accounting for Pollution, Accounting and Ecology and other publications. Hence the idea to carry out a survey to understand and analyze the economic impact of this problem affecting the business context". (P. Miolo Vitali, May 27, 2016).

The study developed on the practical impact of the ecological reorganization on the financial statement, the formation of bid prices and trying to imagine the future environmental development of enterprise management. At this point of the research I developed the idea that, in order to curb the future environmental situation, there needed to be an intensive research and innovation of products and processes to anticipate and eliminate the negative forces that sensitivity to environmental problems can weigh on the market and the environment. Accepting this new perspective, in my opinion, management of enterprises developed well beyond the purification costs, with changes in business strategy and policy and consequently in the Accounting instruments. (P. Miolo Vitali, May 27, 2016).

The third focus of the analysis was on the content of the scientific work carried out in this area and the methodological approach. With this regard, as per the words below quoted, we point out the following key aspects: (1) her personal interest to deeply analyse a new research with the permission of Miolo's Master Egidio Giannessi who allowed her to undertake this "research adventure" and (2) the search for a link with the issues and the basic theoretical constructs of the accounting discipline and the will to cultivate the new perspectives and frontiers, while respecting the doctrine.

On can read in fact: "I chose to set a specific research perspective among those possible. I animatedly discussed with Prof Giannessi this proposal and with his forward-looking vision, he provisionally accepted my belief that the growth of knowledge in this respect would be appropriate and useful if it dealt with that the developing crisis between man and the environment. I remember him saying: 'write and after we will see!'" (P. Miolo Vitali, May 27, 2016).

Miolo Vitali's choice was pursued through a long and difficult journey. However her scientific activity has been respectful of orthodoxy which nevertheless allowed her to persistently cultivate the original vision: "At this point of my research I matured the idea an intensive and continuous research should be carried out to anticipate and eliminate the negative forces that sensitivity to environmental problems can bring to bear on the market and the environment. Accepting this new perspective, in my opinion, would have led the management of enterprises well beyond the purification costs, with changes in business strategy and policy and consequently in Accounting" (P. Miolo Vitali, May 27, 2016).

In addition, with respect to the content of Miolo Vitali's main book on environmental account (Miolo Vitali, 1978), it should be pointed out that: she focuses both on the analysis of business costs for management control and strategic decision-making impact of environmental costs; she uses the perspective of "purified" costs alongside environmental costs, and she focused on the issue of pollution and the investments that the company makes to solve this problem (Miolo Vitali, 1978).

Finally, it is interesting to note the accounting scholars' evaluation of Miolo's book:

"It seems interesting to note today, that after the volume sent to academics of the time, I received the usual ritual of thanks, but also a few letters of the Italian Masters of Accounting (Onida and Amodeo) in which, in addition to praise for my contribution in improving scientific research, they indicated as points of weakness: 'the limitations of the object of study and the risk of enhancement of environmental protection then considered the same way as a trend among many subjects and issues that characterize that time'" (P. Miolo Vitali, May 27, 2016).

1.5 Discussion and Conclusive Remarks

The comparative analysis of the two cases, which are different even if they belong to the same historical period, helps to point out the relevance of women's contribution to "reading the time", their capability in interpreting the stakeholders' expectations during the time and their role in promoting social and environmental accounting and reporting in Italy.

Miolo Vitali is more oriented to studying and recording the environmental impact within the cost accounting field and in the management decision process inside of the enterprise, while Gabrovec considers more the pioneering disclosure process of the enterprise and the information needs of external stakeholders. Both of them showed the analytical processes of calculations but in a different way: on the one hand, Miolo Vitali highlighted the environmental cost accounting and, on the other hand, Gabrovec focused on the value-added accounting and reporting.

Accordingly, we can positively answer the research question: "What is the contribution of women accounting scholars to the pioneering process of social accounting development in Italy?" The contribution of these two pioneering women scholars is relevant and original. Despite the limitations of our work, attributable to the empirical approach which is based only on Italian cases, we think that it has scientific implications since the reflections emerged can contribute to understanding the role of women in generating new fields of research and scientific social innovation. Moreover, it contributes to nurturing a field which still has to be improved in order to "disclose" the sometimes hidden or unknown role of women in promoting social and environmental accounting and reporting.

From the gender accounting perspective, we also detect from the women's personal experience that in their scientific career, they had to face barriers that are typical to entering the university system, barriers that, for a woman, are tied to biological factors (Haynes, 2008a, 2008b: 344; Anderson et al., 1994) and the double role as

mothers and workers. Secondly, we can underline a "crystal ceiling" effect (Broadbent, 1998) in pursuing their carrier within the academic accounting discipline. The crystal ceiling is attributable to obstacles relative to the relationship with the masters (men), colleagues and students, as Miolo Vitali said: "the significant self-evaluation of a large number of the Italian accounting scholars; the initial rare presence of women scholars, that had a little increase over time, along with a progressive, but slow, conquest of their academic burden".

Finally, concerning their freedom to select the research fields, what emerges is the ability to select new topics autonomously. These two women scholars followed their own intuitions, without having to pander decisions or find routes marked by male colleagues.

At the same time, what also emerges is the female ability to "weave and wield relations", not only among people but also between tradition and innovation, which in this case is manifested in the desire not "to break" but to preserve, wisely combine and enrich the bond between the new line of research and the traditional subject areas, cultivating in theory and practice the new perspectives of study (Coronella & Laghi, 2015).

This represented (and represents) an important freedom, which enabled scholars to "liberate" their potential and to express their scientific value by helping to open up new perspectives, despite the judgements—that not all always were positive—from colleagues who failed to understand the relevance of new emerging research fields that have instead proved crucial importance for the present and the future of accounting, as in other disciplines.

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Chapter 2 Fertility Rates Around the World: A Cluster Analysis of Time Series Data from 1960 to 2013

Carlo Drago and Giuseppina Talamo

Abstract The entry of women into the labor market with an active and permanent presence is, today, a subject of a heated debate among scholars and policy makers that sees, on the one hand, diversity in gender relations and women's employment and on the other hand the economic importance of women and increasing economic efficiency. At international level, greater economic and political role of women is recognized as a sign of economic vitality of the country. The increase in female education rates, the economic and cultural globalization, public policies favorable to families, and recent legislative impositions have enlivened this debate highlighting two crucial aspects: a greater integration of women meeting the equitable principles of equal opportunities and a greater integration of women responding to greater efficiency and economic growth. The main limitations and difficulties in the participation of women in the labor market are numerous and complex and often interconnected: direct discrimination, occupational segregation, stereotypes, conciliation of life and work, the service coverage rates, etc.

In this paper we use World Bank data on fertility rates around the world from 1960 to 2013, and we analyze the different time series related to fertility rates of different countries in order to detect different clusters. The classification of different countries considered in different clusters is performed by considering an appropriate clustering methodology and the dynamic time warping distance. At this point we interpret the different clusters in order to considering also the different labor markets and policies as a relevant determinant of the dynamic of the fertility rate over time and a relevant statistical reason of the formation of the cluster. The aim of this paper is to provide how and if greater attention to women considerations could lead

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to a greater understanding of the obstacles that prevent the full participation of women in the economy and in particular in the labor market. This recognition allows the creation of more targeted assistance programs to address these obstacles thus creating an environment for even better response from policy makers. This paper is organized as follows. In the first section, we present a recent review of the main literature on women in the labor market. The second section presents data. The third section presents the methodology used and the fourth all different statistical results. In the fifth section, we discuss all results obtained. Finally, we conclude.

Keywords Economics of gender • Econometrics • Labor market • Public policy • Welfare economics

2.1 Introduction

The entry of women into the labor market with an active and permanent presence is, today, a subject of a heated debate that sees, in the one hand, diversity in gender relations and women's employment and on the other hand economic importance of women and increasing economic efficiency as source of heated debate among scholars and policy makers. At international level, greater economic and political role of women is recognized as a sign of economic vitality of a country. The World Economic Forum (2015) estimates that the global gender gap—the time it will take for women to achieve parity in the workforce—would take 118 years for economic parity to be achieved. The increase in female education rates, the economic and cultural globalization, public policies favorable to families, and recent legislative impositions have enlivened this debate highlighting two crucial aspects: a greater integration of women meeting the equitable principles of equal opportunities and a greater integration of women responding to greater efficiency and economic growth. The main limitations and difficulties in the participation of women in the labor market are numerous and complex and often interconnected: direct discrimination, occupational segregation, stereotypes, conciliation of life and work, the service coverage rates, etc. Following this approach, a study by Goldman Sachs (Matsui, 2005) has introduced the term global womenomics, stressing that women's work is an important engine of world development. Several studies (The Economist, 2006; Wittemberg-Cox and Maitlan 2009) have shown that the phenomenon of womenomics is a tool to promote economic growth, a higher birth rate, of household wealth, and better business performance. Recently, more attentions are given, for example, to the effects of the recent economic and financial crisis on women's participation in the workforce. In this regard, recent studies (EU Report, 2012; UNAIDS, 2012) have shown that women have been more exposed to the global crisis for the following reasons: low levels of social protection, lower wages, less control of resources and property, and increased presence in precarious jobs. Nevertheless, the crisis was seen by many scholars as a chance to rethink and reform the principles and the leadership and governance mechanisms present in most financial institutions and beyond.

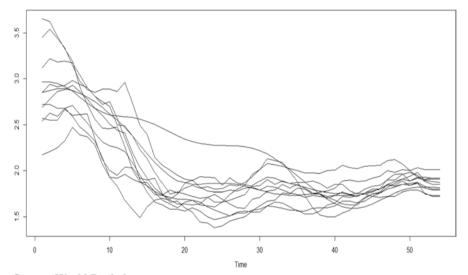
The fact that womens face large difficulties in getting established in labor market, delay of the time when they move to independent living, and to postpone the first motherhood may have serious consequences in terms of fertility. Recent studies (World Bank, 2016; OECD, 2005) show that fertility rates have declined in most countries to the levels that are well below those needed to secure generation replacement. Many of these countries have total fertility rates below 1.5, and some have recorded below-replacement fertility rates for decades. During the recent crisis, at European level, for example, in 2008 there were no falls in fertility rates compared to the 2007. By 2011 fertility rates have declined in 24 countries (Eurostat, 2013).

The effects of fertility declines are not limited to society as a whole but extend to the well-being of individuals, for example, all difficulties in getting established in labor markets, the delay to move to independent living, and the increasing number of women to postpone their first motherhood. All of these require and imply an active role of policy makers in designing possible measures to reverse the ongoing decline in fertility rates. Recent data (OECD, 2003, 2005), however, confirm that few countries have adopted policies that stimulate increasing fertility. In particular, policies that aim to influence fertility should consider different determinants such as social benefits, conditions in labor and housing markets, level of education, and health services. Social scientists and demographers have engaged a lively debate on the causes of low fertility rates. Many empirical studies have focused on the link between women's childbearing decisions and their participation in the paid labor market, as well as on the relation between fertility rates and other demographic or societal development at macro- and microlevels. Recent studies, however, have examined the relation between fertility rates and institutions and policies affecting families with children (OECD, 2003, 2005). Several governments have introduced specific measures aimed at countering it, designing policies that also allow women to combine opportunities in the labor market and responsibilities within the family (OECD, 2005; World Bank, 2016).

Objective of this work is to analyze, in the light of the existing literature, the effect of the variation in fertility rates in two groups of countries due to the interaction of female participation in the labor market. In particular, this analysis considers time series of fertility rates and through a classification process (clustering) of the same series identifies the clusters or groups of similar series with each other. These clusters would then be attributed to groups with similar social and economic structures (which in fact lead to similar fertility rates over time). The results show different fertility patterns over time and across countries. Through this analysis we show that greater attention to women considerations and policies oriented to the decline in fertility rates could lead to a greater understanding of the obstacles and structural factors that have contributed to the decline in fertility rates. This paper is organized as follows. In Sect. 2.1, we present a recent review of the main literature on women in the labor market. The Sect. 2.2 presents data. The Sect. 2.3 presents the methodology used and the Sect. 2.4 all different statistical results. In Sect. 2.5, we discuss all results obtained. Finally, we conclude.

2.2 Literature Review

The gradual but rapid decrease in fertility rates occurred in all industrialized countries, and it is one of the contemporary phenomena at the center of debate among scholars and policy makers because of the multiplicity of implications for both society and the economy. Over the past few years, female participation rates in the labor market have increased, and fertility rates have declined in most developed countries. This negative relationship between fertility and female participation in the labor market is increasingly object for concern and attention at global level. According to the World Bank Report (2016), total fertility is now 2.5 children per woman globally. This global average masks wide regional differences.



Source: World Bank data.

In recent decades, the participation in the labor market by women has increased, while the fertility rate decreased in most advanced countries. This model is consistent with the traditional microeconomic forecasts: economic models of fertility rate provide that an increase in education levels and women's wages led to an increase in their labor supply and a reduction in fertility. The existence of an inverse relationship between fertility and the participation was documented by Becker and Lewis (1973a, 1973b) and Willis (1973a, 1973b) and empirically analyzed by Butz and Ward (1979a, 1979b). In Becker (1960) and Leibenstein (1957), the demand for children is a function of their costs and individuals' preferences, for a given income. Thus, children are a special type of capital good (OECD, 2005). Recent analysis (Del Boca, 2002) showed that in the 1980s, female participation in the labor market has grown in all countries, while fertility rates have declined in some countries, while in others they grew. Countries that, for example, have lower fertility levels (Spain, Italy, and Greece) are those with relatively low levels of female participation in the labor market, while countries with higher fertility rates (Denmark, France) have relatively high

female participation rates in the labor market. Several authors (Ahn & Mira, 2001) have analyzed the correlation between the total fertility rate and the rate of female participation in the labor market. All results confirm the strategic role of political decisions and the actuations of social norms in favor of women-working mothers: parental leave, child care, flexibility. Other studies have, however, shown different results: there is a correlation between the two phenomena, but there was a change of sign from negative to positive. In particular, these studies focus on the Mediterranean area and showed a negative correlation between female employment and fertility rates (Engelhardt, Kogel, & Prskawetz, 2001a, 2001b). Other studies have focused the attention on the role of income in the decision to have a child. The results showed the existence of a negative correlation between income and fertility, and in particular it has been observed that middle-income families are the ones who have fewer children. Theoretical models proposed in the literature (Devaney, 1983; Heckman and Walker, 1990) show that, on the one hand, a pure income effect implies a positive relationship between income and fertility and, on the other hand, a combined income effect with a substitution effect leads to less net results. The income is also related to the position of women in the labor markets, and women who may aspire to higher occupations can find too costly to give up work to have a child. In these cases, therefore, the substitution effect can counterbalance the income effect. The interesting fact is that in countries with the highest degree of fertility, the degree of female employment is also high.

Recent data (Eurostat, 2016) show that in many European countries, fertility levels are below the threshold of substitution. The declining birth rate, in fact, not only has a direct impact on the immediate and age structure and the dependency ratio between generations but, by changing the proportion of young and old, can affect even indirectly on the balance and vitality of the labor market as well as on levels of innovation and economic development of the whole society. Studies conducted in all European countries show that not only in many cases a significant gap between the number of children they want and realized fecundity exists, but also as in recent years it is witnessing a realignment between intentions and actual fertility in a sort of downward spiral described by some authors as "low fertility trap" (Lutz, Skirbkk, & Testa, 2005).

Finally, in light of recent studies on gender equality, comparative analysis between European countries has shown that minor gender imbalances in wages and employment are associated with a higher birth rate and economic growth (Ferrera, 2008; Country Report, 2010). Recent studies (Klasen, 1999) found a positive correlation between gender equality in education measures and growth rates. A recent report (McKinsey Report, 2015) states that the global weakening of the gender gap could double the contribution of women to the growth of global GDP by 2025. According to ILO (2014) shows that the effect of increased gender gap is negatively associated with the process of growth, particularly in developing countries, and lower income. The World Bank (2015) confirms that gender inequality in areas such as education, health and employment, and political participation has a negative impact on growth processes. In Europe, for example, all countries now devote a significant proportion of their resources to the implementation of measures designed to support families in order to support the achievement of desired fertility.

Next to the concept of fertility, it is necessary to associate the level of protection and social assistance to help working women in some countries to be mothers. Several studies provide mixed conclusions on the effect of various policies on fertility.

2.3 Introduction to the Statistical Problem and Methodology

Starting analysis perspective, we will focus on fertility rates as a key element in the analysis of each country. In particular, therefore, we will consider specifically the time series of fertility index. The analysis in time series ended up being important in many scientific contexts. In particular, the usefulness in time series is in the possibility, offered by the method, to analyze dynamic phenomena in time. The classification procedures of time series in this way make it possible to identify common trends over time so that they can be adequately characterized.

In this work we make use of their own time series as just we are particularly interested in analyzing and comparing the dynamic behavior of the time series. The historical analysis allows to study the dynamic and temporal behavior of a phenomenon. In particular, in this context, precisely considering the fertility, the identification of increasing trends over time or even decreasing that instead represent the decline of a certain phenomenon is especially of interest.

In the same way, it is useful to study the trends of time series groups (e.g., convergence) and even possible structural changes that may exists in one or more time series. Structural changes, in fact, may be due to economic or social and political phenomena is very important to identify such phenomena in turn can determine them.

The aim of this scientific work is to analyze the one hand the trend of historical information, the fertility, the fertility rates of countries worldwide, and as of this purely exploratory approach, study the trend of that time series over time. In addition, we will study the trends of the time series to groups making use of appropriate classification procedures (also called cluster analysis). The relevance of such analysis is that one wants to identify the existence of models of development and economic growth between the various countries that can be traced to the economics and prototypes, thus be identified in this way.

Various approaches have been proposed for the classification of time series, including two large families: methods that classify from time series parameters and methods that classify from raw time series data itself (Liao, 2005). From these methods it is possible, using its own remote, to classify the historical series.

We can define clustering or automatic classification that statistic procedure may be considered useful in the classification of objects or even statistical units in groups of objects that can be defined as similar to each other (Liao, 2005). The similarities, therefore, can be defined as a similarity between observations and statistical "intragroup units" where it is instead the maximum distance between the various groups. If so, the classification of time series is a statistical procedure aimed at the identification of classes or groups of time series maximally similar between them;

the same classification is usually based on a reference distance. In this sense the algorithm identify the groups of time series maximally similar to each other and different considering other groups. The distance used is appropriate in these contexts and is the distance DTW (dynamic time warping). The procedure of using the DTW distance identifies the time series that possess the optimal alignment (Zhao & Cen, 2013). The classification method instead uses the single bond (Ghererghi & Andlauro, 2004).

The validation of clustering procedures is important in order to identify a number of groups defined consistent. In particular in the literature, we have proposed very different approaches in the validation and in the choice of an appropriate number of clusters. A classification procedure must be validated as it is theoretically possible to obtain a different number of clusters within the same set of time series. In this sense need the number of clusters identified by the procedure need to be validated. In this work in particular, we will use the index of Dunn (1974). The validation procedure departs from the hierarchical classification algorithm and then identify the number of groups by the Dunn index. We consider several cuts of the dendrogram and we compare the Dunn index. Then we choose the cut of the dendrogram and the associated clusters, which maximizes the Dunn index.

The data refer to all the nations of the world considering the time interval defined. The figures relate to the annual series of the fertility rate. The data source is the World Bank. Where such comments were found to be missing the time series, it is not considered. Eventually we consider the different time series taking into account the reference period. In particular, we use all available information.

2.4 Results and Discussion

This section presents all results and comments on our clustering analysis divided into two groups of countries: Group 1, which includes Italy, Germany, Greece, Russia, Romania, Bulgaria, and Japan, and Group 2, which includes Anglo-Saxon countries, Scandinavia, France, Belgium, and the Netherlands. Using World Bank data (1960–2013), we analyze the pattern of fertility rates across these two groups. In particular, it is interesting to analyze the similarity between different time series of countries related to fertility rates. From the dendrogram it is possible to compute the different Dunn index associated with the different cuts and the clusters obtained. At this point the different indices of Dunn calculated are compared. At the end of the procedure, we obtain a number of 30 clusters or groups which represent the final result of our analysis. We can now describe the different results of different classification groups maximally similar to each other. These time series groups can be referred to different models and represent as the dynamics of fertility which can be acted in time from these development models.

Starting our analysis by Fig. 2.1, it is possible to see a significant difference between different dynamics of both countries.

This dynamic appears to be opposed to our second analysis related to Fig. 2.2 where we have analyzed countries of Group 2.

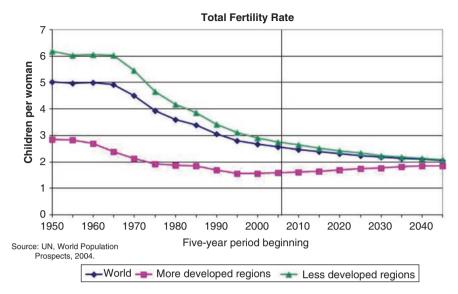


Fig. 2.1 Development of the cluster time series. Group 1: Italy, Germany, Greece, Russia, Romania, Bulgaria, and Japan. Fertility rate years from 1960 to 2013. Source: World Bank data

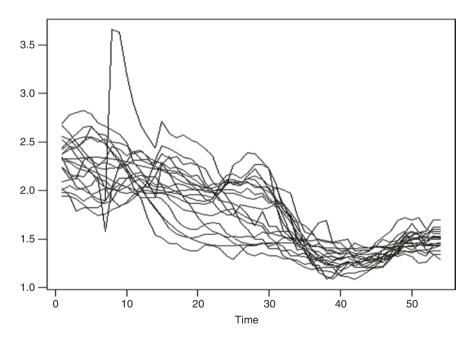


Fig. 2.2 Performance of Group cluster time series 2. Group 2: Anglo-Saxon countries, Scandinavia, France, Belgium, and Holland. Fertility rates in 1960–2013. Source: World Bank data

The dynamics of both time series groups can usefully be considered and compared. All descriptions related to the main variables are in the appendix.

Analyzing Fig. 2.1, it is interesting to note that in the 1960s we have a level of about 2.4 with regard to the type of European countries. Variability tends to vary over the next decade being reduced gradually, by aiming well to shrink the central value. In the same way, it can be seen that the value of fertility continues to decline over time in the decade having some recovery in the 1980s that is reconfirmed in the 1990s. Finally we can see a collapse precisely in the 1990s but also in a certain way a certain convergence of all of the group's cluster time series toward the end of the period. Finally, after 2000, we can see a slight recovery in a scenario in which the time series of fertility tend to be still converging.

One first conclusion is that fertility rate has been growing in some stages and declining in other phases. This pattern confirms that the countries of this first group, in different phases, have adopted both policies that have strongly influenced fertility rates and have followed the micro approach related to income effect. Despite different economic and social history, these countries present a significant and variable trend in term of fertility rates. For example, considering the years of the economic boom, we can see a high fertility rate, which in turn may imply an affordable and quality child care, tax advantage provided to family, and statutory maternity leave (OECD, 2005).

Additionally, a comparison between some of the countries of Group 1 is instructive. Before the 1940s, low fertility rates were not sustained by policies, and this low rate was the result of the two wars. On the contrary, birth rates increased during the baby boom of the 1940s, 1950s, and 1960s and assuaged previous fears of population decline. By the 1970s, most of Western Europe experienced the emergence of "low-low" fertility rates. By the late 1980s and early 1990s, countries such as Germany, Spain, and Italy reported fertility rates well below replacement level (<1.5), refueling concerns about very low levels of fertility (Morgan & Taylor, 2006). At this point it is also possible to consider Fig. 2.2. In this second group, countries' fertility rates decrease more sharply in the first decade and then increase in the following period. Finally, all countries tend to have a recovery in recent years. Analyzing Fig. 2.2, we can conclude that the economic policy choices of this group of countries and their economic situations have a great influence on the value of the fertility rate. For example, France initiated birth policies immediately after the Second World War and is a clear proof that birth support policies by governments show their results in the long term and also significantly affect women's participation in the labor market (Livi, 2017). Thus, the interpretation of the temporal variation in the relationship between participation and the fertility rate confirms the importance of policy choices and the implementation of social norms for womenmothers: parental leave, child care, and greater flexibility.

In contrast, in countries such as Italy, for example, the lack of fiscal policies that encourage women's work, the lack of long-term policies for births, and the lack of family income security have strongly influenced the low and limited participation of women in the labor market, total fertility has dropped to 1.34 children per woman, and the Italian propensity to have children at maturity is confirmed (ISTAT, 2017).

Comparing some countries of the two groups, we can see how the concerns facing Greece, Italy, and Spain are very different from those facing France, for example. For the latter one country, moderate levels of immigration could offset sub-replacement fertility, producing population stability. For Greece, Italy, and Spain, only massive immigration could offset their very low fertility. (Morgan & Taylor, 2006).

Comparing both figures we can conclude that despite the diversity in the choice of economic policies of each country, we can confirm that since the 1980, female participation in the labor market has grown in all countries, while fertility rates have declined in some countries, while in others they are grown. Countries that, for example, have lower levels of fertility (first group: Spain, Italy, and Greece) are those with relatively low levels of female participation in the labor market, while countries with higher levels of fertility (second group: see, e.g., France) have relatively high levels of female participation rates in the labor market. Additionally, a comparison between Italy and Scandinavian countries (Group 1 and Group 2) is instructive. Until the 1970s, Scandinavian fertility rate was lower than the Italian rate. Now we can see the opposite: new generations of Scandinavian women have more children compared to Italian women.

These results confirm recent analysis (Del Boca, 2002) showed that in the 1980s, female participation in the labor market has grown in all countries, while fertility rates have declined in some countries, while in others they grew. Countries that, for example, have lower fertility levels (Spain, Italy, and Greece) are those with relatively low levels of female participation in the labor market, while countries with higher fertility rates (Denmark, France) have relatively high female participation rates in the labor market.

These results confirm the main theories on fertility rates: for many years the elasticity of fertility with respect to incomes was positive, and in recent years it is zero or even negative (Guinnane, 2011).

2.5 Conclusions

The United Nations (2010) in relation to fertility rates in different countries agrees with the idea of a future convergence around the replacement level or an attenuation of the differences between countries. This approach would allow policy makers to have an agenda of more accurate and reliable policy particularly in the short to medium term as the basis for critique and design interventions on the social systems. In this paper we proposed an analysis of historical data relating to fertility indexes on World Bank data. The present analysis confirms very low fertility trends that may increase in the light of improving the sustainability of socioeconomic system itself. The results of the two different groups confirm and reinforce what is analyzed at the micro and macro: in recent years, female participation rates in the labor market have increased, and fertility rates have declined in most developed countries. In recent decades, as confirmed by the data, participation in the labor

market by women has increased, while the fertility rate decreased in most advanced countries. This model is consistent with the traditional microeconomic forecasts: economic models of fertility rate of conduct provide that an increase in education levels and the ports of women's wages led to an increase in their labor supply and a reduction in fertility. The existence of an inverse relationship between fertility and the participation was by Becker and Lewis (1973a, 1973b) and Willis (1973a, 1973b) and empirically documented by Butz and Ward (1979a, 1979b). Recent studies have shown that especially for policy makers and institutions, it is necessary to understand the potential effects of fertility trends on the various economic and social dimensions in order to arrange an agenda of policy suited to respond or to provide correctives to the needs that new sociopolitical arrangements require.

All results presented in this paper show that the phenomenon of the fall in the average rate of fertility lasts too long and also in all countries. Although in some of them there will be a recovery in the last decade, no nation is really at the level of sufficient fertility rates to ensure the replacement of generations.

Finally, according to the main literature (Guinnane, 2011), the historical fertility transition played a central role in the making of modern economies, and in considering this it is necessary to consider several different economic explanations for the historical fertility transition: an exogenous decline in infant and child mortality, innovations in the technology of contraception or more widespread availability of contraceptive devices, increases in the direct cost of childbearing, changes in the opportunity costs of childbearing, and net increase in returns to child quality; children were an important way to ensure against risk and to provide for old age, and the rise of state social insurance as well as private insurance and savings vehicles led households to substitute out of children. In conclusion, in light of this observation, the role of the flows of international migration to industrialized countries should be followed carefully. In fact, we can consider the so-called third transition that can affect the population structure in terms of ethnic composition as well as on the age (Coleman, 2006).

Appendix

Nations Considered

- 1. Afghanistan
- 2. Albania
- 3. Algeria
- 4. Angola
- 5. Antigua and Barbuda
- 6. Argentine
- 7. Armenia
- 8. Aruba

- 9. Australia
- 10. Austria
- 11. Azerbaijan
- 12. Bahamas, The
- 13. Bahrain
- 14. Bangladesh
- 15. Barbados
- 16. Belarus
- 17. Belgium
- 18. Belize
- 19. Benin
- 20. Bhutan
- 21. Bolivia
- 22. Bosnia and Herzegovina
- 23. Botswana
- 24. Brazil
- 25. Brunei Darussalam
- 26. Bulgaria
- 27. Burkina Faso
- 28. Burundi
- 29. Cabo Verde
- 30. Cambodia
- 31. Cameroon
- 32. Canada
- 33. Central African Republic
- 34. Chad
- 35. Channel Islands
- 36. Chile
- 37. Cinchona
- 38. Colombia
- 39. Comoros
- 40. Congo, Dem. Rep.
- 41. Congo, Rep.
- 42. Costa Rica
- 43. Cote d'Ivoire
- 44. Croatia
- 45. Cuba
- 46. Cyprus
- 47. Czech Republic
- 48. Denmark
- 49. Djibouti
- 50. Dominican Republic
- 51. Ecuador
- 52. Egypt, Arab Rep.
- 53. El Salvador

- 54. Equatorial Guinea
- 55. Eritrea
- 56. Estonia
- 57. Ethiopia
- 58. Fiji
- 59. Finland
- 60. France
- 61. French Polynesia
- 62. Gabon
- 63. Gambia, The
- 64. Georgia
- 65. Germany
- 66. Ghana
- 67. Greece
- 68. Grenada
- 69. Guam
- 70. Guatemala
- 71. Guinea
- 72. Guinea-Bissau
- 73. Guyana
- 74. Haiti
- 75. Honduras
- 76. Hong Kong SAR, China
- 77. Hungary
- 78. Iceland
- 79. India
- 80. Indonesia
- 81. Iran, Islamic Rep.
- 82. Iraq
- 83. Ireland
- 84. Israel
- 85. Italy
- 86. Jamaica
- 87. Japan
- 88. Jordan
- 89. Kazakhstan
- 90. Kenya
- 91. Kiribati
- 92. Korea, Dem. Rep.
- 93. Korea, Rep.
- 94. Kuwait
- 95. Kyrgyz Republic
- 96. Lao PDR
- 97. Latvia
- 98. Lebanon

- 99. Lesotho
- 100. Liberia
- 101. Libya
- 102. Lithuania
- 103. Macao SAR, China
- 104. Macedonia, FYR
- 105. Madagascar
- 106. Malawi
- 107. Malaysia
- 108. Maldives
- 109. Mali
- 110. Malta
- 111. Mauritania
- 112. Mauritius
- 113. Mexico
- 114. Micronesia, Fed. Sts.
- 115. Moldova
- 116. Mongolia
- 117. Montenegro
- 118. Morocco
- 119. Mozambique
- 120. Myanmar
- 121. Namibia
- 122. Nepal
- 123. Netherlands
- 124. New Caledonia
- 125. New Zealand
- 126. Nicaragua
- 127. Niger
- 128. Nigeria
- 129. Norway
- 130. Oman
- 131. Pakistan
- 132. Panama
- 133. Papua New Guinea
- 134. Paraguay
- 135. Peru
- 136. Philippines
- 137. Poland
- 138. Portugal
- 139. Puerto Rico
- 140. Oatar
- 141. Romania
- 142. Russian Federation
- 143. Rwanda

- 144. Samoa
- 145. Sao Tome and Principe
- 146. Saudi Arabia
- 147. Senegal
- 148. Sierra Leone
- 149. Slovak Republic
- 150. Slovenia
- 151. Solomon Islands
- 152. Somalia
- 153. South Africa
- 154. South Sudan
- 155. Spain
- 156. Sri Lanka
- 157. St. Lucia
- 158. St. Vincent and the Grenadines
- 159. Sudan
- 160. Suriname
- 161. Swaziland
- 162. Sweden
- 163. Switzerland
- 164. Syrian Arab Republic
- 165. Tajikistan
- 166. Tanzania
- 167. Thailand
- 168. Timor-Leste
- 169. Togo
- 170. Tonga
- 171. Trinidad and Tobago
- 172. Tunisia
- 173. Turkey
- 174. Turkmenistan
- 175. Uganda
- 176. Ukraine
- 177. United Arab Emirates
- 178. United Kingdom
- 179. United States
- 180. Uruguay
- 181. Uzbekistan
- 182. Vanuatu
- 183. Venezuela, RB
- 184. Vietnam
- 185. Virgin Islands (U.S.)
- 186. Yemen, Rep.
- 187. Zambia
- 188. Zimbabwe

Group 1 European countries, Italy, Germany, Greece; Eastern European countries, Russia, Romania, Bulgaria; Japan.

Group 2 Anglo-Saxon countries, Scandinavia, France, Belgium, Netherlands.

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Chapter 3 Female Entrepreneurship as Production Factor or Business Function: A Literature Review of (Lack of) Definitions

Gabriele Serafini

Abstract The research starts from an analysis of scientific papers identified by means of querying academic databases, in relation to the identification and classification of female entrepreneurship. Since female entrepreneurship is an economic magnitude clearly identified only in a small part of the scientific products analyzed, the paper continues with the purpose of locating a definition of entrepreneurship as *productive factor* or *entrepreneurial function*. The lack of a unique definition seems to constitute a fundamental element of this field of studies, even though the results of the four queries carried out suggest that entrepreneurship, in addition to the female entrepreneurship, is mainly considered a function that *combines* the production factors, rather than a productive factor. Implications for profit accounting rules are discussed at the end of the paper.

Keywords Productive factor measure • Entrepreneurial function definition • Female entrepreneurship

3.1 Foreword

This research is an evolution of an our previous work (Serafini, 2016) which aimed at identifying a definition of female entrepreneurship as factor of production, through any measurement model of its contribution to value added or business revenue.

The research was carried out by means of a survey of the literature published in 2015, and its main result consisted in registering a lack of a clear definition of

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female entrepreneurship and, therefore, the impossibility in general to measure its contribution to the value added or business revenue.

As an evolution of that work, this research has first extended in temporal terms, without time limits, the analysis of scientific papers identified by means of querying scientific databases, in relation to the identification and classification of female entrepreneurship.

As will be seen in the following paragraphs, dedicated to the classification and the discussion of the results, even if in the economic literature it is possible to trace a prevailing definition of this magnitude as *production function* rather than as *a productive factor*, female entrepreneurship is an economic magnitude clearly identified only in a small part of the scientific products analyzed, since it is considered *independent*¹ from other variables.

On the basis of this lack of clear definition, the research was then expanded with the purpose of locating at a higher level—i.e., at the level of *entrepreneurship* instead of *female entrepreneurship*—a definition of the entrepreneurship as productive factor or entrepreneurial function that combines the productive factors.

This extension of the research was made because, in the history of economic thought, *entrepreneurship* was intended both as a productive factor (Marshall, 1890–1920: Book IV) and as the capacity to innovate by combining the productive factors (Schumpeter, 1911–1934: Entrepreneurial Profit).

In this case the database query was conducted by combining the word *entrepreneurship* with *production factor* and then with *production function* or *business function*. The additional 95 articles obtained suggest that entrepreneurship, in addition to the female entrepreneurship, is mainly considered a function that *combines* the production factors,² rather than a productive factor,³ even if in a large part of the analyzed papers, such occurrence is not explicitly identifiable.⁴

Clearly it is not conceivable that you should force scholars to share a definition of *female entrepreneurship* and even *entrepreneurship*. However, precisely the lack of a unique definition seems to constitute a fundamental element of this field of studies. Detail of the analysis performed and main results are in the next paragraphs.

¹We considered the criterion of a *clear definition* when the paper, possibly of a qualitative nature, reported a definition of the *independence* of this magnitude with respect to the others. As it can be seen in Table 3.2, female entrepreneurship is classified as independent in 41 papers of the 142 result of the query.

²53.68% of the 95 papers obtained as output of the two queries; 96% of the classifiable papers. 44.21% of the papers couldn't be classified in relation to the definition of "entrepreneurship" as a production or business function.

³ 16.88% of the 77 scientific articles obtained as output of the two-key query "entrepreneurship" and "production factor"; 38.24% of the classifiable papers.

⁴55.84% of the papers couldn't be classified in relation to the definition of "entrepreneurship" as production factor.

Table 3.1 Quantitative or qualitative

	Number of papers	%
Quantitative	73	51.41%
Qualitative	40	28.17%
Not classifiable	29	20.42%
Total	142	100.00%

Table 3.2 Female entrepreneurship as independent

	Number of papers	%
Female entrepreneurship (FE) as independent	41	28.87%
FE as independent and quantitative	29	20.42%
Total	142	

3.2 Female Entrepreneurship as (Independent) Factor or Function

As temporal broadening of the research previously recalled, we performed a *query* on databases "Business Source Complete" and "EconLit" of "Sapienza University of Rome," by means of the following keyword: *female entrepreneurship*. The research was carried out without any year limit and other keywords, in order to find a definition of female entrepreneurship and its independence.

Carried out in July 2016 with the limiter "peer-reviewed journals," the query has produced 142 articles⁵; we have proceeded to classify the following three research questions: *Is paper qualitative or quantitative? Is female entrepreneurship independent? Is female entrepreneurship a factor or a function?*

The results tell us that only half of the papers are quantitative and that about a fifth of the paper is not classifiable in this sense (Table 3.1).

41 papers indicate the female entrepreneurship as independent, and only 29 papers indicate that female entrepreneurship is a quantitative variable and independent of the other (see Table 3.2).

In relation to the consideration of female entrepreneurship as a factor of production or a business function, only five papers clearly indicate that it is a production factor, and 58 that it is a business function, since 79, more than half, are not classifiable (see Table 3.3).⁶

As a result, we can state that only a small number of papers establish a clear definition of female entrepreneurship. We then considered an additional research in order to try to understand (at an upper logical level) if is there a clear definition of *entrepreneurship* as a factor or a function.

⁵Adding as a second keyword "factors," the number of results drops to 32. Adding as a second keyword "production factors," the number of results drops to 1.

 $^{^6}$ Only 27 of the quantitative papers that indicate female entrepreneurship as independent (93.10% = 27/29) indicate that it is a business function.

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Table 3.3 FE as factor or function

	Number of papers	%
Factor	5	3.52%
Function	58	40.85%
Not classifiable	79	55.63%
Total	142	100.00%

Table 3.4 Entrepreneurship. quantitative or qualitative

	Number of papers	%
Quantitative	26	33.77%
Qualitative	2	2.60%
Not classifiable	49	63.64%
Total	77	100.00%

Table 3.5 Entrepreneurship as factor and independent

	Number of papers	%
Entrepreneurship as factor	13	16.88%
Entrepreneurship as independent	37	48.05%
Entrepreneurship as factor and independent	8	10.39%
Total	77	

3.3 Is Entrepreneurship a Production Factor?

Given that the previous query has not provided unique results, an integration of research was carried out with the aim of identifying, at a higher level, i.e., at the level of *entrepreneurship* instead of *female entrepreneurship*, a definition of the entrepreneurship as a productive factor. The *query* on database "Business Source Complete" and "EconLit" of "Sapienza Università di Roma" without year limit and the limiter "peer-reviewed journals" was performed in July 2016 by means of these keywords: *entrepreneurship* and *production factor*.

It has provided 77 articles, which we have classified according to three conditions: Is paper qualitative or quantitative? Is entrepreneurship considered a production factor? Is entrepreneurship independent?

The 63.64% of article results of the question were not considerable as qualitative or quantitative, and only the 33.77% were classified as quantitative (see Table 3.4).

Only the 16.88% indicate that entrepreneurship is a productive factor, even if a little less than half of the articles (48.05%) consider it an economic magnitude independent of the others present in each article (see Table 3.5).

As a relevant result, we note that only eight articles of a quantitative nature indicate clearly that entrepreneurship is a productive factor and independent.

3.4 Entrepreneurship as a Production or Business Function

In order to establish if *entrepreneurship* is considered a production or business function, we have made two other queries.

The *query* of the databases "Business Source Complete" and "EconLit" of "Sapienza Università di Roma," without year limit, was made by means of two keywords—*entrepreneurship* and *production function*—and this limit: "peerreviewed journals."

Carried out in July 2016, it has provided 49 articles, which we have classified according to three conditions: *Is paper qualitative or quantitative? Is entrepreneurship considered a production function? Is entrepreneurship independent?*

The research results show us that the 85.71% of articles are of a quantitative nature (see Table 3.6) and that the 89.80% clearly indicate that the entrepreneurship is a production function. Furthermore, 90% of articles indicate the presence of productive factors to be coordinated (see Table 3.7).

This result clearly indicates that the overwhelming majority of article results from the query argues that entrepreneurship is a productive function.

In the same context, we then performed a further query on the same database—by substituting the word *production* with the word *business* by means of two keywords, *entrepreneurship* and *business function*—and with the same limit: "peer-reviewed journals."

The research has provided 46 articles; we have proceeded to classify in the usual way: Is paper qualitative or quantitative? Is entrepreneurship considered a business function? Is entrepreneurship independent?

Only 13.04% of the papers are quantitative, and the 41.30% are not classifiable (see Table 3.8).

The 80.43% can't be classifiable in regard to the definition of entrepreneurship as a business function, and only 15.22% of 46 articles clearly indicate that entrepreneurship is a business function (see Table 3.9).⁷

Table 3.6 Production function as quantitative

	Number of papers	%
Quantitative	42	85.71%
Qualitative	1	2.04%
Not classifiable	6	12.24%
Total	49	100.00%

 Table 3.7 Entrepreneurship as production function

	Number of papers	%
Entrepreneurship as production function	44	89.80%
Entrepreneurship and combined factors	45	91.84%
Total	49	

⁷Only one paper clearly indicates the presence of productive factors to be coordinated.

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Table 3.8 Business function as quantitative

	Number of papers	%
Quantitative	6	13.04%
Qualitative	21	45.65%
Not classifiable	19	41.30%
Total	46	100.00%

Table 3.9 Entrepreneurship as business function

	Number of papers	%
Entrepreneurship as business function	7	15.22%
Entrepreneurship not as business function	2	5.41%
Not classifiable	37	80.43%
Total	46	100.00%

Table 3.10 Production or business function

	Number of papers	%
Entrepreneurship as production or business function	51	53.68%
Not as production or business function	2	4.76%
Not classifiable	42	44.21%
Total	95	100.00%

This last query therefore emphasizes that the word *business* significantly reduces the possibility of inserting the entrepreneurship within the category of the function of production.

3.5 Main Results of the Queries

By combining the four queries, we note that only 41 of the 142 papers define the female entrepreneurship (28.87%), and about half does not show a clear classification of female entrepreneurship (48.59%). When we try to understand if entrepreneurship is a productive *factor*, only 16.88% the of papers selected by means of the second query (paragraph 3) may be classified among the papers in which there is an affirmative response, while the 55.84% are clearly not classifiable (Table 3.3). When instead we are trying to understand if entrepreneurship is a productive *function*, according to a first query performed with the keyword *entrepreneurship* coupled to *production function*, almost 90% of papers (Table 3.7) are classified that allow to qualify entrepreneurship as a function. When the research is conducted with the same purpose but using *business function* as keyword together with *entrepreneurship*, the result is not equally clear, because it was not possible to classify over 80% of papers (Table 3.9).

By aggregating the results of the last two queries, instead, it emerges that 42 papers are not classifiable (Table 3.10) but that 51 of 53 papers are classifiable,

namely, over 96.23% of the papers classified according to the definition of entrepreneurship show a definition of entrepreneurship as production or business *function*.

We can therefore conclude that the difficulty of definition and classification of female entrepreneurship is greater than the difficulty of definition and classification of entrepreneurship. This could be connected to the greater dating of the term entrepreneurship or to the greater generality of the term.

In relation to entrepreneurship, even if in economic literature there are authoritative examples of definition in one direction or the other (see footnotes 3 and 4), the literature that comes from scientific journals indicates that it is more considered an entrepreneurial function, rather than a productive factor. Therefore, you can search for contribution to *revenues* but not its remuneration as a part of the *added value*. This is because it is the variable that combines productive factors and therefore its remuneration coincides with profit, intended as a residual, and not with the remuneration of a factor. We emphasize that this is not ensured for female entrepreneurship, given that only the 28.87% of papers indicate a clear definition (whatever it is) of female entrepreneurship.

Finally, we note that the 92.06% of papers in which female entrepreneurship is classified (only 37% of the 142 papers) consider *female entrepreneurship* as a *function*, not a factor—in accordance with the data on *entrepreneurship*—and that the foregoing requires at least two reflections.

- 1. We can suppose that the complexity of the concept *entrepreneurship* constitutes one of the fundamental elements for the difficulty of classification, but scholars could operate to classify the basic assumptions in their scientific articles so as to clarify if entrepreneurship—and female entrepreneurship in particular—is considered a production function which combines production factors or a productive factor like the others. In this way, any research involving this economic dimension would clarify which definition it assumes and therefore the logical relationships you can deduce.
- 2. If female entrepreneurship is mainly considered as a function, i.e., a variable that coordinates the productive factors, its remuneration coincides with the profit only if you intend the profit as separated from the added value, i.e., the remuneration of any productive factor, capital in particular. This should lead to a change in the methods of accounting profit.

In regard to this second point, in the theory of Leòn Walras (p. 319) and Vilfredo Pareto (1919: 305), entrepreneurship is a function separated from productive factors, and, in that context, capital should be considered as *paid* (Serafini, 2015: 95).

If instead we think the rules of *corporate accounting*, profit includes the remuneration of capital ownership, generated as a *residue* with respect to the remuneration of the factors of production. This implies that it is *not* clearly distinguishable the part of profit that remunerates the *capital* from the part that remunerates the *entrepreneurial function*, unless it is clearly identified the remuneration of entrepreneurial function between the costs of personnel dedicated to this function.

If entrepreneur is a *fourth character* (Walras: 319)—in addition to consumers, workers, owners of capital, and landowners—who combines productive factors,

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while capital must be considered to be provided, *profit* is precisely the remuneration of the entrepreneurial function, *not a part of the added value*.

If, on the contrary, it would be intended that entrepreneurial function is carried out by workers, what is now classified as *profit* should be considered an *extra profit*, a *residual value* after the payment of productive factors.

In the latter case, the remuneration of capital would be established as a residual value, determined after the remuneration of workers who played the entrepreneurial function; but if profit is the *remuneration* of the capacity to combine the factors of production, the *residual value* shouldn't be qualified as profit; it should be classified as *extra profit*. In this case, profit should not appear as a residual value, within equity value, but it should be accounted between the costs of the company. As Pareto says, it should be accounted as *remuneration of capital* (Pareto, 1896-7–2006: 169), while the residual value would be separately attributed to the *entrepreneur* only if it is an extra profit.

This is to say that if entrepreneurship is the capacity of combining productive factors, its amount is not part of the added value and it shouldn't be accounted as an increase of equity value. Moreover, if entrepreneurs are part of the workers, their remuneration is part of business costs, such as remuneration of capital. In this case, what is usually accounted as profit shouldn't be accounted together with the increase of the equity value because it's a *residual* value, results of market imperfections that should be distinguished from revenue generated by capital invested.

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Chapter 4 An Overview on Immigrant Women's Entrepreneurship in the Italian Context

Paola Paoloni and Marco Valeri

Abstract The aim of this paper is to verify whether a successful development model of female immigrant entrepreneurship does exist in Italy. Our study will focus on the potentiality of social media strategies as opportunities for growth and development of new business ideas. The assumptions underpinning the theoretical framework are Hp1, implementing social media strategies is an opportunity for business development, and Hp2, the ability to create partnerships with companies within the same industry has an impact on the implementation of social media strategies. The survey was carried out by submitting a questionnaire to a sample of immigrant women entrepreneurs in the textile and clothing sector based in Italy. The choice fell on this specific economic segment because it represents the third largest sector for the number of female immigrant entrepreneurs (2.271 units) which amounts to 16% of the total number of entrepreneurs operating in the same sector. The percentage of respondents was 35%, with 795 completed questionnaires. The structure of the questionnaire reflects the need to examine the personal features of female entrepreneurs, the organizational aspects and the style of leadership, the task environment in which the enterprise works, and the main possible benefits, or obstacles, they might obtain, or face, by using social media. In addition to the objective of enlarging the literature regarding the management and governance of businesses run by women entrepreneurs, that is quite limited to date, this paper is a contribution to the analysis of a possible development model of women entrepreneurs.

Keywords Entrepreneurship • Network • Resilience • Women entrepreneurs

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4.1 Introduction

As part of the national and international debate, immigrant entrepreneurship has been analyzed from many different points of view, emphasizing personal, psychological, and sociocultural aspects of immigrant entrepreneurs and the social context in which they operate (Light & Bhachu, 2004; Clydesale, 2008; Lin & Tao, 2012). The immigrant entrepreneurship incentives are linked to factors such as desire for self-fulfillment, risk appetite, identification of market opportunities, and personal dissatisfaction related to social issues (Aviram, 2009; Chiesi, De Luca, & Mutti, 2011).

Compared with resident population, immigrants have limited skills and human capital resources, necessary to create and access networks, because of their difficulty to acquire information and evaluate market opportunities (Flap, Kumcu, & Bulderl, 2000; Alder & Kwon, 2002; Kloosterman, 2010).

Likewise, immigrants have insufficient language skills and are bound to encounter numerous obstacles to access to the credit market (Paoloni et al., 2017a).

The transition from being employed to self-employed can represent a reward and an enhancement of their own entrepreneurial ambition (Rajiman & Tienda, 2000).

It is clear that the economic and social disadvantage in which immigrants live is just one of the many negative conditions that stimulate their need for change (De Clercq & Honig, 2011; Vinogradov & Gabelko, 2010; Labrianidis & Hatziprokopiou, 2010; Valenzuela, 2001).

At the same time, the lack of adequate education, the limited access to financial resources, and poor language skills can also influence the choice of the economic sector in which to start a business.

Usually, the immigrant entrepreneur is more oriented toward markets that the local entrepreneur tends to neglect (Giaccone, 2014). These are markets that you can access through a limited allocation of capital, where the technological barriers are low and where the enterprise sizes are relatively modest and where, due to the number of active companies, the potential for expansion and profit margins are lower than the market average (Rath & Kloosterman, 2000).

In such a complex environment, belonging to ethnic networks could make up for the lack of full integration of immigrants in the economic fabric of the host country. This may stimulate the development of new businesses operating in new markets, and it may be a way to connect with new customers of different ethnicities and to enable long-lasting relationships with local institutions (Saxena, 2005; Valeri & Baiocco, 2012).

Taking all the above into account, this paper examines whether there exists a possible development model of female entrepreneurship in Italy, focusing specifically on immigrant women's entrepreneurship.

The work is structured into three parts. The first part presents a review of the literature on the issues inherent to the concept of "diversity" of immigrant businesses compared to those of indigenous enterprises and the difficulty to create and develop partnerships between these two categories.

The second part of the paper studies the dynamic of development of female entrepreneurship promoted by immigrants on the Italian territory.

The third and last part of the paper analyzes the results of the survey conducted through the submission of a questionnaire.

The paper concludes by promoting the need to establish strategic relations with all actors involved in the business process, making use of the potentiality of social media to strengthen the competitiveness of national and international economy.

4.2 Framework

In an increasingly competitive environment, businesses need to have an appropriate level of knowledge and resources to cope with fierce competition (Paoloni et al., 2017b).

This need has led to the phenomenon of the specialization of businesses, reducing the number and type of knowledge and common assets. The collaborative process may be disturbed by factors as the high cognitive distance between individual companies and the simultaneous lack of resources to acquire new knowledge. In this sense, the network represents the best organizational model to promote the growth of small- and medium-sized enterprises.

The ability of a network to innovate and compete successfully depends not only on the skill of the individual companies but also on the ability to govern the network of relationships between them. As widely claimed by management literature, the ability to oversee the dynamics of internal and external relations of the network is a way businesses can successfully compete with others in a hypercompetitive economy.

Within the international scientific debate, many studies have focused on the analysis of the evolutionary dynamics of the network and on factors that influence their success over time (Gulati, 1998; Gulati & Gargiulo, 1999; Soda, Usai, & Zaheer, 2004; Yin, Wu, & Tsai, 2012; Das & Teng, 2002).

Thanks to the interdisciplinary debate on network theory (Parkhe, Wasserman, & Ralston, 2006), we can mention a number of important contributions that identify the evolutionary phases of the creation and development of interorganizational relationships, for example, (1) the preconditions of exchange or the reasons that led to the birth of the network, (2) the building conditions for any form of relations between enterprises, and (3) the operation of the network that presupposes the reaching of an agreement on the rules of future conduct and on the mechanisms to regulate conflict management.

The complexity and the increasingly competitive market pressure stimulate the formation and development of interorganizational relationships, and they allow to acquire and exploit new resources and new knowledge, reducing the environmental uncertainty (Dickson & Weaver, 1997).

In particular, the network cooperation between small- and medium-sized businesses is crucial for their survival over time (BarNir & Smith, 2002). The network is an

essential organizational model for small- and medium-sized enterprises to defend themselves from strong competitive pressures, thus overcoming the limited resources and knowledge that characterize them (Park & Zhou, 2005).

In other cases, networks are not created to avoid competitive threats but to improve the competitive position of singular businesses (Park & Zhou, 2005). In this way, they are able to seize market challenges they could not face on their own.

A basic prerequisite for the creation and the development of networks is the mutual trust between the parts. Trust is crucial to ease relations between partners (Gulati & Singh, 1998). In interorganizational relationships, trust presupposes not only the correct behavior of the participants but also the confidence in the competence of the counterparty (Das & Teng, 2002). The interaction is facilitated when trust between participants has been already proven by prior experience of collaboration (Powell, 1990; Gulati & Singh, 1998).

The case of businesses owned by immigrants in the Italian context, along with the concept of "diversity" which characterizes the typical features of an immigrant enterprise, continues to be the subject of national and international scientific debate (Chaganti & Greene, 2002; Horwitz & Horwitz, 2007; Carter & Mwaura, 2015).

The concept of "diversity" has been analyzed in several respects, taking into account the nature and the type of activities carried out by immigrant companies. Ethnic traditions, ethnic role models, and community ties represent aspects on which the nature of activities carried out by immigrant businesses is based (Rath, 2000; Smallbone, Bertotti, & Ekanem, 2005; Rusinovic, 2007). These aspects have their origin in the immigrant entrepreneur communities, and they tend to be significantly different from those typical of an occidental company.

In fact, the marginality of services, the poor organizational structure, and the lack of managerial and language skills often tend to increase the gap between immigrant and local enterprises (Butler & Kozmetsky, 2004).

The condition of "economic disadvantage" in which immigrants live is an important element of diversity among the immigrant enterprise and the native enterprise (Levie, 2007). Unlike the native-born population, the immigrant entrepreneur has limited access to formal consulting network and difficulties in finding information and evaluating market opportunities (Kloosterman, 2010).

The same condition of economic disadvantage influences the choice of the sector in which to start the entrepreneurial activity (Zhou, 2004). The immigrant entrepreneur is attracted to markets that are accessible with limited capitals, where technological barriers are low, where enterprises are small sized.

These markets are overlooked by local entrepreneurs because they guarantee lower profit margins and expansion potential lower than the national average (Rath & Kloosterman, 2000).

Considering their ethnic specialization, these companies tend to produce goods and deliver services intended primarily for consumers belonging to the same ethnic community.

In fact, thanks to a number of factors such as the knowledge of the language and customer preferences, the ease of access to imported goods, and the availability of manpower resources at low cost and informality in economic and labor relations, it

is possible to create business opportunities for micro and small-sized businesses by using limited start-up fixed costs, as well as having the guarantee of being protected from potential competition of indigenous enterprises (Portes, Haller, & Guarnizo, 2002). These immigrant enterprises can get typical resources and enable social and economic relations in the origin communities (Rath, 2000; Rueda-Armengot & Peris-Ortiz, 2012).

Moreover, especially in the start-up phase, the opportunity to enjoy economic relations within an extended social network represents a stimulus to business initiatives (Kloosterman & Rath, 2001).

Therefore, by sharing group resources and developing economic co-operations, the ethnic group becomes an important tool that facilitates access to information and to economic resources which may not be found in other contexts (Watson, Keasey, & Baker, 2000; Masurel, Nijkamp, Tastan, & Vindigni, 2002).

Despite that most of the literature considers the immigrant enterprises as characterized by an effective structural homogeneity and devoid of strategic differentiation, in the last few years, immigrant entrepreneurs have made entry into sectors that produce goods and services destined mainly to local markets (Waldinger, 2000; Kloosterman, 2010).

The search for new business opportunities has led immigrant entrepreneurs to step outside the ethnic network, activating a series of relationships with other entrepreneurs and territorial Institutions (Masurel et al., 2002; Wang & Altinay, 2012).

It would be thus possible to reduce the risk of slow growth and slow development of immigrant enterprises.

Consequently, the strategic and organizational profile of immigrant enterprises becomes more similar to the native companies because of the quest for independence, the desire to move away from subordination, and the need to carry on investment projects.

4.3 The Immigrant Women Entrepreneurs: A Growing Phenomenon

The contribution of immigrants to entrepreneurial initiatives in our territory should not be underestimated. In 2015 Italy had approximately 6,041,187 businesses, out of which 524,674 were businesses run by immigrant entrepreneurs (8.7% Italian enterprises, 12.9% Italian sole proprietorships) (Unioncamere/Infocamere, 2015). Immigrant enterprises are mostly micro or small sized, and together they contribute for 6.5% to the national GDP with over 94 billion euros (Idos, 2015). In Italy, sole proprietorships are the major component of immigrant enterpreneurship. Immigrant sole proprietorships are 421,004 units (8% immigrant enterprise, 51.4% sole proprietorship). The trade sector has the largest number of immigrant companies, representing 35.8% of all companies, the construction sector has 24.3% of companies, manufacturing represents 7.4%, the business services sector 5%, and finally 2.4% is

the share of the agriculture sector which seems to be the least attractive due to high necessary investment costs (Unioncamere/Infocamere, 2015).

From the geographical location point of view, Northern Italy has the highest concentration of immigrant businesses (about 51.2%); there, the most attractive sector for immigrant entrepreneurship is represented by the construction industry. South-central Italy hosts 26.7% of immigrant businesses mainly working in the commerce sector.

Regions with the highest percentage of immigrant businesses are Lombardy (19%), Lazio (12.8%), Tuscany (12.1%), and Liguria (11.2%). Milan and Rome record 8.6% and 10.9% of immigrant enterprises, respectively.

The 49.2% of immigrant businesses is of Chinese nationality, and it is mainly concentrated in the manufacturing sector, 28.2% is of Moroccan nationality, 10.2% is of Bangladeshi nationality and works in the trade sector, 27.6% is of Romanian nationality, and 20.4% are Albanians and work in the construction sector.

Different market destinations lead to different activities and productions by immigrant businesses: about 58% of them places products at local and provincial levels, less than 25% places products on regional market, and the remaining 17% allocates its products on domestic and international markets.

There are 15,065 foreign women entrepreneurs in Italy, equal to 16% of the total run by men. The majority of women entrepreneurs is in the commercial sector (6966), in the service sector (2717), and in the textile and clothing sector (2271).

Managers are mostly women in the hotel and restaurant industry (43%), in the textile and clothing sector (38%), and in the service sector (33%); there are fewer women in the areas of trade (18%) and transport (8%) and in the production and processing of metals (7%); women are virtually absent in the construction industry (just over 1%).

More than one-third of women involved are venture partners: they are 37% of the total. The presence of women among immigrant entrepreneurs is growing: 9.3% of companies are run by women (121,000 units) while 8.5% are headed by men. There are approximately 90,300 foreign women-owned businesses in Central and Northern Italy, and they represent 11% of all enterprises run by women of the area (Rapporto Impresa in Genere, 2016).

According to Censis report (2016), over the last 5 years, the immigrant women businesses increased by 3%. The Chinese community has the largest number of women involved in entrepreneurship, with more than 10,000 female managers. One of the biggest immigrant communities in Italy is of Albanian origin; according to Unioncamere Observatory data, in Italy 48% of Albanian immigrants are women, and almost 3600 companies are headed by women, i.e., 12% of total Albanian businesses, ranking as the fifth community with the largest number of female managers in the immigrant women enterprises in Italy.

From a territorial point of view, the highest concentration of immigrant entrepreneurs is in Southern Italy (3.2% versus 2.6%), and this is particularly noteworthy in Abruzzo, which has the highest proportion of women entrepreneurs (6.2%).

Regarding the age, the largest share of immigrant women entrepreneurs is between 30 and 49 years old (49% of the total female population, with an increase of 0.2% points compared to 2015).

The number of entrepreneurs aged 50–69 years has slightly decreased (from 34.9% to 34.7%), while women over 70 years old have increased their number becoming 9.4% of the total individual "pink" companies. The region Campania leads the regional rankings, with more than 8000 companies led by young women that, in this case, come to represent 9.2% of the company owners registered in the territory.

Rome and Naples are the cities where most young women choose to become entrepreneurs. However, the highest percentage of young business women is recorded among immigrant women.

In June 2015, young female immigrant entrepreneurs represented 12.6% of 52,000 owned by immigrant women in Italy (Unioncamere, 2015).

In some ethnic groups, the participation rates among women are slightly higher than among men: in the case of Nigerians, the percentage of women on total enterprise owners exceeds 50%, while in the Chinese and Brazilian communities, the percentage reaches 36%, and in the Peruvian community, it is about 28%.

However, the weight of female entrepreneurship is significantly below the average of the whole of the countries of origin (16%). Actually, in some communities, entrepreneurship is heavily male: this is the case of the Macedonians, Pakistani, Senegalese, Egyptians, Tunisians, Albanians, and Bangladeshis where the percentage of women among business owners is comprised between 2 and 5% (Idos, 2015).

4.4 Research Methodology

The survey was carried out by submitting a questionnaire to a target sample of women immigrant entrepreneurs operating in the textile and clothing sector in Italy. This particular economic segment was chosen because it represents the third biggest sector for the number of female immigrant entrepreneurs (with 2271 enterprises), 16% of the total of entrepreneurs operating in Italy. The context under analysis is characterized by micro-sized companies. The interviewed entrepreneurs were aged between 30 and 49 years. The questionnaire was submitted in September 2016, and the return of completed questionnaires by e-mail was agreed for the month of December 2016. The sample selection was made possible by consulting primary sources such as ISTAT, Confcommercio, INPS, CCIAA, Censis, Osservatorio di Genere, and Osservatorio IDOS.

The rate of adherence of respondents was 35%, with 795 completed questionnaires compared to 2271 submitted questionnaires. The questionnaire was structured in a battery of questions, mainly multiple choice, simple and graded, with a specific weight to be assigned to each response. The questions were aimed at analyzing the distinguishing factors of the enterprises of the investigated sample (Fig. 4.1).

COMPANY DETAILS

- Company name
- Legal Form
- core business
- Registered and operational office

Personal data of the women entrepreneur

- Entrepreneur name
- age
- marital status
- qualification
- number of children

PERSONAL CHARACTERISTICS

- reasons for the acquisition or venture
- management style
- responsibilities within the company
- decision-making process with in the enterprise

ORGANIZATION

- main objectives of the entrepreneur
- relevance of the profit target
- organization of work, functions, roles and responsibilities
- measurement of performance

BUSINESS IDEA

- inspiration of the business idea
- initial phase of raising capital and difficulties encountered
- network benefits (how is the relationship with the environment in perceived and what are the exchanges with the outside?)

SOCIAL MEDIA STRATEGIES

- objective of social media strategy (definition of target)
- attractiveness of an editorial plan, that must be coherent and well-defined
- potential involvement of the social media strategy

Fig. 4.1 The questionnaire

All these aspects are summarized in the following aspects:

- 1. Personal characteristics of the woman entrepreneur
- 2. Organizational aspects and style of leadership
- 3. Task environment in which the company operates
- 4. Potential implementation of social media strategies

The analytical form of the questionnaire was not a constraint for the interviewer to use rigid forms of dialogue with women entrepreneurs: they were free to describe the company's results, focusing on specific aspects which characterize their business experience.

The aspects that are analyzed in the questionnaire are the result of the continuation of previous researches carried out in recent years on women's businesses. These are conceived as factors that characterize the immigrant female enterprises and which delineate the distinctive features compared to the male gender (Valeri & Paoloni, 2016).

4.5 Results

The survey has made it possible to analyze typical factors of a female immigrant business, with particular reference to:

- 1. The personal characteristics of the entrepreneur
- 2. The organizational aspects and style of leadership
- 3. The task environment in which the business operates
- 4. Social media strategies and their potential.

These aspects will be discussed later in the paper, taking into account the statements made by the interviewed entrepreneurs, in order to investigate whether there is a possible model of success for the development of women's entrepreneurship in Italy, in particular as far as immigrants are concerned.

4.5.1 The Identikit of an Immigrant Woman Entrepreneur

The identikit of immigrant women entrepreneurs does not vary greatly from that of Italian ones and includes opposing elements which coexist. The survey shows that immigrant women entrepreneurs are conventional but, at the same time, innovative and dynamic. They are traditional and conservative but also modern and explorer.

For them, success consists of a mix of personal characteristics as, for instance, the ability of taking on responsibility (for 44.7% of them). Relations with employees highlight the style of management adopted:

"In women's enterprises, there is a greater tendency to delegate others than in men's enterprises."

It is interesting to note the ease of integration between women who tend to be less hierarchical and to build circular relationships. Women tend to be more collaborative than men in the management of roles in the company, and women entrepreneurs tend to have a greater focus on the customer's needs.

Service quality (55%) and customer service (37%) represent strengths that female entrepreneurs add to their business model. Women are successful and suitable for management positions because they possess features such as empathy, sensitivity, creativity, attention to details, ability to listen, ability to negotiate, spirit of collaboration, ability to communicate, and more. Moreover, women entrepreneurs choose to adopt development strategies that are compatible with the preservation

and enhancement of the environment, focusing their attention mainly on waste management, choice of raw materials, and energy saving.

An interesting outcome of the survey is the development of the figure of "circulating" businesswomen, who leave their country of origin to trade in small scale through the sale of their local products in Italy. This phenomenon is particularly widespread within the immigrant community, allowing the entrepreneurs to provide employment to women in the country of origin, helping them combine paid work with family responsibilities, letting them chose when to move, and giving them a valid motivation for traveling.

Through the exchange of goods, a cultural exchange takes place too, transforming families and societies according to the different contexts in which the business operates.

Among the women contacted during our research, the majority of those involved in this virtuous circle were from Morocco, Turkey, and Albania.

4.5.2 Organizational Aspects and Leadership Style

Organizational aspects and leadership style of women immigrant entrepreneurship are very complex, because of the presence of many intervening factors: different motivations, different strategies for reconciling, different career paths, and different personal and professional experiences, which can profoundly affect their life choices.

Interestingly, in the available literature, we find different approaches to women entrepreneurship. It could be read as a response to the stiffness of economy; on the other hand, recent studies suggest that the choices of immigrant women entrepreneurs generally lie in the subjective importance of the desire for autonomy and self-determination.

Analyzing the results of the survey, it has been possible to identify a number of different immigrant women entrepreneur profiles, such as:

- 1. Traditional profile (53%), which includes women heavily involved in the roles of both manager and housewife, whose motivation is mainly linked to economic factors.
- 2. Radical profile (31%), women who do not totally identify with both roles, driven by a desire for personal gratification and ideological factors.
- 3. Innovative profile (16%), entrepreneurs who use their company to develop their working lives. These are generally childless women, who express their autonomy through their business. In this case, the desire for autonomy and personal gratification is very strong.

The results of our survey have revealed no major differences between genders in the adoption of a particular leadership style. Rather, immigrant entrepreneurs believe that it is a personal choice, depending on competencies, and that often involves a participatory approach to organizational reality: "...both men and women have the same competencies: guidelines on how to do business do exist. I believe that the diversity of doing business between a man and a woman lies in the application of the feminine or of the masculine side, from a psychological point of view. What changes is the approach mode."

With regard to the strategies, gender studies show that men tend to prescriptive leadership roles, while women prefer a persuasive dimension. Female leadership characteristics can be summarized as follows: interpersonal skills and multitasking know-how.

Listening, mediation, and care are basic components of relational skills. These components are spelled out each day, especially in relationships with customers but also in relations with employees and partners. The natural propensity to motherhood transcends the strictly domestic dimension and becomes a transversal competence:

"...listening to others is very important, you must always pay attention. If a baby cries, you just can't ignore it...."

"Being multitasking" means having the ability to perform simultaneous multiple actions. The interviews stressed the fact that women are used to having a global view of situations and to managing multiple things at once because of their historical domestic role:

"...Modern women have the ability to control many things at once. This is very important in any job and in every role, not only that of the leader. Women are very suited to work on several activities at once."

Multitasking attitude is a highly functional resource in managing the relationships inside and outside the company because it highlights productivity orientation:

"...women are able to work even under pressure, because of their traditional need to face more than one problem at once. It's natural for a woman to go back home and take care of the house, the children, the washing machine, and the shopping list!"

Leading men are more resolute and have a natural tendency to delegate. Wondering whether there is a feminine way of being leaders, we must point out that many of the "objective" skills of leadership come from a history full of male leaders. Therefore, women have few models to refer to, and the mentoring practice is still little adopted in their management.

4.5.3 The Task Environment where Company Operates

Our study reveals two important findings that show the importance of the economic environment in which women entrepreneurs operate: the production context and the recently settled women's network in the clothing and textile sector.

The production context implies certain production rates and specific requests to workers in terms of working hours: operations often require continuity so the activities must necessarily be organized in shifts. It seems clear that in the working

organization, best practices should be applied in accordance with the requirements of production.

Over the years, the consolidated industrial workforce has been mainly composed of men; women are fewer in number due to the limited access to employment, and it is harder for a woman to emerge with business initiatives. However, the situation is different in the tertiary sector, where the manufacturing activity is different and women have more chances.

The interviewed women have focused on the importance of local context and culture, highlighting the reluctance that still persists today when we talk about female leadership:

- "...the working world is not accustomed to having you inside..."
- "...in Germany, they have chancellor Merkel. Do you think Italians might accept a female president?...".

According to the interviewed women, the local context is a significant variable although it is perceived more as a constraint than an opportunity for their careers.

The survey provides a number of critical elements, such as:

- a. The lack of adequate services, in particular those related to family and mobility
- b. The permanence of stereotypes and a widespread attachment to traditional gender roles
- c. The lack of social recognition of women's work
- d. A business culture that still has its roots in tradition and is unwilling to change

Perhaps in reaction to this rigidity, female immigrant entrepreneurship is supported by associations which promote the circulation of good practices and initiatives.

We must also mention the committees for immigrant women's entrepreneurship which were set up at the Commerce Chamber, involved in the organization of information and training meetings about business opportunities for women:

- "...my colleagues and I set up this group, and then many other women entrepreneurs joined us...it is something that really belongs to us..."
 - "...we must stimulate political institutions!"
- "...no man has ever fought for the legislation on maternity. Instead, our group is working on that.. I am also part of an international network working on those same aspects, exchanging tools with Germany, which is more advanced than our country."
- "...networking is important..I love connecting people because I think every person has something positive to offer and when people meet amazing things can happen."

The answers of the interviews show the large number of women entrepreneurs who try to escape from the isolation of the productive context with laborious relational activities. The interviewed entrepreneurs are part of a dense network of formal and informal relationships that are able to enrich the intellectual and social capital of businesses, stimulating new synergies between enterprises and territory and promoting greater awareness among themselves.

4.5.4 The Potential of Social Media Strategies

Thanks to our survey, it was possible to investigate the effect of innovative marketing compared to the traditional one, in immigrant business development. Traditional marketing remains the most widely used: 58% of medium-sized businesses that decided to approach a digital innovation are still using classic tools. But if word of mouth (3%) and exhibitions (4.5%) have a low impact on sales, online advertising campaigns (8.5%), e-mail marketing (12.7%), and social media activities contribute up to more than 30% of revenues. Advertising on social networks is part of a comprehensive strategy that can improve the presence of the enterprise on the Internet; some 30% of small and medium enterprises want to increase the use of this kind of advertising. Advertising on social networks for SMEs can be strategically and economically advantageous. It can bring good results even if it costs less than an AdWords campaign:

"Just having a website is not enough. It is essential to ensure its position on the internet search engines of target markets countries. A website in Italian and English is useful but if I want to connect, for example, with the Finnish economy, my website should be reachable with keywords that are in different languages too. Only a few SMEs understand the importance of this investment."

"This year I made my first intake via Linkedin but until 6 months ago we did not use any social media marketing leverage. This way we signed contracts for thousands of euros. It's too soon to take stock of the benefits. Meanwhile, I have managed to hire an employee selecting his CV from Linkedin, thus investing only 150 Euros, instead of 6000 that a professional recruiter would have required."

"Only with a careful use of strategic planning on Social Media, it is possible to effectively communicate to customers the mission of a company. A key document used to formulate communication strategies is the Editorial Plan which must be presented at least once a month with the objective of helping customers understanding our philosophy."

"The key role played by social media managers in successful Social Media strategies lies on multidisciplinary skills: from the ability to use images and situations without having to use any graphic, to the ability to write a 'captivating' story."

Nevertheless, interviews show that immigrant entrepreneurs have still to get a view of the use of social media promotional strategies to support the development of their business. They are not able to see that the web can be a source of income and visibility, useful to attract new customers and retain existing ones. Therefore, they find it difficult to invest in this type of communication, they fail to see the benefits, and they prefer to rely on traditional instruments. According to our survey, in 2015 almost 50% of the interviewed women entrepreneurs used less than 20% of the operating budget for digital marketing; 53% of respondents used social media, 45% used SEOs, and 25% used online advertising.

As for the use of social media like Twitter, Facebook, LinkedIn, Pinterest, Instagram, Google+, and YouTube, 53% of interviewed entrepreneurs started using

them since 2014, and 11% plans to use them in the future, while another 11% does not want to use them at all.

The results have demonstrated that there is no real culture of using social media as a promotion tool.

Many people think that social networks are just for entertainment, not for business. According to 25% of respondents, it is unlikely that the use of social media strategies will be adopted in their enterprises.

In this way, these companies are losing the opportunity to show their customers their identity and the passion that is behind their business. In fact, today people expect to find almost anything they want online, especially on social networks.

That is clearly reflected in the respondents' statements saying that investments on social network strategies of their enterprise will be segmented as follows: 38% intend to increase investment, 38% will keep investing the same, 16% will decrease, 4% is still uncertain, and finally 4% is not willing to invest on it.

It may seem counterproductive, but the investment in employees' training is that with the highest percentages: even if employees know the company, they might not be prepared to use social networks to promote the company. Employees should be properly trained to make use of these tools effectively and become specialized in this field.

4.6 Discussion

The paper aims to verify whether there exists a successful model for the development of immigrant women's entrepreneurship in Italy. Specific reference will be made to the potential of a social media strategy as an opportunity to improve and develop new business ideas. To pursue these objectives, the study is built on two basic assumptions:

Hp1: Implementing social media strategies is an opportunity for business development

Despite strong similarities with the traditional micro and small enterprises in the Italian native business, immigrant entrepreneurship, and, in particular, immigrant women's entrepreneurship, has a number of specific characteristics. Those are related to the migration experience of the entrepreneur and to the rigidity of the economic system in which immigrant companies operate (Light, 2005; Reyneri, 2007; Ndofor & Priem, 2011).

Therefore, alongside constraints related to the profile of an immigrant entrepreneur, it is possible to identify a number of obstacles that limit the consolidation of immigrant business development.

There are obstacles inherent in the immigrant's personal sphere, such as:

Difficulties of integration in the economic and social context. It is not easy to
overcome the relative isolation condition that characterizes immigrant companies. The company not only represents an activity of production of goods and

services, but, in contrast, it contains all the entrepreneur's experience. The migratory experience, the prospects of integration, and the ties with the country of origin are not just traits of entrepreneur's personal life but also contribute to connote the company and influence the strategic choices. The importance of corporate social dimension is particularly evident during the growing process when a multiplicity of relationships within and across enterprises are fundamental to establish. In addition, the relationships activated by ethnic groups are very important: these are considered indispensable, especially in the start-up phase.

2. Difficulty in starting relationships. Immigrants fail to have confidence in the other participants of the economic sector they have chosen because of difficulties of the migratory path and the precarious living conditions in the host country. At the same time, the existence of widespread distrust of the immigrant entrepreneur by the host territory people should be highlighted (Siqueira, 2007; Roy et al., 2008). Often, the linguistic gap generates closure and results in a real obstacle to access to useful information for business development. In addition, there are limited links with other companies in the sector and business associations. This inevitably generates an underutilization of the potential relationship baggage owned by the entrepreneur.

The obstacles related to the rigidity of the economic system in which immigrant entrepreneurs operate, such as:

- 1. Legal constraints for the regularization of the personal position of immigrant entrepreneur in the host country. Current legislation imposes a series of obligations to entrepreneurs who need to regularize their legal position in the host country. Often bureaucratic rigidity lengthens waiting times, for example, for the renewal of the residence permit. In the absence of such a document, the entrepreneur does not have its own legal identity and, consequently, does not have the ability to perform actions necessary for the conduct of business (e.g., signing of contracts).
- 2. Legal constraints for the start of business. Depending on the legal form chosen and the business sector in which they decided to operate, a series of requirements are necessary, especially for an immigrant. Often the constraints imposed by the bureaucracy generate delays in the start of business with inevitable economic and financial repercussions.
- 3. Poor coordination among people working in support of immigrant entrepreneurship. For the immigrant entrepreneur, confusion and lack of coordination make it even more difficult to seize the opportunities offered by the territory. Furthermore, discriminatory attitudes and behaviors toward immigrants are widespread.
- 4. *Difficulty in accessing credit*. The access to the credit market is one of the major obstacles for immigrant entrepreneurship. Economic resources are already scarce because of the economic crisis and decrease when the potential entrepreneur is an immigrant. This is justified by the "lower reliability" resulting from the difficulty of providing guarantees in dealing with the credit system.

5. The obstacles inherent in the entrepreneur's personal sphere immigrant as well as those related to the rigidity of the economic system cannot be underestimated. On the contrary, they should be addressed by strengthening the network of relationships to improve the competitiveness of the business sector.

Hp2: The implementation of social media strategies is influenced by the ability to activate partnerships with companies in the same sector

The concept of networking has long been the object of intense scientific debate in management literature. The network bases its success on the ability to establish cooperation and coordination relations (Eisenhardt and Schoonhoven, 1996) and to foster the joint execution of production processes and delivery of products and services (Gulati, 1998).

By sharing resources and knowledge, network allows overcoming the limitations related to the micro and small size that hinder the development of enterprises in many economic sectors. Organizational literature has analyzed the concept of network focusing on the potential of organized inter-relationships (Greve & Salaff, 2003). In particular, these studies have provided arguments about the causes and benefits inherent in their formation and their implementation (Lipparini & Lorenzoni, 2000; Grandori & Giordani, 2011), focusing on cooperative and competitive strategies activated between the actors involved in the network, on conduct of business rules, on network institutionalization levels, on the power relations, and on the changes in these variables over time. Nevertheless, to date, a specific analysis on the complex dynamic that drives the inner development processes of collaboration between immigrant and native businesses still lacks (Fadahunsi et al., 2000).

Generally, it is argued that the start of business by immigrants presupposes the establishment of a network of relationships with all actors involved in the territory, such as:

- 1. Ethnic groups. These are communities in which there is a strong sense of common identity between members (language, culture, tradition, and historical memory). Ethnic groups traditionally live in the same territory and represent the first instrument available to potential immigrant entrepreneurs for the procurement of all that may be necessary for their business (Siqueira, 2007). On one hand, ethnic groups are a valuable source to draw on financial, economic, human resources useful information to start new ventures; on the other hand, they may represent obstacles for growth and consolidation of immigrant businesses in the market and in the not-ethnic environment.
- 2. Business associations. They play a very important role in supporting immigrant entrepreneurship. For example, they are engaged in the promotion of specific programs and initiatives that tend to the defense and to the social-economic assistance, in the promotion of educational programs for immigrant entrepreneurs, in the organization of specialization courses, retraining and vocational training for manager and workers. Yet today there are still few immigrant entrepreneurs who are turning to them, and this is why the effectiveness of their activities remains limited.

3. Investment credit. The banks affect the start-ups of immigrant businesses.

Considering the difficulties for immigrants to have access to credit, most of the lenders decided to initiate programs for the provision of microcredit services for immigrants and their families, without asking them for specific guarantees, aware of the strong dynamism of immigrant entrepreneurship in our country. Nevertheless, ethnic groups are still the preferred source of economic resources.

In this perspective of network analysis, immigrant entrepreneurs are not conceived as isolated entities of the context, but may represent the central node in a larger network of relationships activated with all the actors involved in the environment.

4.7 Conclusions and Limits

Is there a successful model based on cooperation and on social media strategies for the development of immigrant women's entrepreneurship in Italy?

This paper analyzes both the factors that affect the development of immigrant women businesses in Italy and the obstacles that immigrants face to consolidate their business development. The research shows that the quest for independence, the desire to move away from a condition of hierarchical subordination, and the desire to carry on their investment projects make immigrant businesses more and more similar to native businesses, both from a strategic and an organizational perspective.

The survey shows that immigrant entrepreneurship is an important resource for the growth of our territory: although it may represent a big threat for national companies, it is a great opportunity for integration with native businesses to strengthen the competitiveness of the national economy. Considering the importance of immigrant entrepreneurship phenomenon and its contribution to the national GDP, institutions should not underestimate the importance of the phenomenon and should respond appropriately to support development and consolidation of these businesses.

The interviews have revealed that immigrant women entrepreneurs have yet to get a full view of using social media strategies to promote their own activities. Keeping acting like this, they will not be able to understand that the web is a source of income and visibility and a tool to find new customers and retain existing ones.

Furthermore, the difficulties of the migratory path and the precarious living conditions in the host country cause a lack of confidence in immigrant women entrepreneurs in relations with the other actors involved in the development of business. At the same time, discriminatory attitudes and behaviors toward immigrants are often widespread in the host country.

In many cases, the difficulty of speaking a foreign language generates closure by the interlocutors resulting in a real obstacle to access to information needed for business development. In addition, there are limited links with other companies in the

same sector and with business associations; this inevitably generates an underutilization of the potential wealth of reports available to the immigrant entrepreneur.

Therefore, despite the desire to move from a working position of hierarchical subordination to an autonomous position (like that of the entrepreneur) and despite the desire of independence and enhancement of the entrepreneurial aspirations, it seems that as yet there is no talk of the existence of a development model of immigrant women's entrepreneurship in Italy.

It is evident that the social-economic disadvantage in which immigrants live is one of the negative conditions that stimulate the search for change.

The paper intends to fill a gap in the existing management literature about the study of factors affecting the propensity to start entrepreneurial activities by immigrants, and orient, in this sense, the decision-making processes of the institutions in order to strengthen the competitiveness of the Italian entrepreneurial system.

In future researches, it would be important to study the national profile of immigrant entrepreneurs and examine some empirical evidence of immigrant entrepreneurship successfully launched in Italy, focusing on the analysis of the network's process of creation and collaboration development among immigrant businesses and indigenous realities.

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Chapter 5

The Relationship Between Intellectual Capital Performance and Ownership Gender Diversity in Small-Sized Italian Companies

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Abstract In recent years, research has been directed toward investigating the determinants of IC performance. While several studies have shown that gender affects company performance and some of its dimensions, whether and how gender impacts on IC performance is still an area open to research. Thus, the aim of this study is to investigate the relationship between ownership gender diversity and IC performance with specific reference to small-sized Italian companies.

The investigation is carried out through cross-sectional OLS analysis. The IC performance, the dependent variable, is measured through VAICTM and each of its three components, while the ownership gender diversity, the independent variable, is measured through a gender diversity index, the Shannon's index. A set of control variables is included to control for the influence of the factors that previous studies have found to affect the magnitude of VAICTM and its three components.

The results of the OLS analysis show that ownership gender diversity has a negative impact on IC performance: i.e., the higher the diversity, the lower the performance. This seems to support the validity of the similarity attraction paradigm within the IC field.

Keywords Ownership • Gender diversity • Intellectual capital performance • $VAIC^{TM}$ • Small-sized companies

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5.1 The Impact of Gender on IC Performance: Literature Review and Research Gap

This study examines two topics that have been receiving increasing, but separate, interest by both researchers and practitioners: gender diversity and intellectual capital (IC).

The concept of "gender diversity" can be defined as the extent to which a group or organization is heterogeneous with respect to the gender of its members (Li et al., 2016). It can be considered as an attribute of an organization based on its gender homogeneity, and it is arguably the most debated diversity issue as it is a way of representing the female participation in economic activity and in society in general (Campbell & Mínguez-Vera, 2008). The recognition that gender diversity is a reality in the workforce has generated an enormous amount of activity over the years among leaders in business, government, and civil society. With reference to the business domain, some would argue that gender diversity can influence different dimensions of the organizational performance (e.g., financial, social, etc.). In particular, some scholars have investigated the connections between gender diversity, mainly referred to boards and CEOs, and firms' financial and social performance achieving very different results (Bear, Rahman, & Post, 2010; Campbell & Mínguez-Vera, 2008; Carter, D'Souza, Simkins, & Simpson, 2010; Elizabeth & Baines, 1998; Erhardt, Werbel, & Shrader, 2003; Fairlie & Robb, 2009; Gneezy, Niederle, & Rustichini, 2003; Harjoto, Laksmana, & Lee, 2015; Kalleberg & Leicht, 1991; Rao & Tilt, 2016; Smith, Wokutch, Harrington, & Dennis, 2001). The different and sometimes conflicting results have led to call for more investigations on the linkages between gender diversity and performance (Campbell & Mínguez-Vera, 2008; Carter et al., 2010; Erhardt et al., 2003; Siciliano, 1996).

The second pillar of this study is represented by IC. The relevance of IC has been increasing in the last decades due to the idea that IC performance "drives" the financial one. Consequently, several studies have been developed in order to understand the determinants of IC performance and how it can be improved. The extant studies suggest several determinants of IC performance such as the size of the company (Kujansivu & Lönnqvist, 2007; Meressa, 2016), the firm age (Chen, Cheng, & Hwang, 2005; Ling, 2013; Meressa, 2016), the corporate governance characteristics (e.g., composition of the board, ownership structure, etc.) (Chouaibi & Kouaib, 2015; Ismail, Bakar, & Al-Musalli, 2016; Mohd-Saleh, Rahman, & Ridhuan, 2009; Nicholson & Kiel, 2004; Norman, Mara Ridhuan, & Mohamat Sabri, 2009), locations and ecosystems (Dumay & Garanina, 2013; Edvinsson, 2013; Schiavone, Meles, Verdoliva, & Del Giudice, 2014), the market structure (Al-Musalli & Ismail, 2012; Meressa, 2016), as well as the risk and profitability of the organization (Eftekhare, Asgaryan, & Seyyedy, 2014; El-Bannany, 2008; Sefidgar, Maleki, & Minouei, 2015).

So far no studies have investigated whether and how gender diversity impacts on IC performance, despite previous research has shown that gender diversity affects company performance and some of its dimensions. In order to contribute to fill the

aforementioned gap, the aim of this study is to investigate the relationship between ownership gender diversity and IC performance in small-sized Italian companies.

The focus on small-sized companies is due to their significant contribution to the Italian economy and, more in general, to the European one. The focus on shareholders is due to the fact that in small-sized companies the relevance of the gender and of the qualities of the shareholders assumes particular importance, maybe even superior to the one of the directors. Small-sized companies tend to be characterized by a simple, stable, and highly concentrated ownership structure and the direct involvement of the shareholders in the management of the firm. Therefore, in this kind of firms, it appears more interesting to study the shareholders rather than the directors (Elizabeth & Baines, 1998; Fairlie & Robb, 2009; Johnsen & McMahon, 2005; Watson & Robinson, 2003). On the idea that ownership is one of the determinants of a small-sized company's performance, it is possible to mention Daily and Dollinger (1992) that argue that "small firm, particularly the family-owned and -managed business, is more likely to have a single individual—the owner-operator—who can accurately assess firm processes. Those firms, therefore, provide a rich area for investigating hypotheses about the separation of ownership and control. It is in the smaller firm that linkages between ownership and performance may be more easily observed." In all, in small-sized companies, the typical agency problems related to the dissociation between ownership and management that justify the focus on the board lose their relevance (Abor & Biekpe, 2007; Arosa, Iturralde, & Maseda, 2010; Chu, 2009). In addition, there are few investigations on the effects of ownership gender diversity in small-sized companies (Carter, Anderson, & Shaw, 2000; Cohen & Kaimenakis, 2007; Johnsen & McMahon, 2005; Neergaard, Shaw, & Carter, 2005; Ngah & Ibrahim, 2009; Orser, Riding, & Manley, 2006; Shahveisi, Khairollahi, & Alipour, 2016; Steenkamp & Kashyap, 2010).

The investigation is carried out through cross-sectional OLS analysis. The IC performance, the dependent variable, is measured through VAICTM and each of its three components (Bontis, Bart, Nazari, & Herremans, 2007; Iazzolino & Laise, 2013; Pulic, 2000; Silvestri & Veltri, 2014; Ståhle, Ståhle, & Aho, 2011). The ownership gender diversity, the independent variable, is measured through a gender diversity index. A set of control variables is included to control for the influence of the factors that previous studies have found to affect the magnitude of VAICTM and its three components.

The study is organized as follows: Section 5.2 reviews the literature and develops the research hypothesis. Section 5.3 describes the research design and the sample selection. Section 5.4 shows the empirical results. Section 5.5 concludes, highlighting the main contributions to the literature, the limitations of the study, and possible further research opportunities.

5.2 Development of the Hypothesis

As previously specified, we investigate whether and how gender impacts on IC performance of small companies by focusing on the gender composition of the ownership, in other words, on its gender diversity. Gender diversity appears to be relevant 70 M.S. Chiucchi et al.

in determining the outcomes of groups of individuals (Horwitz, 2005; Horwitz & Horwitz, 2007). In this study it is argued that the whole of the shareholders of a small-sized company can be considered as a peculiar type of group or even as a team, i.e., a "group of people who normally work together on an ongoing, day-to-day basis" (Irani, Sharp, & Kagioglou, 1997). In fact, as mentioned, small-sized companies' shareholders tend to be also related to the same family or the same managerial team (Daily & Dollinger, 1992).

The extant literature has highlighted that gender diversity influences organizational performance. IC performance can be considered as a dimension of the overall organizational performance (Firer & Mitchell Williams, 2003). As gender diversity seems to influence several dimensions of the organizational performance (Bear et al., 2010; Campbell & Mínguez-Vera, 2008; Carter et al., 2010; Elizabeth & Baines, 1998; Erhardt et al., 2003; Fairlie & Robb, 2009; Gneezy et al., 2003; Harjoto et al., 2015; Kalleberg & Leicht, 1991; Rao & Tilt, 2016; Smith et al., 2001), it can be argued that gender diversity can also influence IC performance.

A review of the literature shows that there are two main competing theories regarding the linkage between gender diversity and performance (Horwitz, 2005; Horwitz & Horwitz, 2007). The first stream of studies is based on the similarity attraction paradigm that argues that homogeneous groups perform better than their heterogeneous counterparts due to the fact that groups composed by members of the same gender tend to share the same language, approach, way of acting, etc. and consequently they are more productive. The other stream of study relays on the cognitive resource diversity theory. In this case, it is argued that diversity has a positive impact on performance because heterogeneous members promote creativity, innovation, and problem solving, hence generating more informed decisions. The extant analyses regarding the relationships between gender diversity and performance achieve mixed results.

Although the two theories theorize a different impact of gender diversity on performance, both of them theorize an impact. This suggests to test the research hypothesis that follows:

 H_0 : Ownership gender diversity has an impact on IC performance.

5.3 Research Design and Sample Selection

Research hypothesis is tested through cross-sectional OLS analysis.

The dependent variable is a measure of IC performance. It is the Value Added Intellectual Coefficient (VAIC™) developed by Pulic (2005). This choice is due to the fact that it is widely used in previous studies for investigating the determinants and the effects of IC performance (Chen et al., 2005; Bontis et al., 2007; El-Bannany, 2008; Firer & Mitchell Williams, 2003; Mavridis, 2005; Pew Tan, Plowman, & Hancock, 2007; Pulic, 2000; Ståhle et al., 2011). Algebraically, it is expressed as follows:

$$VAIC^{TM} = HCE + SCE + CEE$$
 (5.1)

where:

VAICTM is Value Added Intellectual Coefficient

HCE is Human Capital Efficiency, calculated as the ratio between value added and total cost for employees

SCE is Structural Capital Efficiency, calculated as the ratio between structural capital (the difference between value added and total cost for employees) and value added

CEE is Capital Employed Efficiency, calculated as the ratio between value added and total assets, net of intangible assets

Value added is calculated as follows:

$$VA = OP + EC + D & A + P$$
 (5.2)

where:

VA is value added OP is operating profit

EC is total cost for employees

D&A is depreciation and amortization

P is provisions (in the profit and loss statement prepared according to Italian legislation, provisions are included in operating profit)

In order to make a more in-depth analysis, both VAICTM and each of its three components (HCE, SCE, and CEE) are used as dependent variable.

To test the research hypothesis, the independent variable is a measure of gender diversity in groups. As it has been extensively done in literature, the Shannon's diversity index is used (Shannon, 1948):

$$-\sum_{i=1}^{i=1} p_i \times \ln p_i \tag{5.3}$$

where:

p is the proportion of individuals in a category

n is the number of categories

p is intended and measured in two alternative perspectives. On the one hand, it is the proportion of equity held by individuals in a gender category (GD1). On the other hand, it is the proportion of individuals in a gender category (GD2).

Both GD1 and GD2 can range between 0 and 0.69. Since the logarithm of 0 is not defined, if $p_i = 0$, it is adopted the convention that the expression $p_i \times \ln p_i = 0$.

GD1 and GD2 take value 0 when the ownership gender diversity is minimum (absent). With reference to GD1, it occurs when all the equity is held by female shareholders or male shareholders. With reference to GD2, it occurs when all the

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Table 5.1 N	Aeasurement.	of	variables
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Variable	Measurement
VAICTM	Sum of HCE, SCE, and CEE
HCE	The ratio between value added and total cost for employees.
SCE	The ratio between structural capital (the difference between value added and total cost for employees) and value added.
CEE	The ratio between value added and total assets, net of intangible assets.
GD1	The Shannon's diversity index, computed as $-\sum_{i=1}^{i=1} p_i \times \ln p_i$ where p is the proportion of equity held by individuals in the gender category i and n is the number of the gender categories. Since the logarithm of 0 is not defined, if $p_i = 0$, it is adopted the convention that the expression $p_i \times \ln p_i = 0$.
GD2	The Shannon's diversity index, computed as GD1, except for p_i that here is the proportion of individuals in the gender category i .
SIZE	The natural logarithm of total assets at the end of fiscal year.
LEV	The ratio between total liabilities and total assets at the end of fiscal year.
SECTOR	Set of 73 dummy variables based on the first two-digit ATECO 2007 codes (the base case is the economic sector that has the greater number of company observations). ATECO 2007 is the Italian classification of economic sectors.

shareholders are female or male. They take value 0.69 when the gender diversity is maximum. With reference to GD1, it occurs when the proportions of equity held by female shareholders and male shareholders are the same and each of them amounts to 0.5. With reference to GD2, it occurs when the proportions of female shareholders and male shareholders are the same and each of them amounts to 0.5.

Control variables are included to control for the influence of the factors that previous studies have found to affect the magnitude of VAICTM and its three components (Chen et al., 2005; Firer & Mitchell Williams, 2003; Ho & Williams, 2003; Pew Tan et al., 2007; Shahveisi et al., 2016). Previous studies have found well-documented statistically significant relationships between them and the size (SIZE), level of indebtedness (LEV), and economic sector (SECTOR) of companies. Control variables are measured as reported in Table 5.1.

The cross-sectional OLS models used to test research hypothesis can be specified as follows:

$$Y_i = \alpha + \beta_1 \text{GD}_{ii} + b_2 \text{SIZE}_i + b_3 \text{LEV}_i + b_4 \text{SECTOR}_i + e_i$$
 (5.4)

where:

Y is the dependent variable (alternatively represented by VAICTM, HCE, SCE, CEE)

 α is the constant term

 β is the regression coefficient

- ε is the error term
- *j* is the reference to the independent variable configuration
- i is the reference to the company

All the variables are measured as reported in Table 5.1.

The sample of companies was extracted from the AIDA database supplied by Bureau van Dijk, that provides financial statement data for a vast set of Italian private companies operating in sectors other than the financial one, on the basis of the selection criteria that follow (all referring to 31st December 2015): limited liability company, active company, private company, financial reporting prepared according to Italian legislation and generally accepted accounting standards, small-sized according to the quantitative size limits established by the European Union, positive total shareholder equity, turnover of at least € 1000, positive value added, total cost for employees higher than zero, and ownership structure composed of only individuals.

The number of companies that meet the above selection criteria and for which the data are complete and valid amounts to 60,384. To them, 2,159 observations are subtracted because they have outlier values of dependent variables, and 26 observations are subtracted because they are related to under-represented economic sector (<10 observations). Observations with outlier values of dependent variables are those that have values of HCE, SCE, or CEE below the respective first percentile and above the respective 99th percentile. The final sample of companies amounts to 58,199.

5.4 Results

Table 5.2 shows the main descriptive statistics referring to the companies of the sample.

Table 5.2 shows that, in terms of mean values, HCE, SCE, and CEE contribute to the mean value of VAICTM for 69%, 13%, and 18%, respectively. This result is essentially consistent with the ones of previous studies (Laing, Dunn, & Hughes-Lucas, 2010; Ståhle et al., 2011; Wei Kiong Ting & Hooi Lean, 2009).

The degree of ownership gender diversity appears to be restricted especially when the diversity index is calculated on the basis of the proportion of equity held by the two gender categories of shareholders (GD1). A GD1 median of 0.0560 means that the shareholders of a gender category hold a maximum of 1% of equity in 50% of the companies of the sample. The companies in which female shareholders and male shareholders hold the same proportion of equity amount to 8%.

The degree of ownership gender diversity appears to be wider when the diversity index is calculated on the basis of the proportion of the shareholders of the two gender categories (GD2). In this case, a GD2 median of 0.5004 means that the shareholders of a gender category are a maximum of 20% of all shareholders in 50%

			Standard	First		Third		
Variable	Number	Mean	deviation	quartile	Median	quartile	Min	Max
VAICTM	58,199	2.2869	0.9305	1.7767	2.0610	2.5072	0.3571	10.5656
HCE	58,199	1.5891	0.7853	1.1913	1.3562	1.6687	0.7141	8.7363
SCE	58,199	0.2917	0.1908	0.1606	0.2627	0.4007	-0.4004	0.8855
CEE	58,199	0.4060	0.2754	0.2074	0.3397	0.5258	0.0389	1.6845
GD1	58,199	0.2697	0.2961	0	0.0560	0.6109	0	0.6931
GD2	58,199	0.3349	0.3287	0	0.5004	0.6931	0	0.6931
SIZE	58,199	14.6162	0.8200	14.0320	14.6340	15.1877	11.7249	18.4010
LEV	58,199	0.7406	0.2075	0.6147	0.7988	0.9094	0.0090	0.9999

Table 5.2 Descriptive statistics

Variables are measured as reported in Table 5.1

Table 5.3 Correlation matrix

	VAICTM	HCE	SCE	CEE	GD1	GD2	SIZE
HCE	0.8270a						
SCE	0.8270a	1.000a					
CEE	0.1665a	-0.2998a	-0.2998a				
GD1	-0.0066	0.0205a	0.0205a	-0.0470a			
GD2	-0.0033	0.0202ª	0.0202ª	-0.0445 ^a	0.8909a		
SIZE	0.0413a	0.3823a	0.3823a	-0.6838a	0.0769a	0.0643a	
LEV	-0.2798a	-0.3312a	-0.3312a	0.0545a	-0.1010a	-0.0790a	-0.2152a

Spearman correlation indexes are shown because variables are not normally distributed ^aIndicates significance at 5%. Variables are measured as reported in Table 5.1

of the companies of the sample. The companies in which female shareholders and male shareholders are present in the same proportion amount to 27%.

Table 5.2 shows two features that characterize the small-sized Italian companies: their average size is very small, and their average degree of indebtedness is very high.

Table 5.3 shows the correlation matrix.

Table 5.3 shows that a very high correlation index (0.8909) exists between the variables GD1 and GD2. It exceeds the threshold value that suggests collinearity problems if the two variables were included in the same OLS model. Although GD1 and GD2 measure two different aspects of ownership gender diversity, they are largely overlapping in the contest of the sample of companies. Taking this into account, GD1 and GD2 are not included in the same OLS model. Further studies could overcome the collinearity problems by adopting different analysis models (i.e., ridge regression models).

Tables 5.4 and 5.5 show the results of the OLS analysis.

When the independent variable is GD1, its coefficient is negative and statistically significant when the dependent variable is VAICTM, HCE, and SCE, and it is positive and statistically not significant when the dependent variable is CEE.

	Coefficients (Heteroscedasticity-robust standard errors: variant HC1)						
Variables	VAICTM	HCE	SCE	CEE			
CONSTANT	2.270a (0.082)	-0.712a (0.067)	-0.441a (0.015)	3.423 ^a (0.020)			
GD1	-0.141a (0.013)	-0.116 ^a (0.010)	-0.029a (0.002)	0.004 (0.003)			
SIZE	0.080a (0.005)	0.222a (0.004)	0.067a (0.001)	-0.209a (0.001)			
LEV	-1.148a (0.023)	-0.830a (0.019)	-0.229a (0.004)	-0.088a (0.004)			
SECTOR	Included	Included	Included	Included			
Observations	58,199	58,199	58,199	58,199			
Adjusted R ²	0.1174	0.1763	0.2339	0.5125			
F-statistic	62.43a	95.36a	214.37a	595.56a			

Table 5.4 Results of the OLS models (independent variable: GD1)

^aIndicates significance at 1%. Variables are measured as reported in Table 5.1

Table 5.5	Results o	of the O	LS models	(independent	variable: C	3D2)
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	Coefficients (Heteroscedasticity-robust standard errors: variant HC1)					
Variables	VAICTM	HCE	SCE	CEE		
CONSTANT	2.269a (0.082)	-0.713a (0.067)	-0.441a (0.015)	3.423a (0.020)		
GD2	-0.112a (0.011)	-0.091a (0.009)	-0.023a (0.002)	0.002 (0.002)		
SIZE	0.080a (0.005)	0.222a (0.004)	0.067a (0.001)	-0.209a (0.001)		
LEV	-1.144a (0.023)	-0.827a (0.019)	-0.229a (0.004)	-0.089a (0.004)		
SECTOR	Included	Included	Included	Included		
Observations	58,199	58,199	58,199	58,199		
Adjusted R ²	0.1169	0.1758	0.2335	0.5125		
F-statistic	62.24ª	95.26a	214.04ª	595.51a		

^aIndicates significance at 1%. Variables are measured as reported in Table 5.1

When the independent variable is GD2, the results are qualitatively the same as in the case in which ownership gender diversity is measured in the other way.

In the light of such results, the research hypothesis can be confirmed: ownership gender diversity has an impact on IC performance. Specifically, such an impact is negative.

With reference to control variables, Tables 5.4 and 5.5 show that the respective coefficients are always statistically significant consistently with previous studies (Chen et al., 2005; Firer & Mitchell Williams, 2003; Ho & Williams, 2003; Pew Tan et al., 2007; Shahveisi et al., 2016).

5.5 Conclusions

The aim of this study was to investigate the relationship between IC performance and ownership gender diversity in small-sized Italian companies.

The results of the OLS analysis showed that ownership gender diversity has a negative impact on IC performance, i.e., higher diversity leads to lower performance.

This seems to support the idea of the validity of the similarity attraction paradigm within the IC field: homogeneous groups perform better than heterogeneous ones since members of the same gender share the same language, approach, way of acting, etc. Thus, homogeneous ownership groups are likely to lead to a higher IC performance.

This study has theoretical and practical implications. From a theoretical perspective, it highlights the existence of a relationship between gender diversity and IC performance. As the authors are not acquainted of the existence of similar studies, this study can enrich both the IC discourse, pointing out a determinant of IC performance, and the studies on gender, offering a new stream of research. From a practical perspective, this study suggests the opportunity to reflect on how groups related to the management of IC should be composed.

The main limitation of this study is related to the fact that it was not possible to observe at the same time the impact of the two ownership gender diversity measures due to collinearity problems.

Future research avenues can be as follows. First, it would be interesting to investigate more in-depth the linkages between gender, IC performance, and financial performance. Second, because of the way in which the analysis was conducted, the characteristics of shareholders, other than their gender (e.g., age, level of education, etc.), are aspects that were not taken into account. However, these aspects may be relevant for the purpose of this study and could be included in further research.

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Chapter 6 Measuring and Evaluating the Interest on Management and Gender Topics in the United States in 1990–2017: A Time Series Clustering Approach

Paola Paoloni and Carlo Drago

Abstract In the last years, there has been an increased interest in the "gender studies" on which the topics related to women, managers and entrepreneurs are analysed from an approach combining different disciplines. These different approaches reflect also the different topics and the different problems considered on these fields. In this work, by using selected Google queries, we have studied the evolution of the different queries related to "gender studies" over the time. In particular we have used a time series clustering approach in order to detect a common dynamics for the considered Google queries. We found that the queries between the glass ceiling and the pay gap between men and women show a relevant increase over the time.

Keywords Gender studies • Glass ceiling • Gender pay gap • Time series clustering • Google queries

6.1 Introduction

Since the early 1980s, there has been increased interest in women managers and entrepreneurs, often from an interdisciplinary approach combining, for example, sociology, psychology, management and organizational studies and economics. Some scholars (Paoloni & Demartini, 2016) stated that research into gender in management and organizations is constantly evolving the developing field of gender in

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management and organizations to identify dominant research topics addressed and uncover those yet to be explored.

In accordance with what is stated, we can say that in recent literature in the field, there are different perspectives: corporate governance, female entrepreneurship (Paoloni, 2011; Paoloni & Dumay, 2015), conflicts of interest, differences between men and women, discrimination and others.

According to this evolutionary dynamics, we wondered how they are connected with the big data and time series clustering, so our research question is: how has evolved in recent years the interest of the concepts related to women and management over time. And it is possible to find an increase or a decline of these groups of queries over time.

In answering this question, the article contributes with the use of a new approach based on the statistical analysis of some selected Google queries on gender. In answering this question, the articles contribute by considering a time series clustering approach on the gender and management topics. It also highlights the emergence of women in corporate governance as a major area of research and draws attention to other key emerging research themes in the literature and the connection with the research on google.

The article is structured as follows: In the Sect. 6.2, we will introduce the main problem of the paper, how to represent and measure the level of interest over time related to some gender topics, by considering the relevant google queries and their frequency. On the Sect. 6.3, we will consider the dataset built and the methodology considered, and on the Sect. 6.4, we will discuss the results we have obtained. Finally on the Sect. 6.5, we reach the conclusions.

6.2 Big Data, Google Queries and Gender: Relevant Topics

The size of the datasets is increasing their dimensions in many different applications. In this context this growth of the amount of data-related electronic devices is coming from a wide range of different sources (McAfee & Brynjolfsson, 2012). Usually big data considers datasets which cannot be analysed by taking into consideration classical statistical methodologies. At the same time, big data are increasingly important nowadays for the relevant opportunities they can provide in terms of insights on the different social phenomena it is possible to examine (see Manyika et al., 2011). Various examples of big data can be provided. Big data can also need specific statistical techniques to be analysed (see Drago, Lauro, & Scepi, 2013; Drago, Scepi, & Lauro, 2012). A relevant example of big data are the data coming from the web, which can be very useful because they allow to measure latent phenomena as the positive and negative opinions on markets, for example (in this context, it is possible to develop a sentiment analysis). At the same time, other useful uses of the big data can be considered using other types of unstructured data.

An example of big data in action, on this sense, could be also the analysis of the Google queries. In this sense, the Google queries allow to measure the frequency of

the searches related to a specific topic. There are many cases in which it could be very relevant to use the different queries in order to determine more specifically the amount of a specific phenomenon.

Various examples are presented in literature (see Choi & Varian, 2012 and also Vosen & Schmidt, 2011 on a different context). In this respect the first step is to measure the latent phenomenon (the interest on a topic), and then it could be significant to use the information discovered in order to make other relevant findings.

We consider this approach in order to analyse how has evolved in recent years the interest of the concepts related to women and management over time. We want to analyse if it is possible to find an increase or a decline of these groups of queries over time. Initial research into gender in management and organizations stems from the 1970s, particularly by authors of Anglo-American origin (Schrier, 1975).

Before, few studies were focused on the entrepreneur only as a male (De Carlo and Lyons, 1979; Schwartz, 1976). Therefore, the view of women in the business world was oriented to the past. Women in management and organizations were not perceived as a manifestation of a natural social evolution, in which the woman is no longer constrained by the boundaries of her role as mother, wife and/or housewife but rather as an exception of interest because the dominant interpretive model is masculine. However, since the early 1980s, there has been increased interest in women managers and entrepreneurs, often from an interdisciplinary approach.

Different perspectives in the field of the recent literature (Paoloni and Demartini, 2012) are corporate governance, female entrepreneurship (Paoloni, 2011; Paoloni & Dumay, 2015), conflicts of interest, differences between men and women, discrimination and others. The literature on the general trend today shows the relevance and focus on four specific macro-research topics:

- Corporate governance—about the presence of women on boards of directors, audit or other company committees; issues concerned with career paths; the glass ceiling phenomenon; or the pink share.
- Female entrepreneurship—more broadly and specifically, the family business, relational capital, the formal and informal networks that women entrepreneurs activated during the life cycle of their company and different problems that women have to overcome in doing business.
- Differences between women and men.
- Discrimination includes discrimination against women in the workplace and in the political, economic and social fields.

The corporate governance issues (Guillaume and Pochic, 2009; Tlaiss and Kauser, 2011) are, in particular, in relation to quotas and their impact on corporate performance and on the emotions and perceptions of men.

The female entrepreneurship issues (Paoloni & Demartini, 2012) are also more much studied to understand the role of gender and women, in particular, as regard to new businesses opportunities in the sectors of the green economy, big data management and social media. It could be worthwhile to analyse new business models from a gender perspective considering both women as consumers and female entrepreneurs. Another interesting and emerging trend is that of differences

between women and men. It is very interesting to understand the bridge between gender in science, technology, engineering and mathematics and new digital skills needed to enter the world of work. Finally, research of conflict of interests and discrimination (Probert, 2005; Smithson and Stokoe, 2005) takes into account specific contexts in order to suggest possible and applicable solutions to bridge the gender gap, taking an interdisciplinary approach that combines management and organization, psychology, sociology, political economic and law.

6.3 Data and Methodology

At the start of the analysis, we consider and we design the different Google queries related to different topics of interest for the research (in particular we consider as a tool Google Trends, and we have worked using the R package gtrendsR; see Massicotte & Eddelbuettel, 2016). In this sense the data source is Google Trends (www.google.com/trends see Google Trends (2017)). These queries are specifically useful to answer to the research question on management and gender considered in Chap. 2. In this sense each query is related to a specific contemporary aspect of the topic (the queries considered are on Appendix). These queries tend to cover the different important contemporary real themes on gender studies. In this way we obtain a time series for each different query. Each time series represents the amount of different searches performed using Google. So it is possible to measure the interest on each aspect of the gender studies represented by the same query over time. It is also important to consider that when two time series tend to vary together, that could be interpreted with an existing relationship between one query and another one.

We collect the data related to the different queries during the specific period of 2004–2017. The period was chosen with the specific aim to maximize the available data on Google. The geographic region considered was the United States. In this sense the different queries are related to the location of the United States, so we expect that the different queries can discover specific queries performed by people living in the United States.

When the time series which had a not sufficient number of traffics was not considered from the system, in these cases, it was not possible to return any result by Google. The final number of queries considered is used on the statistical analysis. Each query is represented as a different time series measuring over the time and the volume of the queries searched over time. The frequency of the different series extracted is weekly. Each different time series is normalized to their maximum, so the time series varies over time to 0–100 (the maximum reached over time). An example of query extracted with the temporal evolution of the volume of the searches over time is in Fig. 6.1.

By starting from the volume of each query, it is possible to expect that the different dynamics of the different time series over the time can be useful to identify relevant trends on the labour market and the society in general.

	start	end		key	word	hits	location
1	2004-01-04	2004-01-10	gender	pay	gap	34	US
2	2004-01-11	2004-01-17	gender	pay	gap	27	US
3	2004-01-18	2004-01-24	gender	pay	gap	27	US
4	2004-01-25	2004-01-31	gender	pay	gap	27	US
5	2004-02-01	2004-02-07	gender	pay	gap	36	US
6	2004-02-08	2004-02-14	gender	pay	gap	45	US
7	2004-02-15	2004-02-21	gender	pay	gap	54	US
8	2004-02-22	2004-02-28	gender	pay	gap	0	US
9	2004-02-29	2004-03-06	gender	pay	gap	0	US
10	2004-03-07	2004-03-13	gender	pay	gap	0	US
11	2004-03-14	2004-03-20	gender	pay	gap	0	US
12	2004-03-21	2004-03-27	gender	pay	gap	0	US
13	2004-03-28	2004-04-03	gender	pay	gap	0	US
14	2004-04-04	2004-04-10	gender	pay	gap	0	US
15	2004-04-11	2004-04-17	gender	pay	gap	0	US
16	2004-04-18	2004-04-24	gender	pay	gap	0	US
17	2004-04-25	2004-05-01	gender	pay	gap	0	US
18	2004-05-02	2004-05-08	gender	pay	gap	25	US
19	2004-05-09	2004-05-15	gender	pay	gap	25	US
20	2004-05-16	2004-05-22	gender	pay	gap	26	US
21	2004-05-23	2004-05-29	gender	pay	gap	27	US
22	2004-05-30	2004-06-05	gender	pay	gap	28	US
23	2004-06-06	2004-06-12	gender	pay	gap	0	US
24	2004-06-13	2004-06-19	gender	pay	gap	0	US

Fig. 6.1 Example of the data collected for each query

In order to answer to the research question, we will use the cluster analysis applied to the different time series (Montero & Vilar, 2014). Clustering techniques are frequently used in order to detect relevant groups of similar statistical units (e.g. detects some subpopulations on the data). Clustering techniques are very common in many different disciplines and can be used on different contexts (Jain, Murty, & Flynn, 1999).

The aim of the clustering algorithms is to identify, between different statistical items, groups of similar objects within where at the same time it is possible to observe the highest differences between different groups. In this work we are considering a clustering approach to the time series of queries in order to detect a common dynamics for the time series considered. In this sense each group of time series can be characterized by similar characteristics (for the clustering of time series, see Aghabozorgi, Shirkhorshidi, & Wah, 2015; Liao, 2005). At an interpretative level, it is possible to find some groups of queries which seem to be searched over time with the same patterns.

In order to perform the cluster analysis, we consider the initial data matrix by considering all the different time series related to each query. The series starts with 4 January 2004 and ends with 21 January 2017. The results for the single query are shown in Fig. 6.1. In particular in Fig. 6.1, we can observe the data related to a single query "pay gap" (the keyword), wherein in the left, we have the period for

each observation (the start and the end), the volume of the queries observed (as index) and finally the location of the queries (us).

In order to answer the research question, we use the time series cluster analysis, where the time series are the different queries considered.

In particular the clustering approach chosen is the hierarchical clustering. This approach is useful to explore the data, also by allowing the construction of a hierarchy, or also "branching pattern relationships" (Phipps, 1971) from the original data.

The distance measure is needed to establish the level of similarity or dissimilarity between the different statistical units on a cluster analysis (in this case we have considered the different time series). In order to perform the time series clustering, we have considered the correlation distance. The correlation distance seems to be appropriate to capture the similar behaviour of these types of time series (for the correlation distance, see Montero & Vilar, 2014). We have used, in order to perform the computations the R language (R Development Core Team 2008).

From the hierarchical cluster analysis performed, we have obtained the dendrogram. As clustering method we have considered the "average" method. In a first phase, we analyse our data considering an exploratory data analysis approach. This approach is useful to analyse and explore the data in order to extract the relevant information from the data itself (Tukey, 1977).

Then we identify the number of the clusters and we cut the dendrogram in order to obtain the different clusters. The clustering procedure is repeated two times, the first time in order to explore the data structure of the data, and then we identify the number of the clusters by considering the Dunn index (see Dunn, 1974). Finally we compute in another time the dendrogram by visualizing the number of the clusters identified directly on the dendrogram (we visualize the different clusters by considering a red line). Then we visualize the most relevant pairs of queries we have identified on the clusters in order to analyse the temporal dynamics over the time.

We present the result we have obtained on the next section.

6.4 Results and Discussion

From the initial data we have obtained, we perform the hierarchical cluster analysis and we obtain the dendrogram (Fig. 6.2). In particular the dendrogram is a statistical diagram which can be used to visualize the different hierarchies of the clusters which can be obtained from the hierarchical clustering (Waterman & Smith, 1978). In this sense the dendrogram represents the different level of similarity it is possible to observe on the different series.

In order to interpret the different dendrograms, it is possible to consider the y-axis: in this sense, the lower the value of the y-axis, the higher the level of closeness (higher similarity or lower dissimilarity) between two specific time series obtained by considering the different queries.

The dendrogram could be analysed on an exploratory approach, and in this way the different groups of clusters of queries can be identified.

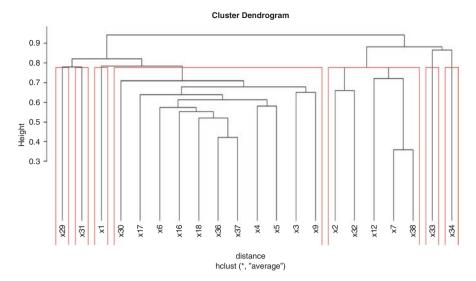


Fig. 6.2 Clustering with seven clusters

It is possible to observe that there are two specific clusters (or groups of time series which can be observed): on the first case, the queries related to the management and the corporate governance and, secondarily, the different clusters related to the pay and the salary (and specifically more related to the differences in salary between male and females).

More specifically we are able to identify and describe the different clusters we were able to obtain. A first cluster (see Appendix) is related to the series representing "politics woman" and a second one on "politics female" which tends to be unique clusters on the first analysis, and it is not a surprise because these queries are very specific queries and they are related to politics and women.

These queries probably are not searched by the majority of women and the public, so they probably tend to represent a cultural and a social interest which is not correlated with other needs (when a correlation between different needs exists, we are able to identify that the queries tend to be sequential to each other).

This result can suggest that "politics" and "woman" are searched by different persons that the persons who search the other queries related, for instance, the salary and the "pay gap".

A third query which behaves differently from the other is "woman management". Also in this case, it is possible to observe that the people who search these queries probably tend to have different characteristics than the people who search the other queries.

At the same time, a fourth and a fifth cluster seems to show a different structure than the other: "female in law" and also "gender in law".

If we consider clusters 6 and 7, we can obtain another very interesting insight from our data. In particular cluster 6 seems to be related to the problems of the pay

gap in the work between male and female. In this case it seems an aspect which is very popular.

At the same time, we can consider that the aspect of the pay is not considered on cluster 7 and it is considered the aspect of the woman and the gender discrimination on a business context. Finally it is also interesting to note that these concepts seem to be related also with the communication of these problems (see that the query related to the communications and the query on "gender discrimination" show some evidence of similar statistical patterns than other queries).

Overall each different cluster seems to be related to a different social group and a different specific interest on the global search on these contexts (advances on career, discrimination and rights, gender pay and gender pay gap).

In this sense it is possible to consider that different persons tend to search for different queries and these queries tend to be correlated (and the correlation implies the creation of a significant cluster).

Overall we identify from the data visualization of the dendrogram in Fig. 6.2 a number of seven clusters, and then we cut the dendrogram in order to identify the associated seven groups of observations.

Then we consider an approach in which the stability of the clustering procedures was assessed, and in this sense we have visualized the results on Fig. 6.6.

The number of clusters to be considered (and so the level of the cut to be done on the graph) is obtained by considering an appropriate validation procedure. The cluster validation is necessary to evaluate the adequacy of the clusters determined on the cluster analysis process.

On this work we have used the Dunn index. The Dunn index is regarded for their wide use in literature (Dunn, 1974; see also Halkidi, Batistakis, & Vazirgiannis, 2001). The Dunn index allows to detect an adequate number of four clusters, which finally are considered validated.

The final different groups represent the "significant concepts" which are searched by considering the dendrogram obtained. Also in this sense, the red line represents the different clusters which can be possible to obtain.

We confirm our previous observation on the dendrogram with the number of validated clusters (Fig. 6.5). The relevant change is that the queries related to the politics tend to merge with the cluster on management. It is also useful to note that clustering in this way considers problems related to women discrimination in business and also to entrepreneurship (gender management).

The groups related woman and Law tends to not merge on an unique cluster.

The complete visualization of the group is on Appendix.

By observing the dendrogram (see Fig. 6.5) and the final clusters, we can look for strong patterns from the data on the dendrogram, and in particular we observe the strong similarity between the series related to "gender communication" and "gender discrimination". These two time series are related because they are considering all the different searches for the different patterns which can occur between the different sexes on the work. These different interactions can be also characterized by discrimination.

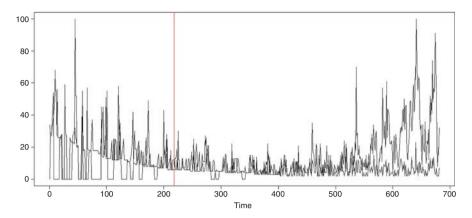


Fig. 6.3 Gender communication and female communication (the *red line* indicates March 2013)

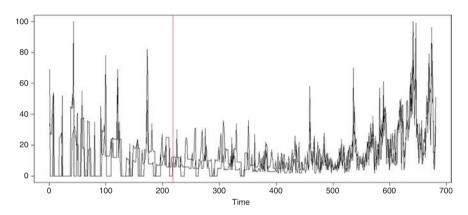


Fig. 6.4 Women pay gap and gender p

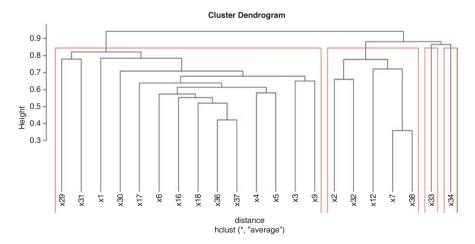
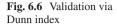
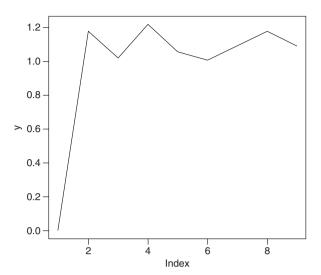


Fig. 6.5 Dendrogram (2) with four clusters: validated version





At this point we can analyse the dynamics of the queries over time (Figs. 6.3 and 6.4).

The first interesting point is that there is a relevant difference between the different numbers of time series extracted related to the different queries and the series related to the query "woman work".

These differences are also clear in this sense. In particular the series is growing over time after the crisis of 2008. The end of the growth of the queries can be defined on the period of July–August 2013. The red line in Figs. 6.3 and 6.4 is correspondent to the period from 2 March 2008 to 8 March 2008, and it is used as a benchmark.

An interpretation of the result is that these queries show a relevant worry about the job. In particular it is interesting to note that the uncertainty could be caused from the difficult economic situation (the high unemployment) which determined a more intense search activity on the labour market (in this case a higher number of different queries performed on Google).

From these analyses, it is possible to observe that there is an increase of the interest for the concept of the pay gap between workers male and female. This interest is also related to the problem of the knowledge of the existence of the "glass ceiling" phenomenon. All these phenomena are analysed and studied on the literature on gender because their relevance on the real world. We find an empirical evidence that the literature and these phenomena had an evolution on the last years in terms of an higher depth but also an increased relevance of the approach on real problems (as it is possible to see by considering the different queries) (Figs. 6.5 and 6.6).

6.5 Conclusions

In this work we have analysed a number of different queries related important themes on gender with the aim to characterize the modern approaches on gender. We have found four relevant concepts which are perfectly coherent with the actual studies on literature on the topic. At the same time, for the pay gap and for the problems related to the differences in pay between woman and men, we have found an interesting increase over the time, so the relevance of the phenomenon seems to increase.

Queries Considered and Their Cluster Membership (United States Based)

Query	Clustering 1	Clustering 2
×1 "women management"	3	7
×2 "women work"	6	6
×3 "gender work"	7	7
×4 "gender management"	7	7
×5 "diversity work"	7	7
×6 "diversity management"	7	7
×7 "women pay gap"	6	6
×9 "gender diversity"	7	7
×12 "glass ceiling"	6	6
×16 "female discrimination"	7	7
×17 "woman discrimination"	7	7
×18 "gender discrimination"	7	7
×29 "politics woman"	1	7
×30 "politics gender"	7	7
×31 "politics female"	2	7
×32 "woman in law"	6	6
×33 "female in law"	4	4
×34 "gender in law"	5	5
×36 "gender communication"	7	7
×37 "female communication"	7	7
×38 "gender pay gap"	6	6

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Chapter 7 The Italian Positivist Culture: From Anti-Feminism to Social Emancipation of Women

Silvio Berardi

Abstract This research aims to analyse the vision of women within the Italian positivist culture, a vision certainly not homogeneous, which ended up seeing the contrast between two different perspectives. On the one hand—as evidenced in the essay of Anna Rossi-Doria, Antisemitismo e antifemminismo nella cultura positivistica (Anti-semitism and Anti-feminism in the Positivist Culture)—there were those who claimed, on the basis of alleged scientific doctrines, the natural female biological inferiority and, therefore, believed that the subordination of women, socially, economically and above all spiritually, was necessary. On the other hand, however, there were those who advocated equality between men and women, biologically, socially and economically: the work of the positivist Lodovico Frati, La donna moderna secondo i più recenti studi (The Modern Woman According to the Latest Studies), was inserted, for example, in this perspective.

Although there are significant writings on the topic (see, e.g. Garin, E. (1962). La questione femminile. Firenze: Olschki (The Female Question); Soldani, S. (1989). L'educazione delle donne. In Scuole e modelli di vita femminile nell'Italia dell'Ottocento. Milano: FrancoAngeli (The Education of Women. In Schools and Models of Women's Life in Italy in the Nineteenth Century), the originality of the research lies in the discussion of a topic not much investigated, especially in a comparative perspective, and, as a result, on the ability to focus the attention on secondary issues of the historiography on the Italian positivism. Not intended to be exhaustive, the analysis will aim to highlight the role that the two positivist perspectives gave to the woman in the Italy of the late nineteenth century.

Keywords Italian Positivism • Italian Women • Emancipation of Women • Anti-feminism

S. Berardi (⊠)

7.1 Introduction

In the decades between the late nineteenth and early twentieth century, women's emancipation movements in some European countries had achieved remarkable results (Minesso, 2015, pp. 7–148). In Italy, the emerging socialist and democratic movement underwent a kind of contamination of neopositivist ideas. In fact, the main members of that school approached the Socialist Party in an attempt to contribute to improving social problems, thanks to their scientific, secular approach, based on the study of *factual data* and no longer on metaphysics (Bulferetti, 1950). Among them, there was a group of anthropologists who began to disclose the first results of their studies on the alleged biological inferiority of various human groupings. These intellectuals did not only discriminate against other civilizations or subjects that were difficult to integrate into modern and evolved society, such as insane people, criminals and alcoholic people, but also discriminate against women and tried to demonstrate their inferior condition; in order to claim for men's superiority, they did not use religious, ethical or moral theories but scientific theories (Rossi-Doria, 1999). Cesare Lombroso, the esteemed founder of criminal anthropology, was perhaps the one who mainly developed and disclosed those ideas in Italy, and he was also related to the Socialist Party, in which he saw the only force that could give the fatherland some prestige, as at that time it was guided by a political class that, in his view, was unsuitable for the task (Lombroso, 1903). Many jurists were soon attracted to Lombroso and his school's positivist theories: therefore, even from a juridical point of view, women were placed in a subordinate position. However, not all scholars who lived at that time, even if they adhered to the positivist school, accepted such theories; in fact, some of them spoke of gender differences but not of one being inferior to the other. Thus, a broad debate within the positivist universe was opened, between those who thought that the female figure was inferior to the male figure and, therefore, that it was not suitable to play important roles in society and those who, while pointing to the physiological differences between women and men, believed that women's role in a family was fundamental but also their contribution to society was important, as difference did not mean inferiority.

7.2 The Way European Positivism was Received

The results, to which that part of Italian positivism against the emancipation of women had lead, had a long tradition of well-known European sources. In 1881, the positivist anthropologist Gustave Le Bon wrote the following in his book *L'homme et les sociétés. Leurs origines et leur histoire (Man and Society. Their Origins and History)*:

Le volume de crâne de l'homme et de la femme, même quand on compare des sujets d'âge égal, de taille égale et de poids égal, présente de différences considérables en faveur de l'homme, et cette inégalité va également en s'accroissant avec la civilisation, en sorte qu'au point de vue de la masse du cerveau, et par suite de l'intelligence, la femme tend à se

différencier de plus en plus de l'homme. La différence qui existe, par exemple, entre la moyenne des crânes de Parisiens contemporains et celle de Parisiennes, est presque double de celle observée entre les crânes masculins et féminins de l'ancienne Egypte. (Le Bon, 1988, p. 154)¹

In Le Bon's opinion, therefore, women were inferior to man, and such inferiority was the result of unquestionable scientific evidence. Moreover, even Auguste Comte, widely recognized as the founder of positivism, was a strong supporter of the idea that women were naturally inferior to men. He accepted Franz Joseph Gall's theory (Gall, 1825) on inferior female brain functions, as he was deeply convinced that in:

tous les genres de forces, non-seulement de corps, mais aussi d'esprit, et de caractère, l'homme surpasse évidemment la femme, suivant la loi ordinaire du règne animal. Or la vie pratique est nécessairement dominée par la force, et non par l'affection, en tant qu'elle exige sans cesse un pénible activité. S'il ne fallait qu'aimer [...], la femme règnerait. Mais il faut surtout agir et penser, pour lutter contre les rigueurs de notre vraie destinée; des lors, l'homme doit commander. (Comte, 1880, p. 210)²

However, he was persuaded that "dans le régime positif la destination sociale des femmes devient aussitôt une suite nécessairede leur vraie nature" (Comte, 1880, p. 210).3 In fact, in Comte's view, the female sex was superior to the male sex because of the tendency "à faire prévaloir la sociabilité sur la personnalité" (Comte, 1880, p. 210)4; the preponderance of the heart was synergistic with universal sociability, and the woman was the protagonist of that preponderance when exercising her educational function as a mother, wife and daughter within the family. Intellectual inferiority was thus compensated for by an indisputable emotional superiority. This vision was incorporated into the positivist environment and determined, with regard to women, an alternation of strength and weakness and a continuous oscillation between the private sphere and the public sphere. In Italy, there were the ideal circumstances with the already mentioned Cesare Lombroso and Guglielmo Ferrero who claimed the following in their work La donna delinquente, la prostituta e la donna normale (Women Criminals, Prostitutes and Normal Women): "La principale inferiorità dell'intelligenza femminile rispetto alla maschile è la deficienza della potenza creatrice [...]. Nelle donne le idee sono stati di coscienza meno chiari, più pallidi [...] come la sensibilità periferica e la morale così la sensibilità intellettuale è

^{1&}quot;The volume of the cranium of men and women, even when compared to subjects of the same age, of equal size and weight, shows significant differences in favour of men, and this inequality increases with civilization, so from the point of view of the mass of the brain, and therefore of intelligence, women gradually differ from men. The difference there is, for example, between the average crania of contemporary Parisian men and that of Parisian women, is almost twice as much as male and female crania in ancient Egypt".

² "Regarding all kinds of strength, not only that of the body but also that of the spirit and the character, men clearly surpass women, according to the normal law of the animal kingdom. Now, practical life is necessarily dominated by strength, not by affection, since it requires a tedious activity. If loving was enough [...] women would be sovereign. However, above all, it is necessary to act and think, in order to fight against the rigor of our true destiny; therefore, men must command".

³ "In the positivist regime, the social purpose of women is the consequence of their nature".

⁴ "To make sociability prevail over personality".

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inferiore" (Lombroso & Ferrero, 1893, pp. 160 and 172). In Lombroso and Ferrero's view, therefore, the distinctive role of women, i.e. reproduction, justified the apparent inferiority of women, in their opinion, "un antagonismo tra le funzioni di riproduzione e le intellettuali" (Lombroso & Ferrero, 1893, p. 179). The two positivists supported their thesis, above all, with the ideas of the French anthropologist Léonce-Pierre Manouvrier, who worked hard on human brain problems by publishing work on brain convolutions and brain weight in relation to height (Manouvrier, 1884). "Il cervello della donna pesa meno di quello dell'uomo. Secondo Manouvrier il peso del cervello della donna starebbe a quello del maschio come 89,0 a 100" (Lombroso & Ferrero, 1893, p. 31; Manouvrier, 1887). Moreover, back in 1900, the German psychiatrist Paul Julius Moebius, in his essay Sulla deficienza mentale fisiologica della donna (About Women's Physiological Mental Weakness), had supported the thesis, in his view substantiated by many rigorous researches and analysis, that women were intellectually, physiologically and psychologically inferior. In the same vein, Paolo Mantegazza, one of the most prominent Italian positivists in the nineteenth century, who, even rejecting the painful question of superiority and inferiority between the two sexes, had asserted in his Fisiologia della donna (Women's Physiology) that the latter "è imbevuta tutta quanta, dai capelli alle unghie dei piedi di maternità, ed è tanto più perfetta quando è più madre [...]. La maternità è il primo titolo d'onore per la donna, e quanto essa vi rinunzia, scalza dai fondamenti la società umana e cessa di essere donna" (Mantegazza, 1893a, p. 123).8 Mantegazza believed in the Spencerian theory of the human body as a system with a given amount of energy, so if the latter was used for some functions and the most relevant functions for women were those of reproduction, it would not be enough for the others, i.e. the intellectual ones (Mantegazza, 1893b, p. 190). However, he respected the female nature and believed that its partial emancipation should occur through the recognition of greater dignity, precisely because of women's maternal and family function. In his view, the woman had the right to be able to benefit from an education that could help her in her delicate tasks as a wife and mother.

7.3 A Complex Issue

The recognition of women in the late nineteenth century in Italy was still very limited; in 1899, Maria Montessori stated the following at a conference: "La donna [...] è nel campo del cuore, e bisogna salire al cervello, poiché il mondo è ora nel

⁵ "The main inferiority of female intelligence as compared with male intelligence is the lack of creative power [...]. In women, ideas are less clear, paler conscious states [...], such as peripheral sensitivity and morality, so intellectual sensitivity is lower".

⁶ "An antagonism between reproduction and intellectual functions".

⁷ "The female brain weighs less than the male brain. According to Manouvrier, the weight of the female brain would be, as compared with the male brain, 89.0–100".

⁸ "is completely imbued, from hair to toenails, with motherhood, and is even more perfect when she is a mother [...]. Motherhood is the first honorary title for women, and when she renounces it, she undermines human society and ceases to be a woman".

positivismo, e il positivismo non s'intende che col cervello" (Montessori, 1899). The widespread scientific opinions of positivist doctors and scientists were then adopted by law scholars to highlight the legal inferiority of women within society. Thus, for example, the jurist Giuseppe D'Aguanno wrote the following: "Il sistema nervoso della donna pare che si sia più sviluppato nella periferia e nei gangli che presiedono alla vita vegetale e sensitiva e meno sviluppato nei centri che più propriamente presiedono alla vita intellettiva" (D'Aguanno, 1890, p. 454). Another jurist that was also a positivist, Vito Antonio Berardi, said the following:

Nella donna v'ha un organo, un *sacco muscolare piriforme* capovolto, il quale ha una tirannica influenza sul suo organismo e sulle condizioni peculiari del suo stato di essere. Questo è l'*utero*. È detto il secondo cervello della donna; ed infatti nelle condizioni patologiche ed anche nelle fisiologiche esso ha gran parte nelle sensazioni, nei sentimenti e negli atti della donna. *Foemina est id, quod est propter uterum*. E ciò per l'intima relazione di quest'organo con il cervello, con cui ha un doppio legame nervoso, grande simpatico e plesso ipogastrico (Berardi, 1881, p. 9).¹¹

Positivism thus affirmed the search for the scientific-biological foundations that demonstrated the culturally widespread belief of female inferiority. However, as seen before, in many cases, as in the case of Comte, such intellectual inferiority was redeemed in the affective field. Paolo Mantegazza, in Italy, when making a comparison of feeling between the two sexes claimed that for women, people's opinions were enough to set up their undoubted primacy in this field. These opinions were related to feelings about motherhood, sexual love, jealousy, discretion, coquetry, compassion, charity, sacrifice, fear of dangers and religious feelings (Mantegazza, 1893b, pp. 291–292). This view was largely supported by other jurists, such as Giuseppe D'Aguanno, who, as a matter of fact, stated the following:

È nel dolore che la donna dà prova di migliore squisitezza sensitiva. L'uomo è sotto questo rapporto più egoista, più distratto dalle preoccupazioni di fuori; la donna, che ha un culto speciale per gli affetti, concentrandoli in poche persone, sente maggiormente la forza e la varietà del dolore, specie quando gravi sciagure colpiscono le persone a lei più care; e certi tipi di supremo dolore il popolo li ha sempre incarnati in una donna. (D'Aguanno, 1890, pp. 462–463)¹²

⁹"Women [...] are placed in the field of the heart, and they need to rise to the brain, as the world is now positivist, and positivism can only be understood with the brain".

¹⁰ "The female nervous system seems to be more developed in the periphery and in the ganglia that preside over vegetative and psychic life and less developed in the centres that more properly preside over intellectual life".

¹¹ "Women have an organ, a *pivot-shaped muscle pouch*, which has a tyrannical influence on her body and on the peculiar conditions of her state of being. That is the *uterus*. It is called women's second brain; and in fact in the pathological conditions and also in the physiological ones, it deeply influences women's sensations, feelings and actions. *Foemina est id, quod est propter uterum*. And this is all due to the intimate relationship of this organ with the brain, with which it has a double nervous connection, the superior hypogastric sympathetic plexus".

¹² "It is in pain that women show evidence of better sensitivity. From this point of view, men are more selfish, more distracted by external concerns; women, who feel a special reverence for their affection, focusing it on a few people, feel the strength and variety of pain much more, especially when severe misfortunes strike the people they mostly care for; and there are certain kinds of supreme pain that people have always perceived as embodied in a woman".

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But if from the emotional field we move to the intellectual one, still D'Aguanno asserted that the historical and empirical evidence demonstrated their unsuitability. He wrote:

Questo fatto del minore sviluppo delle facoltà intellettive nella donna ci viene attestato dalla storia e dalla esperienza quotidiana. Nelle scienze che esigono il ragionamento, dice il Le Bon, non si cita una sola opera rimarchevole prodotta da una donna, e purtuttavia molte hanno ricevuto un'educazione scientifica completissima (D'Aguanno, 1890, p. 458).¹³

The direct consequence of this fact was women's unsuitability for social life. "La donna che si dà alla vita sociale", D'Aguanno kept on saying, "perde le qualità del suo sesso, e si corrompe facilmente, e una volta corrotta arriva ad eccessi di infamia e di libidine a cui non sono arrivati mai gli uomini" (D'Aguanno, 1890, p. 476). ¹⁴ Thus, in 1904, the jurist and anthropologist Pio Viazzi, in his work *Psicologia dei sessi (Psychology of the Sexes)*, exposed women's:

deficienza del sentimento di giustizia troppe volte appaiato con quella pietà morbosa o quell'altruismo isterico, materiati di menzogna cosciente o incosciente e talora anche di vera e propria e complicata malvagità, onde alla buona fede e alla leggerezza di giudizio degli uomini sono così spesso giuocate le più deplorevoli truffe. (Viazzi, 1904, p. 51)¹⁵

The recognized mental inferiority of women therefore prevented a true sense of justice to be born from them: hence the difficulty that many of these men had to see their insertion into social life. Lombroso and Ferrero supported these theses:

La donna normale ha molti caratteri che l'avvicinano al selvaggio, al fanciullo e quindi al criminale (irosità, vendetta, gelosie, vanità), e altri diametralmente opposti che neutralizzano i primi, ma che le impediscono di avvicinarsi con la sua condotta quanto l'uomo a quell'equilibrio tra diritti e doveri, egoismo e altruismo, che è il termine dell'evoluzione morale (Lombroso & Ferrero, 1893, p. 157). 16

¹³ "This fact of the lesser development of intellectual faculties in women is attested to by history and everyday experience. In the sciences that demand reasoning, says Le Bon, there is no mention of a remarkable work produced by a woman, and many of them have received full scientific education".

 $^{^{14}}$ "The woman who has social life loses the qualities of her sex, and gets easily corrupted, and once corrupted she gets to excesses of infamy and libido to which men have never arrived".

¹⁵ "Lack of a sense of justice, which is too often paired with morbid piety or with hysterical altruism that appear as conscious or unconscious falsehood, and sometimes also as true and complicated wickedness, so that the most deplorable scams are so often dealt with good faith and the superficial judgment of men".

¹⁶ "A normal woman has many characters that keep her close to the brute, to a child, and hence to a criminal (anger, revenge, jealousy, vanity), and others that are diametrically opposed, which neutralize the former ones, but prevent her from approaching as much as men, with her behaviour, to that balance between rights and duties, selfishness and altruism, which represents the completion of moral evolution".

7.4 In Favour of the Emancipation of Women

Contrary to these more or less concordant views about the inferiority of women as compared to men, there were, as mentioned above, other views coming from a positivist environment, which, instead, referred to a sort of equivalence between the two sexes. One of these was the view of Scipio Sighele, a psychologist and criminologist, who was educated at Cesare Lombroso's school but from which he later distanced himself. Since 1898, with the publication La donna nova (The New Woman) (Sighele, 1898), he sought to identify the true female value within modern society. However, it was mainly in 1910, with the publication of Eva Moderna (Modern Eve) (Sighele, 1910) that Sighele consolidated his studies on the subject matter and became convinced of the revolutionary principle of equal rights between the two sexes. He claimed it was based on the theories elaborated by Spencer (1870) and hence on the firm belief in the physiological differences between men and women, as the various functions they performed were different. However, if "infatti la donna è diversa dall'uomo, non per questo gli è inferiore: è diversa da lui, ma a lui equivalente, e di lui egualmente necessaria. Quindi non deve soffrire alcuna diminuzione di diritti" (Sighele, 1910, p. 135);17 very clear and specific words that Sighele said at a time when the female issue represented, as seen previously, an open issue in Italian society as well as in much of the Western world. In 1906, the novel *Una donna* (A Woman) by Sibilla Aleramo (1906), a pseudonym of Marta Felicina Faccio, was published; in which, the writer told her own life from childhood to the difficult decision to leave her husband and especially her son in favour of achieving a free and conscious life and against the coercion and humiliation of the existence that a hypocritical ideology of sacrifice intended to impose on women. The novel immediately aroused great scandal, but Sighele appreciated the work and said the following in this regard:

Questo romanzo, che è senza dubbio fra i migliori usciti da penna femminile in Italia, non è che la storia di un'anima, il diario di una battaglia morale combattuta da una moglie di troppo ingegno contro un ambiente intellettualmente mediocre. Ed è piaciuto appunto per la sincerità e per l'audacia con cui l'autrice aveva messo a nudo un cuore di donna. (Sighele, 1910, p. 73)¹⁸

"La donna", Sighele stated in another essay:

non è né superiore né inferiore all'uomo: è *diversa*. Diversa e imparagonabile ed egualmente necessaria, giacché l'uomo e la donna sono i due atomi che formano la molecola della vita sociale, senza uno dei quali la vita non è. E da questa differenza—profonda psicologicamente

¹⁷ "in fact, women are different from men, which does not mean they are inferior: they are different, but equal, and as necessary as men are. Therefore, they should not go through any reduction of their rights".

¹⁸ "This novel, which is undoubtedly one of the best written by a woman in Italy, is just the story of a soul, a diary of a moral battle fought by a wife that is too intelligent, against an intellectually mediocre environment. And people liked it because of the sincerity and boldness with which the authoress had bared a woman's heart".

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come fisiologicamente—non nasce soltanto quel delirio adorabile che si chiama l'amore, ma scaturiscono altresì limpide tutte le ragioni per cui la donna deve avere diritti non eguali all'uomo, ma equivalenti. Non eguali, perché è diversa; non minori perché non è inferiore; ma equivalenti perché il suo posto nel mondo è per legge di natura all'identica altezza dell'uomo. (Sighele, 1910, p. 199)¹⁹

Somehow, the ideas of the positivist Lodovico Frati had already been in line with Sighele's as, despite his precious studies of Dante's issues (Frati, 1920), he also dealt with female problems in a book titled *La donna italiana secondo i più recenti studi (Italian Women According to the Latest Studies)* in 1899 (Frati, 1899). In this book, the author, in a very detailed way, spoke of the physiology and psychology of women, of their juridical and social condition and of the great number of women who in the course of time had given light to civilization, as ladies of letters, scientists and artists. He resumed theories that had developed around the physiological and psychological faculties of women during and before the positivist age, but while considering the differences between the two sexes, he never spoke of women's inferiority to men. On the contrary, Frati outlined the qualities of women that were largely absent in men, such as the epistolary spirit or the way of doing business:

Dove la donna eguagli o superi l'uomo è nello spirito epistolare; perché la conversazione della donna è spesso più arguta e brillante di quella dell'uomo, e la sua arguzia, si trasfonde anche nelle lettere ch'essa scrive con molta facilità. Anche nel trattare gli affari la donna riesce spesso assai bene, appunto perché è prudente, diffidente, economa; virtù tutte necessarie al maneggio degli affari. (Frati, 1899, p. 12)²⁰

And also: "La donna è il perno della famiglia, come questa lo è della società. Ed ora che nella società la donna occupa un posto tanto importante, dobbiamo far sì che possa in tutto competere con l'uomo" (Frati, 1899, p. 72). The main source of Sighele and Frati's ideas, in addition to Spencer, who was previously mentioned, was John Stuart Mill, who had already published his famous book *The Subjection of Women* (Mill, 1869), in which he had analysed female oppression at his time. In Mill's view, this oppression found its deepest roots in the chauvinistic society and in the heart of every male individual that prevented a woman from developing her personality, by locking her within a house's walls, where her intelligence was sacrificed in repetitive and ancillary tasks which, with the passage of time, were transformed

¹⁹ "Women are neither superior nor inferior to men: they are different. They are different and unparalleled and equally necessary, since men and women are the two atoms that form the molecule of social life, if one of them is missing, there is no life. It is from this difference—which is psychologically as physiologically deep—that not only the adorable delirium called love is born, but also all the reasons why women must not have equal, but equivalent rights to men become very clear. Not equal, because they are different; not less, because they are not inferior; but equivalent, because their place in the world, according to the law of nature, is at the same level as that of men".

²⁰ "Women equal or exceed men in the epistolary spirit; because women's conversation is often wittier and smarter than men's, and their wit is also conveyed in the letters they write with great ease. Even when doing business women often succeed quite well, precisely because they are cautious, distrustful, thrifty; virtues that are all necessary to deal with business".

²¹ "Women are the pivot of the family, and of society. And now that women occupy such an important place in society, we must make it possible for them to compete with men in everything".

into occupations and activities that placed her exclusively at the service of fathers, husbands and children. In the English scholar's opinion, the seriousness of this condition consisted of impossibility for women to emancipate themselves from such masculine power since their education had accustomed them to this kind of life and, moreover, had rendered them incapable of carrying out any form of rebellion.

7.5 Anti-Emancipation Positivism

Stuart Mill's ideas, however having had great repercussions in the European culture of his time and beyond, failed to make themselves respected within the positivist universe between the nineteenth and twentieth centuries, especially in Italy, so as seen previously, the female figure was often considered inferior to the male figure. On this cultural scenario, the laws of nature established those limits that civil laws could not overcome. It was in this perspective that Enrico Ferri's ideas were introduced, and he noted that the main function for which the whole woman's existence was intended was, namely, motherhood and then that limited the other functions. Thus, in 1913, for example, in the preface to the book by Benedetto Fera, *La donna e la sua imputabilità in rapporto alla fisiologia e patologia del suo apparato genitale (Women and Their Imputability in Relation to the Physiology and Pathology of Their Reproductive System)*, he stated the following, among other things:

Ond'è che per la maternità, che esige dalla donna, non l'attimo fuggente di voluttà che dà l'uomo, ma il sacrificio organico e psichico della gravidanza, del parto, del puerperio, dell'allattamento, si spiega come la donna resti nel suo sviluppo personale tra il fanciullo e l'uomo adulto, pure avendo sull'uomo talune superiorità, specialmente psichiche, come lo spirito di sacrificio e l'altruismo, che sono ancora e sempre un riflesso della maternità. (Ferri, 1913, pp. 3–4)²²

Back in 1932, the jurist Giulio Andrea Belloni, who was Enrico Ferri's disciple, in a letter addressed to the positivist Arcangelo Ghisleri, said the following about the intellectual abilities of women: "Positivista, antiromantico, so quel che si può ragionevolmente cercare da una donna: un uomo di pensiero che voglia veramente una donna, non un mostro in gonnella accanto a sé, non deve pretendere che la donna lo segua nel suo pensiero" (Belloni, 1932²³; Berardi, 2015). And again in 1936, in a response note also addressed to Ghisleri, Belloni claimed that he did not know the doctor and writer Augusta Del Vecchio Veneziani, greatly praised by the

²² "In motherhood, which does not require the fleeting moment of pleasure that men give from women, but the physical and psychological sacrifice of pregnancy, childbirth, puerperium and breastfeeding it is explained why women get stuck in their personal development between the child and the adult man, even though they are somehow superior to men, especially from the psychological point of view, like the spirit of sacrifice and altruism, which are still and always a reflection of motherhood".

²³ "Positivist, anti-romantic, I know what one can reasonably look for in a woman: a man of thoughts who truly wants a woman, not a monster in her skirt by his side, should not expect the woman to follow him in his ideas".

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person he was speaking to, and asserted: "È interessante il suo interessamento [l'interessamento di Ghisleri verso la signora Veneziani], malgrado l'assegnamento che si può fare sul cervello di una donna in fatto di produzione filosofica" (Belloni, 1936).²⁴ Even so, in the late 1930s, positivist positions had a certain reticence towards the intellectual abilities of women. The Mazzinian view of the female figure compared to music and intended to promote the development of humanity seemed so far away. "La musica, come la donna", Mazzini wrote, "è così santa d'avvenire e di purificazione, che gli uomini, anche solcandola di prostituzione, non possono cancellar tutta intera l'iride di promessa che la incorona [...]. Forse alle donne e alla musica spetta, nel futuro più ampio ministero di risurrezione ch'altri non pensa" (Mazzini, 1967, pp. 288–289).²⁵ The positivist culture, which had taken the principles of naturalistic ideology as their own, in many cases ended up relegating women to lower ranks, though, as seen, it redeemed them for their already mentioned main function, motherhood. On this line, there were also the ideas of the well-known Lombroso's follower Benedetto Fera:

Confinata tra le cure casalinghe e le funzioni materne, ripetendo la figliola gli identici atti della madre per una serie incomputabile di secoli, mentre l'uomo rivolgendo la sua attività a diversi orizzonti si portava a contatto di stimoli sempre nuovi e sconosciuti, perfezionandosi di generazione in generazione, si venne ognora più accentuando quella differenza, che già esistente in natura doveva poi distinguere e dividere con un taglio profondo e nettissimo i due elementi della coppia umana. Rimane così deficiente il potere creativo come effetto di una minore differenziazione nelle funzioni del cervello, e da cui deriva pure mancanza di originalità e monotonia. (Fera, 1913, p. 14)²⁶

At the beginning of the twentieth century, the positivist Pasquale Serafini, in a socio-economic work, continued to recall the ancient Lombroso's beliefs regarding the smaller dimensions of the female brain as compared to the male brain: "le dottrine [...] dicono chiaramente come non solo la donna abbia cranio e cervello più piccolo quando il suo corpo è più piccolo di quello dell'altro sesso, ma li ha anche tali a parità di altezza e di peso" (Serafini, 1900, p. 23). Having made such an essential premise, the author also stated, at the end of his work, that "la natura della donna vuole che essa lavori nelle faccende domestiche, alla quale appunto la chiamano non solo la sua

²⁴ "Your concern [Ghisleri's concern about Ms. Veneziani] is interesting, despite the assertion that can be made on a woman's brain regarding philosophical production".

²⁵ "Music, like women is so holy in its prospects and purification, that men, even when involving it with prostitution, cannot completely erase the rainbow of promise that crowns it [...]. Perhaps women and music are meant for the broader resurrection ministry in the future that others cannot even think of".

²⁶ "Confined between home-care and maternal care, a daughter repeats her mother's actions for an incomprehensible series of centuries, while the man, by pushing his business to different horizons, got to be in contact with new and unknown stimuli, which improved from generation to generation, emphasizing that difference, which already exists in nature, even more, then distinguishing and dividing the two elements of the human couple with a deep and extraordinary cut. Creative power remains defective as the result of a lesser differentiation in brain functions, which also leads to lack of originality and monotony".

²⁷ "The doctrines [...] clearly say a woman not only has a smaller cranium and brain when her body is smaller than that of the other sex, but also when her height and weight are the same".

struttura e la sua autonomia, ma anche i precedenti storici e letterari" (Serafini, 1900, p. 151). As Comte had said: "C'est ainsi que, dans toutes les sociétés humaines, la vie publiques appartient aux hommes, et l'existence des femmes est essentiellement domestique. Loin d'effacer cette diversité naturelle, la civilisation la développe sans cesse, en la perfectionnant" (Comte, 1880, p. 211). Comte's firm belief became, as seen before, the dominant belief in the positivist world, at least in Italy. And this firm belief made a way of thinking that was established in the collective mentality theoretically clear, one that regarded women as an *unnatural* being, so much so that, as the positivist educationalist Aristide Gabelli wrote in 1870:

una donna con un libro in mano nella fantasia di non pochi, non è più una donna, o almeno è una donna che lascia di fare quello che dovrebbe, per attendere invece a quello che non dovrebbe, e rende la stessa immagine di un uomo che dipanasse una matassa di refe, filasse lino o facesse calze. (Gabelli, 1870, p. 152)³⁰

And again in 1910, Scipio Sighele, who has been already mentioned, argued with great sorrow that:

il concetto di educare la donna [...] per renderla intellettualmente e moralmente migliore è [...] un concetto relativamente nuovo [...]. Ancora pochi anni fa il numero dei maschi nelle scuole primarie era dovunque assai maggiore di quello delle fanciulle: ora tendono ad equilibrarsi, e in alcuni Stati, in Francia per esempio e in Baviera, il numero delle femmine supera quello dei maschi. (Sighele, 1910, pp. 171-172)³¹

7.6 A Balance Between Lights and Shadows

It may be seen from the above that positivism and, in particular, Italian positivism "naturalizzò la posizione della donna nella sua diversità rispetto all'uomo, con l'attribuzione di una grande, anzi grandiosa missione nell'ambito designato e una decisa avversione rispetto alle deviazioni da quell'ambito, considerate in qualche misura incongruenti e improprie se non degenerative" (Toscano, 2011, p. 115).³²

²⁸ "The nature of women wants them to work on household chores, to which not only her structure and her autonomy appeal, but also the historical and literary precedents".

²⁹ "In this way, in all societies, public life belongs to men, while women are bound to home life. Without meaning to diminish this natural difference, progress increasingly develops and implements it".

³⁰ "A woman with a book, in the imagination of many people, is no longer a woman, or at least she is a woman who no longer does what she ought to, and instead, carries out what she should not, and conveys the same image that a man who winds up a ball of yarn, spins the linen or makes socks would convey".

³¹ "The concept of educating women [...] to make them intellectually and morally better is [...] a relatively new concept [...]. Even a few years ago, the number of men in primary schools was by far higher than that of girls; now they tend to be even, and in some States, for example in France and in Bayaria, the number of women exceeds the number of men".

³² "naturalized the position of women in their differences from men, with the attribution of a great, grand mission in the assigned scope, and a determined aversion to deviations from that field, considered inconsistent and improper to some extent, and degenerative".

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From that point of view, then, intellectual inferiority, the main characteristic of the positivist conception of women, was not derived, as the feminist Anna Kuliscioff stated, from thousands of years of submission to men, and therefore, it was not cultural but biological (Kuliscioff, 1890). Lombroso and Ferrero strongly supported that idea, deeply convinced that the female genius was almost a man. "Le donne di genio presentano frequentemente caratteri maschili, onde il genio potrebbe spiegarsi nella donna come Darwin spiegò lo scolorimento delle femmine eguale al maschio in certe specie d'uccelli, per una confusione di caratteri sessuali secondari prodotti da incroci dell'eredità paterna e materna" (Lombroso & Ferrero, 1893, p. 161).³³ Still, in Italy, between the nineteenth and the twentieth century, the position of woman within society, especially the Italian society, lays in a scenario of lights and shadows. After the Risorgimento process that saw the active participation of many women, with the advent of the union, the memory of their actions faded, and, as Eugenio Garin (1962) argued, the male side unanimously looked down on women and on the I National Congress of Italian Women held in Rome in 1908: "Il Congresso Romano del 1908 fu, in molte relazioni angusto; con le sue nobildonne e la sua misura, dà l'impressione di una battuta d'arresto" (Garin, 1962, p. 40).34 In the same way, Simonetta Soldani (1989), who wrote L'educazione delle donne: Scuole e modelli di vita femminile nell'Italia dell'Ottocento, stated the following: "[...] sul finire del secolo e all'inizio del nuovo il clima generale non era propizio nemmeno alle battaglie femministe—anche perché—si ricorreva all'autorità degli zoologi, dei fisiologi, degli antropologi per giustificare la naturale inferiorità della donna rispetto all'uomo" (Soldani, 1989, pp. 489 and 470).³⁵

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³³ "Brilliant women often have male characters, their female genius could be explained the way Darwin explained the discolouring of females and males in certain bird species, due to a confusion between secondary sexual characteristics produced by crosses between paternal and maternal heritage".

³⁴ "The 1908 Roman Congress was cramped; with its noble women and its size, it gives the impression of a setback".

³⁵ "[...] at the end of the century and at the beginning of the new century, the general atmosphere was not even propitious to feminist battles also because the authority of zoologists, physiologists, and anthropologists was used to justify the natural inferiority of women".

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Chapter 8 The Role of Women in the View of Gian Domenico Romagnosi and Giuseppe Ferrari

Matteo Antonio Napolitano

Abstract This research aims to analyze and contextualize the role of the female figure in the thought and in the main written works by Giandomenico Romagnosi and Giuseppe Ferrari, paying particular attention to the critical remarks and the practical aspects highlighted by the authors. From the objections raised to Elvezio by Romagnosi at the Società Letteraria of Piacenza [Literary Society of Piacenza] collected in a speech, which was held on June 23, 1789 (22, according to De Giorgi), and entitled Sull'amore delle donne considerato come motore precipuo della Legislazione [On Women's Love, Considered to Be the Key Driver of Legislation] to the role of women within the family analyzed by Ferrari in Filosofia della rivoluzione [Philosophy of the Revolution], the themes of the two authors gather the spirit of their time, bringing to light some very interesting aspects of the debate. The research addresses the issue from a critical point of view, taking as a basis some of the major works of Romagnosi and Ferrari and the main literature on the subject. Far from being exhaustive, the analysis intends to extend the reflection on some specific features of the thought of Romagnosi and Ferrari, highlighting, in particular, the vitality and some of the most important contents of the debate on the points considered.

Keywords Gian Domenico Romagnosi • Giuseppe Ferrari • Women • Family • Legislation

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8.1 Romagnosi and Ferrari: The Relationship, the Cultural Context, and the Role of Women in the Public and the Private Sector

Considering the figure of women from Gian Domenico Romagnosi and Giuseppe Ferrari's point of view means, firstly, going deep into a cultural context that was rich in various and interesting reflections—particularly in Italy, in the late 1700s and in the first half of the 1800s—and, secondly, having the opportunity to compare both the public dimension of the female universe, present in Romagnosi's dissertation, and its private, familiar sphere, mainly linked to Ferrari's works and ideas. Without being exhaustive, this study is therefore intended to take into account only these authors' reflections concerning the role of women without addressing—for obvious reasons of space and content richness—other aspects of their important bibliographic production.

Upon analyzing and contextualizing the observations of these two authors, it is necessary to consider the link between the teacher—in this particular case, Gian Domenico Romagnosi—and his "più eterodosso [most heterodox]" (Schiattone, 1996, p. 9) student, Giuseppe Ferrari. Gian Domenico Romagnosi was, in the Milanese cultural environment of the early nineteenth century, a role model and a very prestigious guide that educated many young people who, while following different guidelines—let us consider, for example, among all possible options, the different life and educational backgrounds of Ferrari and Carlo Cattaneo—found his teachings to be a gateway to writing the history of our Risorgimento and, in any case, to leaving important traces in the Italian cultural tradition.

Even though, as Carlo Cattaneo recalled—and somehow stated—in a moving depiction dated October 1851 and titled *Chi era Giuseppe Ferrari* [Who was Giuseppe Ferrari]:

Ferrari studiò leggi a Pavia dal 1828 al 1832, o in quel torno; e perciò è falso che studiasse sotto Romagnosi, la cui scuola di diritto in Milano era stata chiusa fin dall'estate del 1821, quando Ferrari era poco più che fanciullo [...] [Ferrari studied law in Pavia from 1828 to 1832, or around that time; and, therefore, it is not true that he studied with Romagnosi, whose law school in Milan had been closed since the summer of 1821, when Ferrari was almost a teenager]. (Cattaneo, 1965, p. 360)

It is possible to agree with what was observed by Ernesto Sestan, namely, that Ferrari:

Si disse discepolo di Romagnosi, ma più che altro in senso ideale, e in ogni caso—come ricordato nella nota bio-bibliografica dell'antologia curata dallo stesso Sestan e intitolata Opere di Giandomenico Romagnosi, Carlo Cattaneo, Giuseppe Ferrari [Works by Giandomenico Romagnosi, Carlo Cattaneo, and Giuseppe Ferrari]—non certo del Romagnosi giurista, ché egli rimase lontano dagli studi giuridici e dalla pratica del foro, tutto applicandosi fin dai giovani anni all'amore della sua vita, la filosofia [He said he was Romagnosi's disciple, but mainly from an ideal point of view, and in any case—as recalled in the biographical-bibliographical note of the anthology curated by Sestan, entitled Giandomenico Romagnosi, Carlo Cattaneo, and Giuseppe Ferrari's Works—, which was not about Romagnosi the lawyer, as he stayed away from legal studies and forum practice, committing himself, since he was young, to the love of his life, philosophy]. (Sestan, 1957, p. LV)

The philosophical studies were precisely the guiding principle in the relationship between the great intellectual from Salsomaggiore and the young man from Milan; indeed, Romagnosi's school substantially enlivened Ferrari's youth, contributing to improving the knowledge he gained with university studies and adding it to an environment that was culturally vibrant, where, in spite of the fact that Romagnosi was censored by the authorities, the major issues present in the public debate of the time were discussed.

It is no coincidence that Ferrari's first interest in Saint-Simon came from an article published by Romagnosi in *«Biblioteca italiana [Italian Library]»* in July, 1832, reprinted in the *«Annali Universali [Universal Annals]»* a few months later and then, in October–November, also in 1832, in the *«Annali di statistica [Statistics Annals]»* (Schiattone, 1996, p. 6). Romagnosi's contribution ended with a firm criticism of Saint-Simon's doctrines, which was seen as a religion and—as a result of the desired elimination of private property, inheritance, and the family—as enemies of the civilized development of peoples. Even though—particularly at the time he spent on French soil—Ferrari always looked at Saint-Simon's thesis, at the comparison between the latter and at the pragmatic approach inspired by the Enlightenment, with a critical eye, the approach intended to the constant comparison between the doctrine and the political-social reality about which Romagnosi spoke up in 1832 deeply marked his ideas.

However, the influence of Romagnosi's school was not limited to the first encounter with Saint-Simon; indeed, at this stage of his education, the young Milanese had the opportunity, on the one hand, to experience the intense cultural dissemination activity whose power came from the pages of the journals published under the auspices of the Guide from Salsomaggiore¹ and, on the other hand, to get in touch with other philosophers from different schools—an example of that was Ballanche—and with Vico's ideas, in a meeting that would be particularly productive. The Saint-Simon/Vico combination influenced the double characterization of his theoretical elaboration, well outlined by Ugo Dotti (1985) in a text titled *I dissidenti del Risorgimento. Cattaneo, Ferrari, Pisacane* [The dissidents of the Risorgimento. Cattaneo, Ferrari, Pisacane]:

da un lato—scrive Dotti su Ferrari -, tendeva a scoprire nella storia l'esistenza di una legge razionale ed eterna, che governi lo sviluppo progressivo della società riconducendo a unità le più disparate vicende dell'uomo; dall'altro non era insensibile all'influenza del sansimonismo francese, per il quale il progresso si realizzerebbe dietro la spinta degli interessi e dei bisogni delle masse [On the one hand—Dotti writes about Ferrari -, he tended to discover in history the existence of a rational and eternal law that governed the progressive development of society, by getting together the most diverse human affairs; on the other hand, he was not insensitive to the influence of Saint-Simon, the French, who thought that progress would be achieved due to the drive of the interests and needs of the masses]. (Dotti, 1985, p. 63)

¹As Schiattone recalled, it was especially in activities related to cultural diffusion that Romagnosi's scholars made themselves known and gave their best. Magazines such as the *Conciliatore [Conciliator]*, the *Annali Universali di Statistica [Universal Annals of Statistics]*, and the *Il Nuovo Ricoglitore [The New Binder]*—which in 1834 became *Il Ricoglitore Italiano e Straniero [The Italian and Foreign Binder]* and subsequently, at the instigation of the students, *Rivista Europea [European Magazine]*—became the ideal place to plan the debate on the issues to be discussed (Schiattone, 1996, p. 8).

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For the purposes of this research, besides the central and evident importance of this relationship, at least two other fundamental aspects will be considered: the first one is concerning the chronological setting of the observations to be analyzed; the second one—as a consequence of the first one—is inherent in the cultural references of the two authors being considered.

As far as Romagnosi is concerned, a text published in Trento in 1792² and aimed at highlighting the public dimension of female love in a very precise way will be taken into account. It is titled *Discorso sull'amore delle donne considerato come motore precipuo della legislazione* [Speech on Women's Love, Considered to Be the Key Driver of Legislation] (Romagnosi, 1792), and it was read at the Literary Society of Piacenza in the public session held on June 23, 1789. This date, mentioned in the publication, slightly preceded the events of July in France and was different from the date reported by Alessandro De Giorgi in 1842 who, in the Cenni sulla vita di G.D. Romagnosi [Notes on G.D. Romagnosi's Life] used as an introduction to the Opere filosofiche edite ed inedited [Edited and Unpublished Philosophical Works], backdated the Discorso [Speech] to June 22:

[...] A' 22 giugno 1789 lesse [Romagnosi] alla Società letteraria di Piacenza il *Discorso sull'amor delle donne*, nel quale confuta Elvezio che vuol farne un movente precipuo della Legislazione [On June 22, 1789, he [Romagnosi] read the *Speech on Women's Love* at the Literary Society of Piacenza, in which he refutes Elvezio, who wanted to turn it into a major motive of Legislation]. (De Giorgi, 1842, p. VI)

As Robertino Ghiringhelli explained, Romagnosi's intervention has to be placed in an environment—that of the Duchy of Parma, Piacenza, and Guastalla, the scenario in which the jurist from Emilia spent the first 30 years of his life (1761–1791)—which represented a peculiar hub of enlightenment culture in the Italian scenario of the 1700s (Ghiringhelli, 1988, p. 1). For this reason, therefore:

lo studio della prima produzione letteraria del Romagnosi—in particolar modo degli scritti giovanili, caratterizzati da una forte tensione a conciliare idee e fatti—fornisce [...] una serie di motivazioni e di interpretazioni che vanno al di là della pur importante ricostruzione della formazione del pensiero politico e sociale di una delle più alte figure dell'Italia del primo Ottocento [...], per documentare più in generale come circolassero e come venissero interpretate e raffigurate le idee illuministiche in un ambiente, tutto sommato, ormai defilato e secondario nel panorama culturale europeo come quello della Piacenza di fine Settecento [The study of Romagnosi's first literary production—in particular of his writings during his youth, characterized by a strong tension to reconcile ideas and facts—provides [...] a series of reasons and interpretations that go beyond the important reconstruction of the creation of the political and social ideas of one of the leading figures of Italy in the early nineteenth century [...], in order to document how enlightenment ideas circulated and how they were interpreted and depicted more generally, in an environment that, after all, has now taken a back seat and a secondary position in the European cultural landscape, such as that of Piacenza at the end of the eighteenth century]. (Ghiringhelli, 1988, p. 160)

In order to see the *Discorso* [Speech] by Gian Domenico Romagnosi in a wider context, the Enlightenment's cultural impulse encouraged by this man from Piacenza was crucial, that is to say, that context which was clearly and brilliantly set out by

²Romagnosi left Piacenza and went to Trento in 1791, the year he was appointed praetor, i.e., the Supreme Civil Authority of the City of Trento.

Franco Venturi (Giarrizzo, Torcellan, Venturi, 1965) in his writings on *Settecento riformatore* [*Eighteenth-Century Reformer*] in which:

ritroviamo [...], sia pure in forme differenti e con diversa intensità, il rapporto e contrasto tra la circolazione, la diffusione delle idee illuministiche, che là fu larghissima, e la loro effettiva capacità di penetrare nell'intimo delle cose e degli uomini [we find [...], albeit in different ways and with different intensity, the relationship and contrast between the circulation, the dissemination of Enlightenment ideas, which was very wide there, and their effective capacity to penetrate into the intimacy of things and men]. (Giarrizzo, Torcellan, Venturi, 1965, p. XX)

For the *Filosofia della rivoluzione* [*Philosophy of the Revolution*] (Ferrari, 1970)—published in 1851, about 60 years after Romagnosi's writings were published—by Giuseppe Ferrari, the French context of the Paris Revolution in February, 1848, in which the philosopher from Milan played a very small role, and all that universe of influential periodicals (such as the *«Revue des Deux Mondes»* and the *«Journal des Savants»*) and trendy cultural circles to which Ferrari was admitted during his voluntary exile in France, in the mid-nineteenth century, will be taken into account. It was at this stage, in fact just on the eve of the events of 1848 (Ferrari, 1852; Bertini, 2007), in which the philosopher from Milan became convinced that the reference to the glorious events in France, in 1789—in particular as a lever to provide the Italian process of Risorgimento with a revolutionary (Buchignani, 2017) and not a reformist character³—had to become more and more concrete, in opposition to the collusion between aristocracy and moderate bourgeoisie and, in more general terms, as a basis for consciously founding the ideological distinction between moderatism and democracy (Dotti, 1985, p. 66).

On the pages of Ferrari's works, one of the most renowned pieces throughout his production is a chapter (the thirteenth)—specifically included within the third section, titled *La rivelazione morale* [*The Moral Revelation*], of the Part Two—devoted to family, in which, besides a series of other issues, the role of women, this time and unlike Romagnosi's *Discorso* [*Speech*], will be considered from a private perspective.

8.2 The Woman in Romagnosi's Discorso [Speech] and in Ferrari's Filosofia Della Rivoluzione [Philosophy of the Revolution]

8.2.1 Romagnosi's Discorso [Speech]

After introducing the general topic for discussion, in this second part, the contents of Romagnosi's *Discorso* [Speech] and Ferrari's Filosofia della rivoluzione [Philosophy of the Revolution] will be specifically analyzed for the purposes of this study.

³ Paolo Buchignani's recent analysis (2017) of the "dream" of the revolution and its presence in Italian political culture is very interesting and particularly substantive.

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As highlighted by Robertino Ghiringhelli:

Quantunque cronologicamente posteriore al Discorso sullo stato politico, il Discorso sull'amore delle donne considerato come motore precipuo della legislazione [Speech on Women's Love, Considered to Be the Key Driver of Legislation] è da ritenersi come il primo organico scritto romagnosiano presentato in pubblico. [...] Il Romagnosi disquisisce qui [...], in pubblico ed alla presenza di "sagge e moderate ascoltatrici" [...] su di un argomento meno specialistico e meno pericoloso dei problemi direttamente attinenti alla "politica legislazione" quale è quello dell'amore delle donne inteso come elemento capace di stimolare l'attività legislativa [Though chronologically subsequent to the Speech on the Political State, the Speech on women's love, Considered to Be the Key Driver of Legislation should be regarded as the first of Romagnosi's published comprehensive written plan. [...] Romagnosi here discourses [...], in public and in the presence of "wise and moderate listeners" [...], and on a less specialised and less dangerous topic, on the problems directly related to "legislation policies" which is that of women's love as an element that is capable of stimulating legislative activity]. (Ghiringhelli, 1988, p. 160)

The *Discorso* [*Speech*] fully reflects Romagnosi's attention to the problem of the link between ideas, civil society, and public opinion, i.e., between doctrines and their dissemination and application to social reality, and the interpretative role of the philosopher. It will be the first piece of what shall become the pragmatic end of the doctrine of civilized development in the mature years: the construction of a philosophy for the civil society (Albertoni, 1979; Ghiringhelli, 1988, p. XXIII).

As highlighted by Luigi Bulferetti in the *Prefazione* [*Preface*] to Ghiringhelli's book:

Riprendendo il discorso di Helvétius sul piacere dell'amore tra uomo e donna come il più vivo e quindi il più potente nella società, il Romagnosi [...] non si ferma a un paradosso in sé fors'anche più vivace di quello dell'"utile" affiorante anch'esso, più meditatamente, dal sistema psicologico del "piacere e del dolore", e analizza le scaturigini molteplici, e tutte importanti, della legislazione [Resuming Helvétius's speech on the pleasure of love between a man and a woman as the most intense and, therefore, the most powerful one in society, Romagnosi [...] does not stop at a paradox that is perhaps even more lively than that of "what is useful", which also emerges, having been better worked-out, from the psychological system of "pleasure and pain", and he analyzes the multiple issues derived from legislation, all of which are important]. (Bulferetti in Ghiringhelli, 1988, p. XI)

These principles were about the power of religion, the system of government, the geo-climatic environment, and the spread of education in the social context; however, giving them a meaning to modify or produce the character of every "animale politico [political animal]" would imply, with a scientific parallelism that even Romagnosi used—not casually, given the interests and competences in the field of the intellectual from Salsomaggiore—wanting to bring everything back to magnetism (Romagnosi, 1802). In practical terms, based on the method and the process for mathematical argumentation, developed especially in statistical studies and analyses of state administration and of well-being, only a complex calculation could have reflected the actual role of women's love on legislation, a calculation that had to take all elements into account—religion, government system, geo-climatic environment, etc.—and the interaction between them. It was an arduous calculation, considering the malleability of love and passions in general.

Romagnosi first specified the aim on which his argument was based; in fact, in the introductory part of the *Discorso* [Speech], he described the broad outlines of his "disegno [plan]" in order to refute Helvétius's theory, in any case, praised as "uno de' più bei Genj, e celebri Scrittori di questo Secolo [one of the most beautiful geniuses, and famous writers of this century]" (Romagnosi, 1792, p. 4):

Mio disegno è appunto nell'odierno Ragionamento [...] dimostrarvi [...] in primo luogo la di lui inconciliabile indole colla forma de' costumi e de' governi nostri. In secondo luogo ch'egli leggesi d'ogni argomento dimostrante totalmente sfornito; e per ultimo, che egli racchiude, ardisco fin dire, un'assurdità sterminata in ogni sistema di politico governamento [...] [My plan is, first of all, in today's Argument [...], to show you [...] his nature, that was irreconcilable with our customs and forms of government. Secondly, he read every demonstrating argument that was truly poor; and lastly, he enshrines, I dare to say, an exaggerated absurdity in every political governing system]. (Romagnosi, 1792, p. 5)

Although Romagnosi's argument proved to be very strong, especially with reference to quoting Latin and Greek classics, ancient history, and the philosophical and legal culture of the time, in fact—as Ghiringhelli pointed out—even though "menzionando direttamente fra i contemporanei solo Helvétius e Filangieri, il Romagnosi usa concetti e termini, chiaramente legati ad altri due pensatori allora molto noti e 'alla moda': Montesquieu e Schmidt d'Avenstein [...] [directly mentioning, among his contemporaries, only Helvétius and Filangieri, Romagnosi uses concepts and terms that are clearly linked to two other well-known and 'fashionable' thinkers: Montesquieu and Schmidt d'Avenstein]" (Ghiringhelli, 1988, p. 167). All of these remarks were useful for the intellectual from Emilia to give content and form to the attempt to reconcile the high Italian legal-political tradition—from this point of view, the reference to Filangieri's Scienza della Legislazione [Science of Legislation] (1780–85, 1791; Ghiringhelli, 1988, p. 171; Pecora, 2007)—with novelties from foreign literature. In any case, despite the great amount of references and mastery demonstrated by Romagnosi, the influence of Schmidt d'Avenstein was particularly interesting. Ferrari (1835, p. 10) even said that in the Discorso [Speech], Romagnosi merely quoted faithfully the ideas already expressed by the Swiss philosopher and indeed:

Una comparazione attenta del testo di *De l'Amour*⁴ con quello del romagnosiano *Sull'amore* delle donne porta a rinvenire a più riprese la presenza diretta del saggio dello Schmidt, peraltro mai citato dal Romagnosi [A thorough comparison of the text *De l'Amour* with Romagnosi's *On Women's Love*, makes it possible to find again the direct presence of Schmidt's essay, never mentioned by Romagnosi]. (Ghiringhelli, 1988, p. 169)

⁴According to Ghiringhelli, the work that would have influenced Romagnosi must have been an anonymous essay, published in 1776, misleadingly indicating London—also quoted by Ferrari (1835, 1, p. 10)—titled *De l'amour et de la jalousie* and included in the collection *Essais sur les philosophes avec des dissertations sur l'Amour, la Jalousie, les Projets, l'Agriculture, le Luxe et le Commerce* (Ghiringhelli, 1988, p. 168). As Ghiringhelli noted, the first edition of the *Essais* appeared in 1760, without any indication regarding the publisher or the place of publication. The title was also different: *Essais sur divers sujects intéressans de politique et de morale* (Ghiringhelli, 1988, no. 33, p. 168).

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In fact, however, despite the presence of a strong content-based recovery, the main motives of the two dissertations and the conclusions remained different. In particular, especially as far as the conclusions are concerned:

[...] il filosofo svizzero, sia pure velatamente, tende a dimostrare che per giungere ad avere in società la più naturale e semplice forma d'amore occorre, vista la stretta correlazione fra legislazione e sentimenti, che la forma di governo della società sia repubblicana. Il Romagnosi invece non si addentra in temi, in quei momenti, spigolosi e assai pericolosi quali la scelta della miglior forma di governo [the Swiss philosopher, albeit vaguely, tends to show that in order to achieve the most natural and simple form of love in society, given the close correlation between legislation and feelings, the form of government of society should be republican. On the other hand, Romagnosi does not go deep into issues that, in those days, were sharp and very dangerous, such as the choice of the best form of government]. (Ghiringhelli, 1988, pp. 169–170)

Romagnosi's *Discorso* [Speech], in addition to proving the arguing skills of the young jurist from Emilia, provided an initial trace in which there was "delineata quella tendenza a collegare concetti ed opinioni correnti nel vivere civile [...] con i principi morali e politici a cui si richiamano e che, nel contempo, sono influenzati dalle "concrete circostanze" della vita "di ogni politico Individuo" [an outlined tendency to link current concepts and opinions on civilian living [...] with the moral and political principles they refer to and which, at the same time, are influenced by the "specific circumstances" of "every single politician's" life]" (Ghiringhelli, 1988, p. 173), and it opened the way to what was courageously and confidently desired—with a direct reference to the *Discorso* [Speech] in a note—in the *Prefazione* [Preface] to the work of Laure Junot Abrantès (1838):

Non è lontano il momento in cui i legislatori⁵ si occuperanno seriamente della educazione che debbe avere la donna, delle leggi civili che le proteggano, dei doveri che vogliono esser loro imposti, della felicità che può ad esse assicurarsi. Guai se giungessimo a rendere la donna frivola o inutile! quanti importantissimi vantaggi non andrebbero smarriti per la morale e felicità d'una nazione! [Within a short time, legislators will seriously deal with the education women have to receive, with the civil laws that may protect them, with the duties they want to be imposed upon, with the happiness they can be assured. If we ended up regarding women as frivolous or useless, we would be in trouble! How many important benefits in favour of the morale and happiness of a nation would be lost!] (Junot Abrantès, 1838, p. 6)

8.2.2 The Woman in Ferrari's Filosofia della Rivoluzione [Philosophy of the Revolution].

Ferrari's contribution, compared to Romagnosi's argument, is based on different assumptions, which are aimed at analyzing women's role within a family. The first part of the chapter previously mentioned is dedicated to family—considered in biological-naturalistic terms and supported by the moral inspiration that is directly

⁵In the *Prefazione* [*Preface*], there is the reference number in the word "legislatori [legislators]" for the note in which the direct reference to Romagnosi's *Discorso* [*Speech*] is.

derived from nature (Schiattone, 1996, p. 109) which "rivela l'accoppiamento dell'uomo alla donna, la formazione della famiglia, trascina al lavoro per l'esistenza dei bisogni che non possono venire soppressi [reveals the mating between a man and a woman, family formation, which drags you to work due to the existence of needs that cannot be suppressed]" (Rota Ghibaudi, 1969, p. 218)—and it emphasizes the limits of what the philosopher from Milan called the "famiglia metafisica [metaphysical family]," i.e., that abstract construction, translated into formulas that were controlled, insensitive, and embellished "con isquisitezze e sentimenti raccozzati a caso [with random delicacy and feelings]" (Ferrari, 1970, p. 349):

In astratto non v'ha legge; l'uomo astratto, la donna astratta, non esistono; ditemi dove vivete, qual'è la vostra patria, quale il sistema sociale a cui appartenete; ditemi qual'è l'idea che avete dell'uomo, e allora vi dirò come dovrà vivere nella famiglia ed essere rispettato nella triplice sua forma di padre, di madre e di figlio.

Noi rispettiamo l'umanità, dovunque appare la forma dell'uomo; questo è il nostro principio, ed esso ritraendoci dalle aberrazioni della metafisica, ci rivela l'ideale della famiglia [There is no law in the abstract; the abstract man, the abstract woman do not exist; tell me where you live, what your homeland is, what social system you belong to; tell me what your idea of man is, and then I will tell you how that person will have to live in a family and be respected in the threefold figure of father, mother, and son.

We respect mankind wherever a man's figure comes from; this is our principle, and by staying away from the aberrations of metaphysics, the ideal family is revealed]. (Ferrari, 1970, p. 349)

From these words, the root needed to provide solid foundations for family formation emerged—that is to say, the reconciliation between ideas, interests, and duties, the latter seen as "una sollecitazione altruistica che nessuna filosofia, nessuna metafisica, nessuna legge potrà mai codificare [an altruistic request that no philosophy, no metaphysics, no law will ever be able to codify]" (Schiattone, 1996, p. 109)—and also the rational foundation of Ferrari's philosophy that, in this perspective, considered the role of women: far from polyandry that consists of the man being dominated by the woman; equal to her spouse (this is where, in Ferrari's view, the foundation for the obligation of fidelity comes from); free to file for divorce; and not subject to her husband, even though the role of the head of the family was meant for the man, "non per costituirlo padrone, ma per avere un delegato responsabile della famiglia dinanzi alla comunanza che non può assorbirla [not to make him the master of the house, but to have a delegate that is responsible for the family before the community that cannot take care of it]" (Ferrari, 1970, p. 350).

Following these considerations, at the end of the brief chapter, Ferrari formalized and synthesized a tough attack on Christianity—a reference that was actually present throughout the main text of the chapter—considered to be in conflict with the authority of the state; in Ferrari's opinion, the Christian model was "più tirannico sulla famiglia, che non lo Stato di Sparta [more tyrannical about the family than the State of Sparta]" (Ferrari, 1970, p. 351). In this regard, children's education in general also had to be free from religious grounds at all costs and had to be public and free, "piuttosto tecnico-professionale; e ciò evidentemente per avviare al lavoro

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le masse popolari [rather technical and professional; and this is obviously to set the masses out for work]" (Schiattone, 1996, p. 110).

In conclusion, following the considerations made, it is possible to agree with the critical remark put forward by Schiattone that a fundamental superficiality is evident—in view also of the reduced size of the chapter under consideration—in Ferrari's ideas on the subject matter, which resulted in a contradiction that is particularly clear with regard to the role of men and the emancipation of women:

[...] Ferrari, dopo aver riconosciuto la parità di diritti tra coniugi, contraddittoriamente assegna alla donna un ruolo gregario rispetto all'uomo; riconosce nell'uomo il "capo" perché votato all'operosità e alla giustizia, ma senza spiegare queste prerogative; dice semplicemente che la donna è per natura "riservata e pudica", come a sottolineare un diverso modo d'essere; e aggiunge che è più legata all'individuo che non all'umanità. Più tardi è costretto ad ammettere che l'"inferiorità" della donna costituisce di fatto "una condizione di miseria morale" che non permette una completa emancipazione: il "pudore" è, nello stesso tempo, "dignità" e limite della donna. La questione viene trattata con una superficialità sconcertante; relativamente a questo problema, Platone, Campanella e Saint-Simon vengono semplicemente tacciati di ingenuità [Ferrari, after having recognized the equality of rights between spouses, contradictorily assigns women the role of men's helpers; he regards a man as the "leader" because he is devoted to work and justice, but without explaining these prerogatives; he simply says that women are inherently "reserved and modest", so as to emphasize a different personality; and adds that they are more related to an individual than to human kind. Later on, he was forced to admit that the "inferiority" of women was in fact "a condition of moral misery" that does not make full emancipation possible: "modesty" is, at the same time, "dignity", and a woman's limitation. The issue is treated with disturbing levity; regarding this problem, Plato, Campanella and Saint-Simon are simply considered naive]. (Schiattone, 1996, p. 110)

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Chapter 9 Women Entrepreneurship in the Light of Relational Capital: General Insights

Paola Paoloni and Rosa Lombardi

Abstract Starting from the assumption that women entrepreneurs are relevant developers of the corporate business in small and microenterprises, the main purpose of this chapter is to propose a literature analysis discovering how relational capital influences the first stage of women enterprises. Thus, a literature search on Scopus has been conducted to expand the international literature on the connection between gender studies and relational capital. In this way, evidence proposed are directed to better understand the debate on gender and relational capital.

Keywords Entrepreneurship • Relational capital • Women enterprises • Gender studies

9.1 Preliminary Insights and Research Questions

The amount of relationships that companies have with the external environment and with stakeholders (Freeman, 1984) as well as the brand, image, reputation, satisfaction and loyalty marketing that companies have in their relationship with stakeholders (Donaldson & Preston, 1995) identify relational capital (Stewart, 1997).

In this direction, relationships companies-environment are a way of growing up as well as the opportunity to create added value increasing cash flow and resources. Thus, relational capital becomes an element to obtain a competitive advantage in the market and a real source for women entrepreneurship.

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Women companies are increased in the last years. Direct undertaking of the role of an entrepreneur (Baluku, Kikooma, & Kibanja, 2016; Caputo et al., 2016; Mwatsika, 2015) is a trend that has involved Western countries as well as developing countries.

However, the aim of this chapter is to propose a literature review to investigate how relational capital (Lombardi & Dumay, 2017) contributes to the born of women enterprises. Hence, the research questions are the following:

- RO1. Which is the trend in the studies on relational capital of women entrepreneurship?
- RQ2. How and why women entrepreneurs are using relational capital?
- RQ3. What are benefits and obstacles deriving from relational capital?

This chapter contributes to expand the literature on gender studies and relational capital. Our literature analysis emphasises the topic analysed as emerging issue, allowing for the possibility to identify new trends and future directions for research.

This chapter advances knowledge and practice in the gender in management field and using relational capital by focusing upon empirical research, theoretical developments, practice and current issues. Evidence of the chapter are related to the debate on "gender and relational capital" starting from the assumption that female entrepreneurship is regarded as central to the development and welfare of economies; the deepening of knowledge of how women entrepreneurs manage the relation of her business can contribute to improving the effectiveness policies aimed at promoting women entrepreneurs participation in the economy.

The chapter is structured as follows. In Sect. 9.2, the method of the literature review is proposed. After, the findings are shown in Sects. 9.3 and 9.4. Implications for future research and conclusions are presented in Sect. 9.5.

9.2 Research Approach

We decide to search for academic contributions on the Scopus database. With the purpose to answer to RQ1, the first stage of our research is the selection of keywords to find relevant papers on the topic.

Particularly, the framework to analyse documents by Scopus is found on the matrix of relations that identifies four types of company network relations. This matrix proposes the intensity of the relation variable (permanent or temporary), and the type of relation variable (formal or informal) (Paoloni, 2011).

Network relations

Type-formal	1	2
Type-informal	3	4
	Intensity-permanent	Intensity-temporary

The matrix highlights the existence of four possible models of network relations using formal or informal relations, and temporary or permanent manner:

- 1. Formal nature permanent manner.
- 2. Formal nature temporary manner.
- 3. Informal nature permanent manner.
- 4. Informal nature temporary manner.

The network prototypes changes during the life cycle of a company. The presence and use of different kinds is characterised by the dimension and/or by the legal form of the company. A large company with share capital, for example, has a 1 or 4 type network due to its numerous legal obligations. A smaller company whose legal form is a partnership or an individual company has a natural trend to use the 2 or 3 type of networks, much more efficient and easier to handle according to the specific type of management.

We explain how we created the paper data set with reference to the number of articles, the type of journals and the nationality of the authors. We used search terms to find article title, abstract or keywords of different document types, published from 2010 to 2016 in the Scopus Social Sciences & Humanities database.

However, we found papers by searching terms "intellectual capital" and "relational capital". Second, we found papers by searching terms "relational capital" and "enterprises". Third, we found one paper by searching terms "relational capital" and "women" and enterprises". After, we found papers by searching terms "women enterprises".

9.3 Primary Evidence

We selected 252 theoretical and empirical studies to better define the state of the art on the connection between relational capital and women enterprises.

So, we restricted the scope of our research to the use of previous terms searched in the field of business, management and accounting, excluding the search results for the words "relational capital" and "enterprises" and "relational capital", "women" and "enterprises" owing to the low relevance of these topics for the current analysis. We retain that there is no literature on relational capital in women enterprises. Thus, our research questions will be solved in the future research.

We consider only the search results for "intellectual capital" and "relational capital" on one side and "women enterprises" on the other side.

Starting from the results on women enterprises, we got 12 documents related to the business, management and accounting research fields. We decided to classify such documents adopting the Paoloni-Demartini framework (Paoloni & Cesaroni, 2016) based on the identification of four categories of documents (A. Article focus; B. Research area; C. Geographical area, D. Research Methods) in which are included specific sub-classifications of documents.

After, we aim to investigate documents included in the sub-classification "A2. Female entrepreneurship" corresponding to the 12 documents. The subcategory A2 includes researches in women enterprises, family business, relational capital and relationship activated by women during the life cycle of enterprises (Paoloni &

A. Article focus	N°	B. Research area	N°
A1. Corporate governance		B1. Psychology	
A2. Female entrepreneurship	12	B2. Political and social	
A3. Conflicts of interest		B3. Communication	
A4. Differences		B4. Engineering	
A5. Discrimination		B5. Business	12
A6. Other		B6. Nonacademic	
C. Geographical area		B7. Health	
C1. Comparative	4	B8. Management	12
C2. Middle East		B9. Human science	
C3. South America		B10. Other	
C4. North America		D. Research methods	
C5. North Europe	4	D1. Literature review	1
C6. South Europe		D2. Qualitative	3
C7. Asia	3	D3. Quantitative	1
C8. Africa		D4. Mixed methods	1
C9. UK		D5. Normative	
C10 Oceania		D6 Other	5

Table 9.1 Documents classification

Cesaroni, 2016). From the application of the Paoloni-Demartini framework (Table 9.1), we found 12 documents included in the "A2. Female entrepreneurship sub-classification."

Focusing on relevant contributions, we identified papers on women enterprises with five or more citations.

After, we decided to investigate 137 documents on relational capital in the same field using the previous framework and changing the paper focus of the framework with relational capital (A).

Through the application of such framework to 137 documents on relational capital, we found 12 documents (Table 9.2).

Moreover, we identified also papers with five or more citations.

After these steps, we downloaded all the selected papers, and we classified highlighting the following factors: (1) authors' nationality, (2) journals where they were published and (3) number of citations. Results show that a large part of papers on women enterprises is written by UK authors and is published in specialist journals. In the second case, results show that a large part of papers on relational capital is written by Spanish authors and is published in specialist journals.

A. Article focus	N°	B. Research area	N°
Relational capital	12	B1. Psychology	
		B2. Political and social	
		B3. Communication	
		B4. Engineering	
		B5. Business	12
		B6. Nonacademic	
C. Geographical area		B7. Health	
C1. Comparative	5	B8. Management	12
C2. Middle East	2	B9. Human science	
C3. South America		B10. Other	
C4. North America		D. Research methods	
C5. North Europe	3	D1. Literature review	
C6. South Europe	1	D2. Qualitative	8
C7. Asia	1	D3. Quantitative	1
C8. Africa		D4. Mixed methods	3
C9. UK		D5. Normative	
C10. Oceania		D6. Other	

Table 9.2 Documents classification

9.4 The literature Analysis

9.4.1 Women Enterprises Issues

In the first group "women enterprises", papers refer to women entrepreneurs such as business enterprise, women's empowerment, education and training, entrepreneurialism.

The paper by Roomi and Harrison (2010) presents an analysis on gender challenges of Pakistani women entrepreneurs. The paper by Price and Mcmullan (2012) investigates the role of mentoring in the wider enterprise ecosystem, by focusing the potential of online mentoring for women's enterprise. The paper by O'Carroll and Millne (2010) explores the work of the Women's International Centre for Economic Development showing that the rates of self-employment, business ownership and economic participation can be transformed.

Brierton and Bennett (2012) analyse the origins of the Women's Enterprise Policy Group showing the need for a historical context for policy development. Brush et al. (2012) propose the analysis of the inaugural webinar session of the Women's Enterprise Committee, International Council for Small Business. Carter et al. (2015) analyse the enterprise diversity in the context of ethnic minorities and women in enterprise. Braidford et al. (2013) contribute to the gender mainstreaming debate and investigate the support measures in the USA, Canada and Sweden directed to encourage women to start a business, analysing the role of women's

business centres. Torri (2012) explores the gender empowerment analysing the impact of women enterprises in the traditional herbal sector in Indonesia.

The book chapter by Nilsson (2010) is on the topic of embassy for Women's Enterprise. Roy and Lahiri-Roy (2010) analyse an Indian women's organisation representing both a case in women's empowerment and a successful business enterprise proposing solutions to fight poverty and restore dignity. Waring and Brierton (2011) define the impact of women's enterprise on Scotland's economy and propose policy recommendations related to the increasing women's business ownership.

Weeks and Duffy (2011) investigate the history of the International Council for Small Business, International Journal of Gender and Entrepreneurship, National Women's Business Council Best Paper Award for Women's Enterprise Development.

9.4.2 Relational Capital Issues

In the second group "Relational Capital", papers refer to relational capital and intellectual capital, customer relationship, consumer behaviour, business to business, business to consumer, new venture formation, building family networks, knowledge management.

Delgado-Verde et al. (2011) investigate relations-based knowledge by distinguishing social capital and relational capital. Moreover, authors aim to analyse the effect of relations-based intellectual capital components on the development of innovation. Hormiga et al. (2011) investigates relational capital in new business startups with the aim to discuss the impact of intangible relational assets on the success of new business.

Sussan (2012) analyses customer-to-customer interaction as a subcomponent of relational capital by explaining the connection with business-to-customer relational capital.

Dicu et al. (2011) investigate relational capital of pharmaceutical companies through seven multinational companies, interpreting their reports and results from Romania's emerging economy.

Hosseini and Owlia (2016) analyse a model to assess relational capital of banks introducing measurement indicators on the Ansar bank case in Iran. Delgado-Verde et al. (2014) propose a model to analyse collaboration supplier and customer relationship effects on product innovation outputs. Ghane and Akhavan (2014) discuss a framework to determine relational capitals within service and non-service industries in Iran.

Zaragoza-Sáez and Claver-Corté (2011) investigate activities belonging to relational capital of six multinationals through a qualitative research. Peng (2011) analyse the input resources and transformation in a dyadic interfirm partnership through a multiple case study approach, applying intellectual capital navigator. Gately and Cunningham (2014) investigate how incubated technology entrepreneurs can build

relational capital directed to the new venture formation in the Higher Education Institution.

Pérez-Astray and Babío (2011) propose the analysis of the relationship promoter as catalyst for university/industry relations at transregional and transnational level, introducing strengths and weaknesses of university/industry exchange. Sharma et al. (2012) analyse the implementation of CSR initiatives in family businesses, proposing two cases of Asian family business.

9.5 Primary Conclusions

The literature review offers suggestions to define a research agenda in this field:

- 1. The relevant role of relational capital in female entrepreneurship;
- 2. Literature on the topic is not widely explored.

No article has been found that analyses the use of relational capital by women entrepreneurs working in large companies. From here, issues from these papers cannot be reported to larger companies as in the latter the role of entrepreneur/manager is very different than in micro-firms (Cesaroni & Consoli, 2015).

In other words, The terms relational capital and female entrepreneurship are not widely investigated by literature and we found only one paper from the literature search. However, we'll answer to research question 3 in the future through a case study analysis to connect to the present preliminary research on the topic.

From the CAOS model by Paoloni (2011) to analyse the relationship capital of women's businesses, our aim in the future is to provide an interpretive framework to investigate whether and how the use of relational capital supports female entrepreneurs. Elements of such model are the following:

- 1. Personal characteristics of female entrepreneur
- 2. Enterprise environment
- 3. Organisational and managerial aspects
- 4. Business time horizon

These factors have been analysed, in different research on women entrepreneurship to highlight distinctive features of female enterprises (Sherer 2003; Sarri & Trihopoulou 2005; Klyver 2011; Paoloni & Demartini 2012). Moreover, each of these factors influences and is influenced by the relational capabilities of the entrepreneur.

Our research aims to extend the analysis of the use of relational capital by Italian micro- and small-sized women enterprises. This step allows to gain a greater understanding of a relevant subject for all those, who are involved in the promotion of women's entrepreneurship.

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Chapter 10 The Role of Emotional Leader in Women-Owned Family Businesses

Francesca Maria Cesaroni, Amaya Erro Garcés, and Annalisa Sentuti

Abstract Succession from mother to children is an overlooked area of research. In family business studies, women have often been described as third actors-mediators between family members, patient wives and responsible mothers—playing a main role as emotional leaders. However, what happens when a woman, especially a mother, is the main actor of the succession process? This study focuses on this topic, in order to understand if a woman who leads a family firm can also act as an emotional leader and how this role affects the outcome of the succession process. Two longitudinal case studies from two different countries (Spain and Italy) were carried out. In both cases, the main character is a woman who founded and ran a business and recently passed the leadership to the next generation. Results show that even if both of them were the founders, owners and leaders of the business, they never lost their role as emotional leader. These behaviours have proven to be very beneficial for the succession process and business survival. Findings offer an important contribution to knowledge on family business succession analysing the continuity of businesses founded and managed by women and the ownership/leadership transfer from mother to children also highlight important specific characteristics of this kind of succession.

Keywords Family business • Women-owned family businesses • Women entrepreneurs • Succession • Mother-children succession

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© Springer International Publishing AG 2018
P. Paoloni, R. Lombardi (eds.), *Gender Issues in Business and Economics*,
Springer Proceedings in Business and Economics,
DOI 10.1007/978-3-319-65193-4_10

10.1 Introduction

Succession is one of the main research topics in family business studies (Sharma, 2004), and most of the research has focused on the traditional father-son succession (Handler, 1994; Harveston, Davis, & Lyden, 1997). However, the number of female-owned businesses has slowly but progressively been increasing for several decades in many economies, and the binomial "women entrepreneurs and succession" is becoming extremely relevant. For this reason, a new perspective of analysis is deemed necessary.

Apart from a few exceptions, women involved in the succession process have been described as an invisible but crucial character, often without a formal position in the family firm, not directly involved in the succession process (Gillis-Donovan & Moynihan-Bradt, 1990). Women often act as third actors and play an important role as mediators, informal coaches and consultants (Hollander & Bukowitz, 1990). They manage conflicts, take responsibility for peace and harmony in the family and the firm and play an important role in transmitting family and business values to the children, teaching them "to love the company" (Jimenez, 2009).

To describe this role, some authors introduced the term emotional leader (hereafter EL) (Jimenez, 2009) and underlined its relevance during the succession process, because of often difficult relationships between the incumbent and successor and between family members (Davis & Harveston, 1998; Fox, Nilakant, & Hamilton, 1996; Morris, Williams, Allen, & Avila, 1997). In this context, women may favour succession by taking care of family's dynamics.

As stated above, in more recent years, the number of companies founded and managed by women has been increasing. This means that an increasing number of women are, or will be, involved as the main character of the succession process. For this reason, it is important to wonder if a woman who is passing the leadership to her children can also act as an EL. It is also important to understand which behaviours reveal that she is acting as an EL and how this role can affect succession process outcomes.

To answer these questions, this paper presents two longitudinal case studies (Yin, 2013): an Italian company recently involved in a mother-son succession and a Spanish company transferred from mother to daughter.

We selected these cases due to several reasons. First, the two businesses are located in countries sharing some important features, especially from the cultural point of view. Spain and Italy are both classified as "strong family ties societies" (Reher, 1998) and are characterised by a traditional division of roles between men and women, with men described as breadwinners and women running the household (Alesina & Giuliano, 2010; Andreotti et al., 2001). Moreover, the percentage of family businesses is very high in both countries (FFI, 2016), and they have a similar attitude about the participation of women in family businesses (EY, 2015).

Second, important similarities exist between the two experiences, as a mother was in charge in both cases as incumbent passing the leadership role to one of her children. Moreover, both cases deal with successfully completed succession processes, and we were able to describe not just the daughter point of view but also the mother's and other family members.

The paper is structured in four parts. Firstly, the main literature on women's involvement in family business succession is presented. Following, the research method is described and the two case studies are presented. Finally, key results are discussed and main conclusions are drawn.

10.2 Literature Review

In the last few decades, many authors have studied family business succession (Sharma, 2004), but most of them have ignored gender issues. Female entrepreneur passing "the baton" (Dyck, Mauws, Starke, & Mischke, 2002) has received little attention by both the literature on female entrepreneurship and family business succession.

In studies on female firms, most attention has been devoted to business early stages and to factors influencing business growth. These studies mainly examine female firms in the entrepreneurial phase, before entering in the family phase (Cadieux, Lorrain, & Hugron, 2002), and so succession is not studied.

Research on family business succession generally considers incumbents neutral from the gender perspective, even if they are described with clear male characteristics. Women have not been considered as business founders for a very long time, and female entrepreneurs have been overlooked or tacitly assimilated into the male model.

From this point of view, a few exceptions exist. Some authors discuss specific cases of mother-children succession and focus their attention on interactions and dynamics between mother and son (Kaslow, 1998), how succession unfolds when the incumbent is a woman (Cadieux et al., 2002) and differences between father-daughter and mother-daughter successions (Vera & Dean, 2005). Other authors argue that women's characteristics (such as loyalty to the company, concern for other family members, sensitivity to the needs of others and collegial decision-making processes) are fundamental for a positive outcome of succession (Dubini & Songini, 2002; Salganicoff, 1990).

Apart from these exceptions, women involved in family firms have often been described as mediators between family members, patient wives, mothers responsible for bringing up the future heir or women living in the shadow of their husbands, fathers, sons or brothers. Hollander and Bukowitz (1990) underline that women are often the third, "uninvolved" leg of a triangle that involves the wife-mother, the founder-father and the son or daughter-successor. They act as an informal coach and consultant, resolve frictions and conflicts and take care of the emotional side of the family. As noted by Jimenez (2009), "the most important traditional role that women play in the family has been to take responsibility for peace and harmony in the family and in the firm and to avoid the appearance of conflicts between the relatives who work together in the firm—particularly, the founder and his son". Women have also been given an important role in transmitting family and business values to the children, teaching them "to love the company" (Jimenez, 2009). In this perspective, women act as external and invisible but crucial actors, namely, without a formal position in the family firm but with a key role in managing relationships and main-

taining the family unit (Gillis-Donovan & Moynihan-Bradt, 1990). Precisely because of this central role, some authors have defined women's role as "chief emotional officer" or EL (Jimenez, 2009), being that they bear the emotional leadership in the family firm (Ward, 2004) by favouring communication and ensuring compassion between family members. This role is even more crucial during the succession process. Difficult relationships and conflicts between the incumbent and successor or between family members (Davis & Harveston, 1998; Fox et al., 1996; Morris et al., 1997) and lack of shared values between old and new generations (Tapies & Fernández Moya, 2012) are some of the main factors that may undermine the positive outcome of succession. In this context, women may favour the succession process by taking care of the family's dynamics and relationships.

In conclusion, studies on succession considering women as founders, owners and leaders of family firms are very few. Some research has been realised from the end of the 1990s until now, but analyses on this topic are sporadic and very limited. In the studies mentioned above, women have been described as a minor character, who only participate from the outside of the succession process. Women are indeed involved as third actors, and despite the importance of the role of chief emotional officer, they are not protagonists, as this role is left to incumbent and successor, typically identified as father and son.

But what happens when a woman, especially a mother, is the main actor of the succession process? Can a woman, who is passing the leadership to her son/daughter, also act as an EL? Which behaviours reveal that she is acting as an EL? And how does this role affect the outcome of the succession process?

To answer these research questions, in the next part, two case studies are presented and discussed (Yin, 2013).

10.3 Methodology

10.3.1 Cases Selection and Data Collection

Because of the low number of female enterprises in the succession phase, it is difficult to obtain a high number of mother-to-son succession cases to use for sample surveys. This is why, in this paper, we adopted a qualitative analysis of two case studies (Eisenhardt & Graebner, 2007; Miles, Huberman, & Saldana, 2014).

In both cases, the main character is a woman who founded a small business and recently passed the leadership role to the next generation. Therefore, these cases are particularly suited for the analysis of this little known phenomenon, not only in Italy and Spain, since they are very rare examples of a succession process with a woman involved as incumbent. Other reasons to select these cases were the following (De Massis & Kotlar, 2014): (1) they deal with a successfully completed succession process, while other studies analysed ongoing processes (Cadieux et al., 2002); (2) authors were able to observe the evolution of the succession process for several years (2008–2016 for the Italian case and 2014–2016 for the Spanish case); (3) authors had easy access to the firms and were able to interview the two main

characters of the succession process—the mother and her successor. Unfortunately Yvonne Hortet—the main character of the Spanish case—died in 2015; thus just her youngest daughter was interviewed in the last phase of the research.

Information were collected from different sources, in order to support and triangulate the findings. In-depth, semi-structured interviews (Miles et al., 2014) with incumbent and successor were the primary source of data. Other sources—business documentation and website, newspaper articles and online news and field notes—allowed us to gather contextual information about the business. In the Spanish case, authors had also access to a high amount of sources—videos, books, researches and newspapers—as the owner family was very famous in Spain. In the Spanish case, the village council was also visited as it offered relevant information about the situation and the past of the family members.

Interviews took place at the business site and varied in length from 2 to 4 h. Respondents were asked to freely introduce themselves and describe their family, their company, their succession process, their behaviours and interactions during this process. All interviews were recorded and later transcribed verbatim for further analysis. Interviewees involved in our research are not native English speakers. To ensure that verbatim quotations properly reflect interviewees' intended meaning, a native English speaker translated the original interviews.

10.3.2 Data Analysis

As suggested by Miles et al. (2014), data analysis was an ongoing process. Available data was iteratively analysed in order to allow a progressive elaboration of a general interpretative framework.

We first created a rich description of the cases. Authors read the empirical material independently and classified the stream of words into meaningful categories, related to the research question. Patterns of meaning associated to each category were then identified and tentatively labelled. Then, we cycled through multiple readings of the data and identified a number of definitive categories, by grouping data from interviews and empirical material. These categories were labelled and a data structure was designed, as shown in Sect. 10.5.

10.4 Case Studies

10.4.1 The Italian Case: Maria and Gianni

Toma s.r.l. was founded in 1965 by Maria Toni, in central Italy. It produces work clothes for several sectors (hotels, health care, beauty treatment and industry). Maria worked very hard, with tenacity and great effort in order to create her business and realise her independence.

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The start-up was not simple: Maria was very young, without capital or experience and above all a mother of a 2 years-old son (Giorgio). Her father saw her passion and aptitude for business and decided to help her by loaning her the necessary capital to start the business.

In 1968, Gianni was born and Maria began to really feel the pressure of family commitments and realised that she had to make a choice. "Working in the fashion industry was taking me a long way away from home and with two children I realised that I couldn't continue that way. I gave up the fashion industry and continued producing only work clothing".

The firm began to grow. By the early 1970s, the company employed 65 people (all of them were women and Maria called them "my girls"), producing about 1200 work clothes a day and for very important customers (Ferrari, Tod's, Fiat, Barilla and Poltrona Frau). Maria established with her employees a working relationship based on communication and shared responsibility. To favour a good working environment and a confidential relationship with her collaborators, one time a month, Maria had lunch with her employees in the meeting room: each one used to bring something to eat and they spent some time together.

The mid-1970s recession forced Maria to drastically downsize the business, cut the staff and outsource the production process.

Meanwhile the family was changing: Maria got divorced and her children were grown up. She had involved them in the business from an early age. When they were 6 years old, she started by familiarising them with the business: "Every month I spent half an hour telling them about the business. I don't know how much they actually understood but I kept doing it... We even did the accounts together so that they would get used to understanding our exact income and expenses".

As soon as high school had finished, only Gianni began working in the business: "The work fascinated me ... I remember, when I was young I played with the fabrics... I remember the smell of the fabric; I remember those big giant rolls and saw how the fabric became professional clothing, a jacket, trousers, something for work. I was fascinated by this transformation, as well as by the smell of the fabric that I still love".

In the first 2 years, he worked in each area of the company: warehouse, sales and marketing, information systems and finance. Maria recounted, "My grandmother always said to me that to be a leader you have to know how to do everything! ... Otherwise, how could he assess the employees' work and understand if they were making mistakes?"

At the end of his on-the-job training, Gianni decided to set foot into the business and a phase of joint management began. Maria encouraged Gianni to study management and he began to assume his first responsibilities.

As the years passed, Maria saw in Gianni the right person to succeed her ("He is a thoughtful man, he isn't impulsive and that makes him good for the business".) and she understood that the time had come to make her son's position official. She equally divided the company ownership between her children, but Giorgio preferred not to be involved in the business and refused his share. Maria explained, "I would have preferred that both of my sons worked in the company but I know that they have very different characters".

Thanks to Gianni, the company started exporting throughout Europe, Russia and Dubai. In 2010, the company had 15 employees, 25 external workers and a turnover of 5 million euros.

At the time of the last interview, Maria was 75 years old. In 2011 she retired from the business due to health reasons. Nevertheless, Gianni continued to inform his mother of his main decision and he's still carrying on several practices and traditions that he learned from his mother.

10.4.2 The Spanish Case: Yvonne and Yvonnete

In the Spanish case study, the main character is Yvonne Hortet. In 1971 she started a restaurant—The Espineta—at Calafell, a small village close to Barcelona. The Espineta restaurant is an emblematic place in the village of Calafell, as it maintains the physical characteristics of a fishing tavern. Tourists and local people go there to enjoy a dinner.

Yvonne had five children, and in 1971 her youngest daughter—Yvonette—was pregnant. Yvonne decided it was a great idea opening a new restaurant, so her daughter would be able to work there during the summer and study in winter. Furthermore, they could live in that place, as the building had a house attached.

There was no previous experience in the family about restaurants and pubs. Therefore, Yvonne had to learn by the practice. "I remember my first coffee; it was a disaster", said Yvonne. At the beginning, the Espineta was just a bar, but Yvonne realized tourists were hungry and the meals she prepared usually "disappeared in 15 min", so she decided to include some dishes in her menu.

Yvonne's family—Casa Barral—played an important role in her experience. Casa Barral, in the 1950s and 1960s, was an intellectual and cultural centre due to Carles Barral, Yvonne's husband. As well as a poet, he was a famous editor and a cultural promoter. With the Editorial Seix Barral, it was the first publishing company open to Europe and later to Latin America. "Carles Barral promoted the Formentor prize, the most important event for writers in Europe", informed Yvonnete. "The first book selected was published in ten languages"; therefore, it was very important for writers to participate in that event.

Carles Barral and Yvonne Hortet married when they were very young—respectively, 20 and 22 years old. They got married in Calafell, and they were really close to the fishers of the village. "I knew nothing about that small village. When I watched the video of my wedding, I saw myself looking at everything, just like being lost", said Yvonne. Casa Barral was always full of people. The house was opened to the beach, and the coffee hour took place in the sand. Drinks, breakfasts, meals and dinners took place at Casa Barral. On one hand, it was great for the family, but on the other, the family was never alone. This situation helped to build the idea of starting a restaurant, or a bar, where visitors could meet and spend their time chatting and relaxing.

The figure of Carles Barral was also relevant. He always supported her wife's decisions and gave an important help in facilitating the success of the business. In fact, many people used to frequent the restaurant just to see Carles Barral and the

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famous writers that were with him, such us Vargas Llosa, Juan Marsé, Jorge Edwards, Muñoz Suay, Bryce Echenique or García-Márquez. "During those years, her husband had to support her with the banks and bureaucracy, because it was not allowed that a woman represented a business", said Yvonnete. "Even more, in some years, Yvonne was the owner of the business licence, and yet more, people called her Ms. Yvonne, and not Ms. Barral", said Yvonnete. These situations support the idea of Yvonne's character.

Anyway, Yvonne Hortet was the main responsible for all decisions concerning the restaurant creation and management. "My mother had a very hard character. She leaded everything, she had initiative and creative ideas", remembered Yvonnete, "and she was a very modern woman. She was the first woman in wearing a bikini on the beach, for example". In fact, she was a clever and practical woman. Even more, she recollected all the information about her husband and published it once Carles Barral died. She was a leader.

Some weeks after the business inauguration, she discovered customers' needs; therefore, she offered not just drinks but also some food in the restaurant. She prepared some food with sea products: crab sand, tallinas, etc. In fact, the bar became a restaurant and began offering food. "I remember tourists eating everything I cook for the Espineta", said Yvonne.

The business was a success. Investments were paid in a year. They bought new furniture, and the Espineta started to work as a restaurant. "I chose nice and expensive furniture for the restaurant. I wanted to create a different place, where people could enjoy their meals", said Yvonne. There were no competitors during those years, and restaurants in Calafell helped each other, as the owners were close ones to the others.

Carles Barral and Yvonne Hortet had five children. During those years, the relationship between brothers and sisters was fluent, and they had a good relationship with their mother. There were any conflicts between them. "We were a united family", said Yvonne. Some of them moved away—to Madrid and Barcelona—and built an autonomous professional career, as they were not interested in the familiar business. Then, they married and forgot about the restaurant and the small village. One of the daughters, Dania, started a restaurant in Madrid called "Captain Argüello", that was the name of her father's boat. Just their son Alexis preferred the life next to the sea, so he did not leave Calafell. Little by little, Yvonne went away from the business, and delegated the restaurant to her son Alexis.

Alexis lead the restaurant for some years. Yvonne owned the business during the first years, but after sometime, she transferred the ownership to Alexis. He got married and worked in the Espineta with his wife. The other family members were not involved in the business, and even Yvonne preferred to leave the restaurant during that time. "I thought they need their space, as a family", remembered Yvonne.

Then Alexis divorced and Yvonne began helping him with the business. In some years, also Yvonnete came back to help her brother with the company, and Yvonne was very happy to teach them about the business. As the son and daughter recognized, Yvonne was very generous with them. She taught them everything about the business and helped them with the dishes and customers. Yvonne was always thinking about the restaurant, but she left her son and daughter take all the decisions. "It was their future", Yvonne believed. Yvonne and her sons maintained a fluent and

close relationship during those years. Alexis and Yvonnete created a society and worked together in the restaurant.

After some time, Alexis left the restaurant, as he preferred to start a new career in another business away. His brother Marco began to work in the restaurant. As Yvonnete remembered, "it was a natural process. We all did what we preferred". Yvonne helped her son and daughter with the business. "She loved being close to us", said Yvonnete. "We had a nice relationship, and there were no conflicts during the succession process. She was happy to see we lead the business, and she respected our decisions".

In 2013, Marco died. He was young, so it was a difficult situation for the family. Yvonnete helped her mother and continued with the business. Yvonne continued to work in the restaurant, but she was older and she got tired, so she needed the help of her daughter. Even more, Yvonne was really sad because of her son's death and she needed some support. The rest of the family members were not interested in the company, so she worked alone.

In 2015, Yvonne died. In 2016, another daughter came back to the business and joint Yvonnete. In fact, it was a place where all the family members could work every time they need it.

In fact, some children were uninterested in the restaurant (or that they just worked only for short periods in the restaurant). In synthesis, four stages can be differentiated in the succession process: firstly, the Alexis leadership; secondly, the society between Alexis and Yvonnete; thirdly, the leadership of Yvonnete; and, finally, the two daughter's period; the actual situation.

10.5 Findings and Discussion

In line with the research questions, the available material was analysed in order to understand how Maria Toni and Yvonne Hortet behaved during the succession process and to identify behaviours consistent with the role of EL.

The following themes resulted from this analysis:

- 1. Avoid and mitigate conflicts.
- 2. Transmit values.
- 3. Teach her son to love the company.
- 4. Keep family and company harmony.

In the following section, these themes are described and discussed.

10.5.1 Avoid and Mitigate Conflicts

In both cases, the relationship between incumbent and successor was characterised by a great harmony. This does not mean that conflicts were totally absent, but mothers were able to defuse and resolve conflicts, which mainly arose from different views of the business or temperamental differences. Maria stated: "If I disagree with

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my son I tell him my opinion and sometimes we get angry as well". And Gianni confirmed: "It was not easy to work with her! She is a dynamic woman with a very strong character, so it was not easy at all. We have had several confrontations, convincing her was not easy and disagreements were frequent". Maria was able to dissolve each conflict limiting exasperation and negative interactions: "It's useless to argue when it comes to the business. One has an opinion, and the other has another opinion, but it is useless to argue. If there is something that seems wrong to me, I let him know and at times we get annoyed with each other. But before going home I hug him ... a little kiss and a goodbye". Above all, she taught her son that a conflict is not a personal issue but an opportunity to learn and find solutions. In fact, Gianni added: "Any confrontation or discussion always brought something positive. My mother taught this to me, it was great! We clashed many times, but that's what made me grow".

Yvonette remembered her mother's strong personality. "I remember once, that there was no one in the kitchen, and she could cook, but she was very slow, because, of course, she wanted everything to be perfect. Some customers ordered fried eggs with potatoes and bacon. I was very bad cooking fried eggs! I did not get to the point ... I ended up arguing with my mother and I ended up with a fried egg in the head. So I shut up!!! In the end, the fried eggs came out, the potatoes too, and the bacon too, and customers were very happy".

Furthermore, conflicts were never characterised by competition. Yvonette said: "My mother was a wonderful person. She was really proud of us. Of course we had some conflicts, but at the end she always helped us to solve them". And Gianni said: "We had contrasts and threads, but rivalry, envy, jealousy ... no, never!" According to Maria, "a lot of patience was necessary. A woman is also a mother and understands that she cannot impose herself on her child or let her child keep making mistakes beyond a certain point... well, we are a bit over protective because there is always the umbilical cord! Maternal instinct always remains. I am always trying to help him learn and help him understand things. Men do not always have this patience. At times, they want to be better than their son and compete against him. I have never competed against my son". In Maria's opinion, women's sensitivity makes mother-son succession less conflictual and more successful than the traditional father-son succession.

Thanks to Maria and Yvonne's attitude, it was not necessary to involve other actors to manage conflicts. Even if Maria and Yvonne were responsible in running the business and managing the succession process, they never forgot their role as mother and they always avoid conflicts with their children.

10.5.2 Transmit Values

Both Maria and Gianni mentioned values referred to the family and the business several times during the interviews. And it is clear that Maria was the key actor in the transmission of values.

She taught her son the value of money since he was very young, discussing the family budget together and then dealing with the business's financial needs. Gianni really appreciated his mother's approach and decided to do the same with his daughter. Secondly, Maria taught Gianni the meaning of sacrifice and hard work. It is representative his involvement in each business area, including working in the warehouse as a packer. Thirdly, Maria educated her son to take care of employees and collaborators. It's emblematic that both the mother and the son use the same term to refer to their employees (the "girls"), that Gianni maintained the same tradition of having some time at lunch all together at the headquarters and that the employee turnover is equal to zero. Gianni stated, "We have people who have worked with us for a lifetime. All of them have grown up here. People who have joined the business have always remained". Finally, Maria taught her son to be a "person of his word", maintaining promises and always being reliable. Maria was proud that Toma's main stakeholders (e.g. customers, suppliers, banks) appreciated the earnestness of the company: "For me this is worth more than a few million". And Gianni absorbed this value: "She passed on me the seriousness of one's word. When you give your word, you shouldn't go back on it".

Yvonne carefully preserved values. The family members knew how she liked to behave in the business and maintain that behaviour. "She was a clever, clever woman, but she also liked to help others. We have the same behaviour", said her daughter. In her business decisions, she tried to show her values and transmit them to the next generation. For example, Yvonne loved the small village of Calafell and defended the fisher's traditions against the touristic expansion. She welcomed the fishers in the restaurant and Alexis inherited this behaviour. Yvonne liked the sea, and so their sons and daughters did. Yvonne was nice and close to her customers. She tried to make them feel comfortable, she was always polite with them and she looked continuously for new dishes. So did her sons and daughters.

"When you talked to their sons and daughters, the figure of Yvonne came quickly to your mind", said some people from the village. Yvonne appreciated people from the village, and Alexis and Yvonnete were really close to those people. "We helped each other, just like a big family", remembered Yvonnete.

10.5.3 Teach their Children to Love the Company

Love for the firm emerged very often from mothers and children's words. Maria declared, "I am completely in love with my company and for me Toma is like another son. It really hasn't been an easy process to detach myself from it". Nevertheless, she was able to pass the baton to her son and taught him to love the company. This process was very natural, without impositions and respecting Gianni's feelings and path of growth. Gianni said: "with lightness". He stated, "She was a wonderful teacher because she made me work, not as a job, but as a way to know, to see, to understand. She made me, with fun, love what I saw. One beautiful thing that she always said to me was, 'working yes, but with fun'". And he added,

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"I often jokingly say to my mother: You made me fall in love with this work and when you fall in love with a job you do not leave! Absolutely. So I tell her that she has totally screwed me, really! She unleashed my passion and made me fall in love with what I do. I do not mind what I do. It was an extremely soft succession".

Yvonne was also very good at teaching her children the love for the business. Her children remembered that she very often used to talk about the business at home. "I love talking about kitchen recipes at home, and I tried to make my sons and daughters part of the business", said Yvonne. Also with regard to this aspect, Maria and Yvonne maintained a central role as educators, transmitting love and passion towards the business.

Yvonnete evoked: "From my point of view, the Espineta was my mother. Everything there remembers me her personality, so I love the restaurant". "It is plenty of memories from my family, and, in particular, from my mother". Yvonne did not obligate her sons and daughters to work in the business, such that behaviour helped them to like the restaurant. "She loved well-done work, and she was proud of the Espineta's evolution", said Yvonnete. "We grew loving that place; our childhood was there, close to the sea".

10.5.4 Keep Family and Company Harmony

Harmony in the family and the firm may be pursued in different ways. In the analysed cases, the attention of the entrepreneur was mainly devoted to respecting both the children's needs, propensity and wills. This attention resulted in an extensive harmony between mother and children, with positive consequences for the business.

When Carles Barral died, Yvonne's family had some conflicts. Alexis needed some money. Therefore, he asked his mother for his part of the heritage. That behaviour annoyed Yvonne, and she stopped helping him with the business. His brothers and sisters were angry too. "Anyway, the situation was solved in a few months, and all of the members of the family forgot about it easily", remembered Yvonnete.

Yvonnes decisions were always taken taking into account the family. This is true from the very first decision about the business. In fact, she decided to start a restaurant just to help her daughter, who was pregnant in that period. "Carles and me were very worried about our daughter's future", remembered Yvonne. "It was a great idea", think Yvonnete. Since then, Yvonne always managed the restaurant trying to respect her children's needs and keeping harmony between the business and her family. Yvonne always left her sons and daughters decide freely about their future. Yvonette remembered: "She did not obligate us to work in the business". "She educated us to create our own future". She wanted her family to be happy: "My sibling knew they could come back, but they preferred different professional careers out of the business".

Maria always put her children first, both when they were babies and when the moment to make choices arrived. In the first phase, she preferred limiting the potentiality of her business instead of delegating taking care of her children: "I could not do fashion, I should have left the family, but I had two children and I was like a mother hen. [...] I saw that I couldn't take care of my children, I didn't like it. For me,

family is very important, it's too precious". It was fundamental for Maria to maintain her role as a mother and her choices were oriented towards this goal. The children grew up without bad feelings towards their mother and—especially Gianni—developed a special relationship with her. In the second phase, Maria left her children to make their own choices. She never forced Gianni's brother to enter the business and encouraged Gianni to feel free to choose what he wanted to do. Maria stated, "I tried to make it clear to him that he was not obligated to work in the business". In this manner, both the sons followed their own paths and developed a good relationship with their mother and between themselves. At the same time, this good relationship between mother and son was transposed into a business relationship with a positive effect on the succession process. The good relationship between the two brothers avoided conflicts between family members during ownership transfer.

Probably choosing to commit more time to her family when the children were young permitted limited business growth, but, in the long term, Maria was rewarded when Gianni chose to enter the business and carry on his mother's dream.

10.6 Conclusions

This paper offers an important contribution to the knowledge of family business succession analysing the transition from mother to children. Based on two case studies, results show that even if Maria and Yvonne acted as founder and leader of their business, they never lost their role as EL. In fact, even though they were completely involved in the succession process as main actors, they maintained the traditional woman's role as the EL. Maria and Yvonne in fact took care of the harmony within the family and the business, assured the transmission of values of both the family and the firm to their children, taught them to love the company and managed potential conflicts by transforming them into learning opportunities. Neither the fathers nor other family or nonfamily members were cited as possible EL.

For Maria and Yvonne, being the EL was an important advantage in managing the succession process because it favoured a positive interaction between incumbent and successor and also ensured a much smoother transition. Furthermore, they had a virtuous behaviour, positive for both the company and its survival. However, maintaining the role of EL requires relationships between the incumbent and successor to be strong and steady over time. In this perspective, Maria and Yvonne always tried to maintain a positive interaction with them, since they were kids.

This research presents a number of limitations. The main one is its generalisation, as this research is based on only two cases. Therefore, they may be considered as pilot cases and could be followed by further empirical studies. The succession from mother to children is an overlooked research area, and further investigations are needed to better identify factors affecting the overlap of an EL and a business leader in the same person and the consequences for succession outcome. For instance, Jimenez (2009) stated, "the role of the EL is much more difficult to replace than that of the CEO". What happens if two roles coincide in the same person?

Furthermore, a comparison from different countries might highlight how cultural factors may affect transition from mother to son. Finally, differences between mother-son and mother-daughter succession can be analysed.

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Chapter 11 The Gender Dimension of the Female Highly Skilled Migrants

Antonietta Pagano

Abstract One of the strategic assets in economic systems is human capital, therefore, advanced and emerging economies have implemented several policies aiming at improving skilled professional inflow. However, highly skilled migrations analysis represents an underdeveloped area of research in geographical sector; gender studies are even more underrepresented. To this end, the paper intends to investigate the skilled labor migration, the gender dimension of female highly skilled professionals, with a special focus on the OECD area. The author, thus, will provide an analysis of the destinations countries, sectorial differences, and labor market integration, in order to show the difficulties female human capital has to face in their migratory project.

Keywords International labor market • Human capital • Gender differences • Migration policies • Skilled migrations

11.1 The Centrality of Human Capital in the Contemporary Territorial Systems

Decades between twenty and twenty-first century has been characterized by several transformations that have influenced numerous territorial systems on various geographical scales and at different pace. Most of these modifications have not been completely understood, especially when considering that postindustrial societies are changing constantly, feeding, and influencing more and more the evolution process occurring in what has been described as liquid modernity (Bauman, 2000).

Despite such ongoing developments, it is possible to identify one of its most powerful engines, innovation, whose greatest and clearest result is the shift from

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industrial economies to the knowledge-based economies (Machlup, 1962; Druncker, 1968; Porat, 1977; Stanback, 1979; Noyelle, 1990), where human capital represents the primary asset. Consequently, over the years it has decreased the importance of resources such as raw materials and unskilled labor force in comparison to the increasing centrality of human capital, being the source of knowledge and skills and therefore innovation.

Human capital is, thus, the most requested strategic asset for (public and private) economic organizations, as growth and competition depend essentially upon this scarce resource. Within this context, global economic actors have started an aggressive competition described as the global race for talent (Shachar, 2006; Wadhwa, 2012) or the research for the best and brightest (O'Leary, Lindholm, Whitford, & Freeman, 2002), whose effects are complex and more and more difficult to decode. The most evident outcomes are occurring in an even more globalized labor market (Lucas, 2008), characterized by an increasing demand for highly educated professionals and a consequent skill labor and salary polarization, resulting in a geographical concentration of skilled professionals within the advanced and emerging economies, who are driven by the assumption: the more human capital a territorial system is capable to attract, the most it will be competitive in the current global economy (Giordano, Pagano, & Terranova, 2012).

Such a phenomenon is deeply affecting the geography of skilled migrations, giving rise to new routes, networks and diasporas. For a long time, studies concerning highly qualified migrations were based on two theories (Iredale, 2001): the human capital theory (Becker, 1964; Schultz, 1971) and the theory of center-periphery relations (Bhagwati & Hamada, 1974), both stating that international skilled migrations are characterized by a centrifugal force from South to North. Meaning that existed a strong skilled migration pressure from developing toward advanced countries (Docquier & Marfouk, 2004; Docquier & Rapoport, 2004; Findlay, 1995; Gould, 1988; Salt and Findlay, 1989; Todisco, 1993).

Nowadays, instead, additional pull and push factors are shaping the volume, frequency, duration, and composition of international movement of professionals, giving rise to an increase in the number of skilled migrants, as well as the emergence of north-north and north-south migration routes (Castle, de Haas, & Miller, 2013; Docquier et al., 2015; Dunnewijk, 2008; OECD, 2016). One of the reasons can be found in the shortage of specific skilled professionals suffered from several advanced and emerging states due to the economic downturn (Castle, 2011) and the declining fertility and increased longevity of their societies (Cipollone & Sestito, 2010; Czaika & Parsons, 2016; Keeley, 2009; Koleth, 2010; Pagano, 2016). As a result, different countries are experiencing an imbalance between the human capital requested in particular sectors—i.e., engineering, physical and medical sciences, finance, and ICT—and the abundant supply of professionals in social sciences (Strack, 2013). In such a scenario, characterized by an overproduction of unrequested human capital and the simultaneous deficit of others disciplines professionals, it is likely that the affected countries will, or are already, experiencing high unemployment rates, mismatch between skills and jobs (brain waste), and deep dissatisfaction of the skilled labor market (Morehouse & Clemens, 2012).

According to a study carried out by Oxford Economics (2012), the top ten countries that are going to distinguish for this alarming imbalance are Taiwan, Japan, Poland, Italy, Chile Greece, South Korea, Canada, the USA, and the United Kingdom.

Some of these states are implemented policies to attract and retain skilled professionals, such as Canada, Australia, and Germany (OECD, 2016); some others are failing in finding the proper solutions that fit their necessities, especially when considering the brain waste or over-qualification phenomena, that is particularly strong in the female skilled human capital labor market (Kofman, 2013).

11.2 The Gender Bias in the Skilled Migration Policies

International community has largely recognized the benefits deriving from highly skilled migrations, ¹ and consequently several countries have opened their borders to the best and brightest talents capable to support their competitiveness in the global knowledge economy. However, a great variety of policies has been implemented in this field, considering that different criteria were used to identifying highly skilled migrants according to the interpretation of the concept of highly skilled migrant and, and thus, the features it should satisfy.

Although at a first instance, the meaning of highly skilled migrant could appear unambiguous, it is on the contrary a hazy and ill-defined concept. Part of the academia has referred to this category basing on the education criteria, i.e., those migrant with a tertiary education (at least bachelor) and beyond (Solimano, 2008); some other researchers have enlightened the necessity to take into account salary and previous occupations as well. Hence, the category of highly skilled migration should include education, salary, and professional qualification at the same time (Batalova & Lowell, 2007; Lowell, 2001; Wiesbrock & Hercog, 2010).

Although this complexity could be sustainable from the theoretical point of view, its result was almost impossible when applying to attraction policy. Some authorities have, indeed, based their skilled migration policies exclusively on the education attainment (Borjas, 2003), others on previous occupations (Bouvier & Simcox, 1994), and, finally, some others on the salary (Isaakyan & Triandafyllidou, 2014). All these three criteria result to be discriminatory toward foreign born, especially when coming from less-developed countries, as well as female highly skilled migrants. In particular, salary- and occupation-based policies are gender-constructed, as often women do not have equal salary of men nor are employed in highly skilled occupations in their home countries, which is one of the main pull factors (Isaakyan & Triandafyllidou, 2016).²

¹Besides from the economic and innovation growth in host countries, highly skilled migrants can support a more balanced demographic structure, enhance the FDI flow, as well as increase the tax and welfare systems in the receiving societies (Boucher, 2016; Cervantes & Guellec, 2002; Pagano, 2012).

²Moreover, educational diploma recognitions represent a severe obstacle to access the skilled labor market, affecting, however, both male and female highly skilled migrants.

In the European Union, for example, the highly skilled migration policies are essentially based on the income criterion; consequently the Blue Card—intended to boost the attraction of extra-EU talents—intrinsically excludes several women to be recognized within the category of the highly skilled migrants, considering that they are underrepresented in the high-income sectors, i.e., engineering or information technologies, but overrepresented in less remunerated professions, although highly skilled, such as doctors and social scientists (Kofman, 2013). Furthermore, high-skilled migrant women result to be the first to be fired, especially during economic austerity, forcing them to return or to be employed in informal and deskilling works (Arslan et al., 2014; OECD, 2012).

As a result, nowadays more than ever, female highly skilled migrants suffer from a double disadvantage: a more difficult access to the job market being a woman and, at the same time, a discrimination as a migrant, as in this years of economic crisis, several countries have privileged local labor force to foreigners. The United Kingdom and USA, for example, between 2008 and 2012, have shifted from a highly skilled open door policy to a restricted access strategies carried out decreasing the number of visa issues (Pagano & Terranova, 2014).

The recent economic crisis has, thus, worsen the gender bias in several countries, not only from the labor market access point of view but from the recovery policies one as well. Despite what has been analyzed after the first wave, described as the *he*-cession, since the most affected sectors were male dominant, i.e., construction and finance, the second wave of the crisis (2010–2012) hit traditionally female professions, especially in the public and service sectors. However, while were implemented recovery policy designed for men, few attention was paid to the female labor force (Rodino-Colocino, 2014). Consequently, over the past years, men unemployment decreased by 0.7%, whereas female one increased by 0.5% (UN, 2014).

Sadly, although the increasing awareness about the importance of gender equality in both employment and migration policies, authorities have resulted to be blind or, at least, unable to find suitable solutions. One of the reasons is the lack of harmonized data and studies concerning the consequences of female highly skill emigration; another one is the underestimated role of women as economic actors.

11.3 The Gender Dimension of Highly Skilled Migration

Women highly skilled migration is generally an underdeveloped area of research, being overshadowed as an economic actor of high-skill migration. As a matter of fact, female migration has been studied more as a social issue rather than an economic one. Several researches have focus on their role within family reunification, demographic trends, and welfare system. Even as economic actors, women's employment studies are concentrated in those lesser skilled sectors, such as sex (Agustin, 2007; Kempadoo, Sanghera, & Pattanaik, 2005), domestic (Lutz, 2008; Parrenas, 2001), and care works (Kilkey, Lutz, & Palenga-Möllenbeck, 2010; Zimmerman, Litt, & Bose, 2006).

It could be stated, therefore, that a gender discrimination exists in the academia community as well. However, this is not totally true. The underrepresentation of female highly skilled migration is due to both the lack of available data (which generally affects the entire research area), as well as the focus paid on those migrants contributing to the knowledge economy, in particular science, ICT, and financial and managerial sectors, which are the most valued in monetary terms but also male dominant. On the other side, female migrants tend to be extremely qualified in other skilled sectors—such as education, health, and social work characterized by two disadvantages: have a smaller salary (and consequently are recognized as skilled migrants rather than highly skilled ones) and are regulated by professional bodies within national welfare states, meaning more obstacle in getting a job.

However, what has not been largely recognized yet is the increasing number of highly skilled female migrants and their higher education and skills when compare to native born. According to IOM and OECD (2014), the migration of highly skilled women has increased by 80% between 2000 and 2011, exceeding by 20% points the growth from the men side.

According to latest data available in 2011, the OECD countries hosted 117 million migrants, of which 34.5 million were tertiary-educated foreigners, corresponding to 15% of the entire tertiary-educated population residents in the OECD zone. Women migrants represented 51% of all foreigners, characterized by high level of education, especially when compared to female native born. In particular, skilled migrants (i.e., holding at least a bachelor's degree) represented almost 30% of the female migrant population in OECD countries, 10% points more than women native born, that composed 23%. A result that proves how to migrate are more and more the highly educated, as well as that they tend to hold higher educational levels than native-born women in host countries (Table 11.1).

What can be observed at an aggregate level differs at the national one. Indeed, the breakdown of the destination countries shows a more assorted situation. According to the country taken into analysis, there are societies where native-born present higher level of education in comparison to foreign migrants, as in the case of Belgium, Finland, Denmark, Spain, and France. This means that native human capital is higher among native female rather than migrants.

On the other hand, however, there are some other states that suffer from an interesting difference in the shares of tertiary-educated women, as it can be observed in the examples of the United Kingdom (20%) and Mexico (16%). As a matter of fact, in several OECD countries (more than 20), the population share of female highly educated is wider among the foreign born than native ones. For example, in 2011

Table 11.1 Female education attainment of native and foreign-born population (2011)

Female population	Population share of highly educated (%)	Population share of medium educated (%)	Population share of low educated (%)
Foreign born	30.6	37.4	32.0
Native born	20.6	42.6	34.0

Source: OECD-DIOC database (2011)

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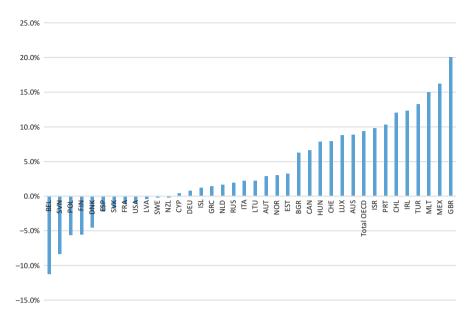


Fig. 11.1 Percentage point differences between the proportion of tertiary-educated migrant and native-born women in selected OECD countries. Source: OECD-DIOC database (2011)

the percentage point difference between the proportion of tertiary-educated migrants and native-born women in Ireland was 12%; this mean that the population share of highly educated among female migrant was 40%, while on the native side, they were the 28%.

These figures suggest that migrant communities in the OECD countries, especially from the female point of view, is investing more and more on education, in order to ensure themselves greater possibility to access stable and well-paid jobs. Moreover, most developed countries are becoming greater attractor of highly educated migrants, totally in line with the global race for the best and brightest talents, although some of these societies are failing in profiting by the availability of such numerous human capital, exposing them to brain waste and over-qualification (Fig. 11.1).

The higher education attainment of female migrants is once again confirmed when compared to male migrants. Over the last decades, not only was there a reduction in the difference of educational level but, according to latest available data, highly educated women were more numerous and shared a larger portion than man. As a matter of fact, in 2000–2001 female tertiary-educated migrants were around 8.5 million (representing the 23% of the total female foreign population in OECD countries), whereas men were 8.7 million (almost 25%). In the 2010–2011, instead female and male migrants were, respectively, 18 million and 16.5 million (30.5% for women and 29.7% for men).

Main destination countries for tertiary-educated women are the USA, Canada, and United Kingdom (as in the case of highly educated men migrants), while leading

sending countries were India, Philippines, and China. Although, it is interesting to note that the fourth and fifth source countries were United Kingdom and Germany, attesting the high mobility of European highly skilled migrants.

Moreover, the figures allowed to enlighten another important phenomenon, namely, the high concentration of highly educated women migrated from the poorest countries, as demonstrated by those coming from Western Sahara, Pitcairn Islands, Zambia, and Nigeria, where the share of tertiary educated was, respectively, 82.4%, 63.4%, 54%, and 52%. Such a polarization can be explained by the fact that skilled migration is higher for women coming from poor countries where higher are gender discriminations in education and labor market. Thus, highly educated women are more likely to leave, as through migration can achieve better career opportunities and live in more meritocratic societies (Dumont, Martin, & Spielvogel, 2007; IOM and OECD, 2014), although such ambition not always is realized.

Even in the destination country, female highly educated migrant can face obstacles in accessing the labor market, despite the higher educational attainment. As a matter of fact, migrant women are employed at a lesser extent in comparison to both native-born women with the same education level and highly educated male migrants as well. In 2011, in fact, the employment rate was, respectively, 64.8% for skilled female migrants, 72.8% for native skilled female, and 76.4% for tertiary-educated men migrants (OECD-DIOC database, 2011).

The gender bias in labor market results to be even more dramatic when the level of brain waste—that is, the under-use of the qualifications that a migrant hold—is analyzed. Women, indeed, are more likely to suffer from over-qualification than man, especially in some areas, such as Southern Europe where the shortage in less-skilled jobs (for example, the domestic and care sectors), highly protected skilled works, and no recognitions of qualifications increase the number of overqualified skilled women migrants.

Such discriminations, besides, is mostly commune among non-OECD foreigners which have to face the deskilling of their qualifications and the disappointment of their career ambitions. Among the overqualified, which in 2011 amounted to 616 thousands skilled women (native and foreign born in the OECD countries), 470 thousands came from a non-OECD States, representing the 76% of the female brain waste in this area. The highest percentages of overqualified non-OECD highly educated migrants were found in Ireland, the United Kingdom, Canada, and Poland (respectively, 85%, 83.8%, 82%, and 79.5%), while among those born in other OECD countries, the pick was in Portugal, Chile, Slovenia, and the Netherlands. In this countries, he highest over-qualification rate was 51.4%, definitely smaller in comparison to non-OECD foreigners. Finally, native female skilled workers as well suffered from brain waste, in particular in Germany (50%), Mexico (43%), and Iceland (40%).

One of the sectors mostly affected by over-qualification is skilled migrants coming from Europe, Africa, and the Philippines, that frequently fail in getting the recognition of their qualifications. Nurses, for example, experience a considerable downgrading of their skills and competences, as they enter the labor market at level far 154 A. Pagano

below their education attainment or the occupation they hold before migrating. Moreover, in this sector brain waste can differ significantly, depending on whether they were recruited in the public or private sector; in this latter case, deskilling and over-qualification are predominant as migrants are employed as care assistant rather than nurses (Cuban, 2016).

11.4 Concluding Remarks

Human capital has been recognized as one the key factors in the global competitiveness, resulting in an international race for the best and brightest talents. Despites the necessity to attract highly skilled professionals, gender bias can be found in the international labor market, independently from the type of country. Several studies have found the increasing quantity and quality of female highly skilled workers; nonetheless, they are still underrepresented among economic actors. Such discrimination is even more accentuated among female skilled migrants that due to several factors (male dominant sectors, nonrecognitions of qualifications, job shortage in less-skilled sectors, informal economies, and unstable occupations) suffer from a mismatch between skills and employments. In the long run, such inequality can affect both migrants and host countries, considering that these latter cannot benefit from the skills and competences of the female overqualified migrants resident on national territories.

Academics and policymakers should pay more attention on this phenomenon, especially when considering the lack of harmonized data and information concerning the employment status, entrance channels, and their work outcomes. Indeed, unlike men, female skilled migrants do not always enter host countries through the labor institutions. On the contrary, they may migrate through marriage, family reunification, and refugee status, meaning a nonrecognition of their skills and qualifications and, hence, additional obstacles when trying to access local labor markets.

A starting point to properly address the gender bias within female skilled migrations should be the differentiation between the concept of skilled migrations and skilled migrants, which is particularly pertinent in women experience. While skilled migrations should refer to those migrants entering in a country to be employed in a skilled job, skilled migrants should concern all those foreigners with a tertiary education level or qualifications, irrespective of their current occupations, since they could be deskilled or unemployed.

Such distinctions would enhance the inclusion of educational attainment in the migration selection policies and produce more gender-sensitive labor procedures, such as support structures for newly arrived qualified migrants, accessible and appropriate professional language courses, and re-skilling programs in order to reduce the useless waste (mostly female) of talents and skills.

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Chapter 12 Intellectual Capital and Gender Capital: The Case of Italian Universities

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Abstract This chapter aims to understand whether the organizations characterized by the culture of diversity and inclusion are organizations that promote the creation of value. Starting from the hypothesis that gender capital, considered as gender diversity within a business reality, facilitates the transfer of interpersonal skills and relationships with stakeholders and company culture, our analysis is aimed at assessing the impact of gender capital on intellectual capital of organizations and, in particular, on its components (human capital, relational capital, structural capital). The research proposes a quantitative method. In the first step of the analysis, for each university the number of women full professors, associate professors and researchers are identified as independent variables. In the second step, the intellectual capital components are identified by the quota premium that universities receive from the ministry for research and teaching activities as dependent variables. To assess the impact that gender capital has on intellectual capital, the independent variables are correlated with the dependent variables. This methodology allows us to understand if the culture of diversity is able to generate greater value within organizations, in particular, if women's skills can make a real difference to foster the competitive advantage of an organization. Moreover, this study contributes expanding the literature on gender studies and it offers a new perspective applied to the concept of gender capital. The outcomes of the application are related to a better understanding the need to fill the cultural and social gap. The results allow asserting that to implement diversity within organizations and develop the principle of inclusion enables to create greater value in organizations.

Keywords Gender capital • University • Women • Intellectual capital

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12.1 Introduction

Starting from the concept of diversity, this chapter aims to understand whether the organizations characterized by the culture of diversity and inclusion are organizations that promote the creation of value.

Diversity can be identified as a relevant difference that an individual has with reference to a group whereby he interacts.

The diversity could lead to an enhancement of skills and competitiveness and allows to set up new processes that make companies more competitive in the generation of ideas, processes and innovations.

Diversity can also be seen as gender diversity or diversity between men and women within a business reality. Gender diversity can help to identify different forms of gender capital; gender capital refers to the knowledge, resources and aspects of identity available, within a given context, that permit access to specific gendered identities.

According to the hypothesis that gender capital enables the transfer of interpersonal skills, relationships with stakeholders and company culture, the analysis is aimed at assessing the impact of gender capital on intellectual capital of an organization and, in particular, on its components (human capital, relational capital, structural capital).

The study is focused on Italian university system, aiming to understand whether an impact of the presence of women within university system on the universities' performance exists.

In the academic context, in the last few years, the access to university and careers for women are much more difficult than for men since it is influenced by stereotypes and gender discrimination.

The aim of this study is to check whether the skills and women's attitudes can make a real difference to achieve high performance and competitive advantage in the university than the men's ones.

The research is based on a quantitative approach. The empirical study is carried out on Italian university system. The sample consists of 60 universities; for each university gender capital indicators and intellectual capital components are identified.

To calculate the gender capital indicators, considered as the independent variables are the three different functions: management function, operational function and general function.

To assess the intellectual capital, considered as the dependent variable, this analysis is based on the hypothesis that the intellectual capital components affect the performance of universities. These performances can be assessed by the quota premium that universities receive from the ministry for research and teaching activities.

In the last step of the research, to assess how gender capital affects intellectual capital, the independent variable is correlated with the dependent variable.

The research sources are of secondary nature (documents, reports, news, journal articles in open sources, scientific papers and books, databases).

Therefore, the research question is the following:

RQ1: Does gender capital affect universities' intellectual capital?

12.2 The Role of Diversity

At a general level, diversity can be defined as a the relevant difference that an individual has compared with a group whereby he interacts and that can affect the group growth or satisfaction (Granelli & Robotti, 2016, p. 7).

The creation of an inclusive organization or organizations in which workers can contribute achieving high performance with their skills while the company respects and values their talent and gives them a sense of belonging (Groysberg & Connolly, 2016, p. 53) could improve benefits related to diversity.

Some authors stated (Grieco, 2016, p. 28) that it is necessary to build diversified organizations since this diversity could lead to an enhancement of skills and competitiveness of employees and allows to set up new processes that make companies more competitive in the generation of ideas and innovations.

Innovations, in the digital era (Murrayet al., 2016; Trequattriniet al., 2016), have modified the management of organizations. If half of the world talent is not integrated into the transformation, the innovation could be compromised and, consequently, could increase inequalities. In this perspective, diversity is a key factor that helps organizations to be stronger on the market (Roehler, 2016, p. 29).

Nowadays, the presence of diversified human resources represents the source of competitive advantage for organizations because it allows taking advantage of their talents, in order to innovate more (Granelli & Robotti, 2016).

In this perspective, diversity can also be seen as gender diversity or diversity between men and women within a business reality.

Gender diversity can help to identify different forms of gender capital. Gender capital refers to the knowledge, resources and aspects of identity available, within a given context, that permit access to specific gendered identities (Bridges, 2009).

Many studies have investigated the gender diversity issue (Sala, 2008; Croson & Gneezy, 2009; Paoloni, 2011; Paoloni & Dumay, 2015).

Our chapter focuses the attention on Italian university system. In literature, different studies have analysed the academic world on the gender perspectives in the national and international context (Andres & Adamuti-Trache, 2007; Bagilhole, 2002; Bianco, 2002; Facchini, 1997; Palomba, 2003).

Many authors state that it is much more difficult for women than for men to have access to university and to pursue academic careers, since women are influenced by stereotypes and gender discrimination (Frattini & Rossi, 2012).

Some studies carried out on specific scientific sectors of universities highlighted the low number of publications, career progression and participation in the management of the main Italian academic associations of women (Baldarelli, Del Baldo, & Vignini, 2015, 2016).

It is asserted (Bianco, 2002) that women have gained positions in the Italian university system compared to the past, but women's opportunities are still far less from that of men, especially in some scientific areas. Considering women, the greatest obstacle is the passage from researcher to associate professor: women have, on average, 66% of the chances of men; at none faculty are their chances better than 80%.

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The aim of this study is to check whether a gap related to the women presence in the Italian university system exists and to understand whether the skills and women's attitudes can make a real difference to achieve higher performance in the university than the men's ones.

12.3 The Role of Intellectual Capital in the University System

The universities are considered critical institutional actors in national innovation systems; therefore, the European higher education and research institutions are trying to make them more comparable, flexible, transparent and competitive (Sánchez & Elena, 2006; Todericiu & Şerban, 2015, p.716).

Since the main goals of universities include the production of knowledge (research), the diffusion of knowledge assets (teaching) and investing in human resources (Leitner & Warden, 2004; Sánchez, Elena, & Castrillo, 2009; Secundo, Dumay, Schiuma, & Passiante, 2016; Veltri, Mastroleo, & Schaffhauser-Linzatti, 2014), it is possible to identify the universities' inputs and outputs as intangible assets (Cañibano & Sánchez, 2009).

Universities can be considered as the knowledge incubators in which the main strategic asset is represented by the knowledge held by individuals who belong to it.

Intellectual capital represents the stock of knowledge held by organizations; thus, it can ensure a competitive advantage (Stewart & Ruckdeschel, 1998). It is the sum of everything everybody in a company knows that gives it competitive edge; it is intellectual material, knowledge experience, intellectual property and information that can be used to create value (Dumay, 2016).

Intellectual capital can be divided into three components: human capital, structural capital and relational capital. Human capital represents a set of knowledge, skills, capabilities and capacities own by individuals in the organization (Becker, 1964; Nonaka, 1994). Relational capital is the knowledge relative to a set of relationships between the company and stakeholders (Dorrego, Costa, & Fernández, 2013; Prahalad & Ramaswamy, 2000). The structural capital is identified by the strategy, culture, structures, systems, practices and organizational procedures (Teece, 2009).

Intellectual capital for universities can be classified and defined in terms as shown in the list below (Secundo et al., 2016, p. 302; Leitner et al., 2014):

- Human capital: referring to the intangible value that resides in the people individual
 competencies. This includes the expertise, knowledge and experiences of researchers, professors, technical and administrative staff and students' competencies.
- Relational capital: referring to the intangible resources capable of generating value linked to the university's internal and external relations. This includes its relations with public and private partners, position and image in (social) networks, the brand, involvement of industry in training activities, collaborations with international research centres, networking with professors, international

exchange of students, international recognition of the universities, attractiveness and so on.

• Structural capital: referring to the resources found in the organization itself, i.e. what remains without the employees. This includes the databases; the research projects; the research infrastructure; the research and education processes and routines; the university culture, image and reputation; and so on.

12.4 The University's Quota Premium

In order to proceed with the attribution of amounts for bonus related objectives, equivalent to 20% of the total resources available, the Ministry of Education, University and Research has identified a whole range of criteria and methods.

These criteria and methods are the results of an assessment carried out on teaching and researching activities within the universities.

In this regard, the percentages related to the four following aspects are identified:

- a. 65% according to the results achieved in the assessment of research quality (VQR 2011–2014)
- b. 20% according to the assessment of employment policies (VQR 2011–2014)
- c. 7% according to teaching results with specific reference to the international factor
- d. 8% according to teaching results with specific reference to the number of regular students who have acquired at least 20 UTCs

The importance given to the first aspect is 65%, and the analysis carried out takes into consideration the following parameters:

- IRAS 1
- IRAS 3
- IRAS 4

In particular, IRAS 1 is the qualitative-quantitative indicator of the products of research expected by the university. This indicator is given by the relationship between (products conferred vs. expected VQR 2004–2010 and products conferred vs. expected VQR 2011–2014).

IRAS 3 refers to the national and international competitive loans for research.

IRAS 4 however refers to the number of doctorate students, registered in specialized medical and sanitary schools, granted research and post-doc grants.

The three parameters illustrated above are then used to compose the following algorithm:

IRFS =
$$(85\%IRAS1 \times ka + 7.5\% \times IRAS3 + 7.5\% \times IRAS4)$$
,

where:

IRFS is the final indicator of the research quality of the structure, integrating the indicators IRAS1, IRAS7 through the importance given to the 14 areas.

IRAS1 is the qualitative-quantitative indicator of the research products expected by the university.

IRAS3 is the indicator related to national and international research funds.

IRAS4 is the number of doctorate students, registered in specialized medical and sanitary schools, granted research and post-doc grants.

With reference to the second aspect, whose importance is 20% of the total of the premium quota, the employment policies are assessed (VQR 2011–2014).

The scientific production of the individuals hired by the university or involved in a higher role or segment during the period 2011–2014, as can be seen in the VQR, equivalent to the IRAS2 value and considering the importance in terms of organic points (OP) of the individuals employed during the period in question as a dimensional variable.

The third aspect whose importance is 7% aims to assess the results of teaching with specific reference to the international factor, therefore:

- The number of incoming students in ERASMUS, academic year 2014/2015
- The number of students registered for the first time in study courses during the academic year 2014/2015, with qualifications acquired abroad
- The number of outgoing students in ERASMUS for the academic year 2014/2015
- The number of UTCs acquired abroad during the year 2015 by students registered in the academic year 2014/2015
- The number of graduates in 2015 within the normal duration of the study course who have acquired at least nine UTCs abroad

Finally, the fourth aspect assessed considers the regular students of the academic year 2014/2015 who have acquired at least 20 UTCs during the year 2015; the importance of this parameter is 8%.

12.5 Framework

Our framework is based on the following hypotheses:

- Gender capital is the sum of knowledge, resources and aspects that permit the access to specific gender identities since it facilitates the transfer of interpersonal skills, relationships with stakeholders and company culture, and therefore, it is possible to assert that gender capital is able to affect the intellectual capital that represents the stock of knowledge held by organizations.
- Many studies have highlighted that in a company, the intellectual capital has a
 positive impact on financial performance, as it allows you to gain more profit
 (Mouritsen et al., 2001).

Therefore, our framework (Fig. 12.1), based on the literature analysed, starts from the assumption that intellectual capital is linked to the performance of the organization and that gender capital is an expression of intellectual capital.

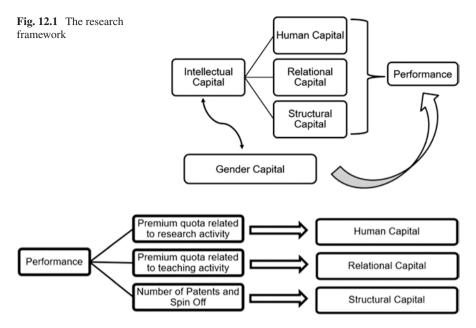


Fig. 12.2 Intellectual capital components

Since, it is particularly difficult to identify objective variables that estimate intellectual capital, our study has focused on showing that gender capital is related to the performance of organizations, so for transitive property, as performance is related to intellectual capital, the latter will also be related to gender capital.

Following our hypothesis, the intellectual capital components influence the performance of universities, and these performances can be assessed by the quota premium that universities receive from the ministry for research and teaching activities; the list below shows as we have calculated the intellectual capital components for each university (Fig. 12.2):

- Human capital: premium quota related to research activity equals to the sum of the amount of indicators A and B.
- Relational capital: premium quota related to teaching activity equals to the sum of the amount of indicators C and D.

With regard to the structural capital, it is possible to identify the number of patents and spin-offs held by university.

12.6 Research Approach

Our research aims at investigating the relationship between gender capital and intellectual capital in the university system in Italy.

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Table 12.1 Number of public universities analysed for each region

Region	Number of universities
Abruzzo	3
Basilicata	1
Calabria	3
Campania	6
Emilia Romagna	4
Friuli Venezia Giulia	1
Lazio	6
Liguria	1
Lombardia	7
Marche	4
Molise	1
Piemonte	3
Puglia	4
Sardegna	2
Sicilia	3
Toscana	4
Umbria	2
Veneto	5

The analysis is aimed at assessing the impact of gender capital on the intellectual capital of an organization and, in particular, on its components (human capital, relational capital, structural capital).

The research is based on a quantitative method (Anderson, Sweeney, Williams, Camm, & Cochran, 2012; Myers, 2015; Waters, 2008).

In order to answer the research questions, an empirical analysis is carried out on Italian university system. The sample consists of 60 universities (Table 12.1).

For each University, gender capital indicators and intellectual capital components are identified.

In the first step of the analysis, the gender capital indicators have been calculated, considered the independent variable. The gender capital indicators should identify the presence of women in universities on the total of professors and researchers.

To determine these indicators, three different functions are identified considering what Professors and Researchers can perform inside the University system:

- Management function
- Operational function
- General function

For each function, it is determined a different type of indicators of gender capital.

• Gender capital with managerial functions

$$GCM2 = \frac{Full\ Women\ Professors + Associate\ Women\ Professors}{Total\ Full\ Professors + Total\ Associate\ Professors}$$

Gender capital with operational functions

$$GCO = \frac{Women Researchers}{Total Researchers}$$

• Gender capital with general function

$$GCG = \frac{Full\ Women\ Professors + Associate\ Women\ Professors + Women\ Researchers}{Total\ Full\ Professors + Total\ Associate\ Professors + Total\ Researchers}$$

The following table reports the statistics summary related to gender capital indicators calculated (Table 12.2).

In the second step, to assess the intellectual capital components, the percentage of premium quota is calculated that the Ministry of Education, University and Research funds to universities for teaching and research activities. The following table reports the statistics summary related to intellectual capital components (Table 12.3).

In this first phase of the research, structural capital has not been analysed because data for empirical analysis was not available for all universities.

In the last step, in order to investigate the connection between intellectual capital and gender capital and to understand whether the women's attitude and skills can

Variable	Number	Mean	Standard deviation	Min	Max
Women	60	0.369746	0.0643673	0.2183908	0.6315789
Women full professor	60	0.2178112	0.0767955	0.0952381	0.6363636
Women researchers	60	0.4813324	0.0661575	0.2643678	0.7272727
Women full and associate professors	60	0.308818	0.0703401	0.1712329	0.5925926

 Table 12.2
 Summary statistics of gender capital indicators

Table 12.3 Summary statistics of intellectual capital components

			Standard		
Variable	Number	Mean	deviation	Min	Max
Research activity premium quota	60	0.0166667	0.0148129	0.000842	0.0676892
Teaching activity premium quota	60	0.0166667	0.0156877	0.0017385	0.0848212

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make a real difference to improve the competitive advantage of the universities, for each function, the gender capital indicators are correlated with intellectual capital components.

Data sourcing has been carried out using the following sources (Yin, 2013). The data are collected through the official website of Ministry of Education, University and Research (www.miur.cineca.it) and through the *Netval Report 2016*.

Overall, the sources are of secondary nature (documents, reports, news, journal articles in open sources, scientific papers and books, databases).

Empirical research is conducted using Stata statistical software.

12.7 Results and Discussion

Research findings are based on the systematization of the literature and on the analysis of data defined earlier.

Variables referred to intellectual capital components (percentage of premium quota related to research activity; percentage of premium quota related to teaching activity) are correlated to gender capital indicators for each function (management function, operational function, general function).

The results of correlations are reported in Table 12.4.

The results show a moderate correlation between gender capital indicators and intellectual capital indicators.

In particular, the result shows that, in general, in the academic system, the women affect moderately both researching activities and teaching activities (the value of Pearson's coefficient, R, in the first case is equal to 0.439; in the second case, R is equal to 0.449).

With reference to the management function, the results of correlation indicate that women full professors and women associate professors have an impact on the teaching activities (the values of Pearson's coefficient, R, are equal to 0.573 and 0.474).

The last correlation shows that women researchers affect more the research activity than the other activities (the value of Pearson's coefficient, R, is equal to 0.489).

Due to the low value of the correlations, it is not possible to assert certainly that there is a correlation between gender capital and intellectual capital in universities.

	General function	Management function		Operational function
	GCG	GCM1	GCM2	GCO
Human capital	0.439	0.457	0.427	0.489
Relational capital	0.449	0.573	0.474	0.431

Table 12.4 Correlations between gender capital indicators and intellectual capital indicators

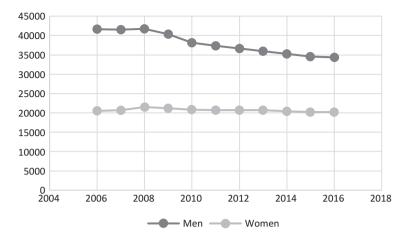


Fig. 12.3 The numbers of men and women in Italian universities 2006–2016

This finding could be affected by some variables. First, the lack of correlation may be due to the nature of universities that can be considered as highly knowledge-intensive organizations. Considering highly knowledge-intensive organizations, human resource management is a business strategy; the competitive advantage is built on the ability and talent of a company's most productive staff (Becker, 1964). In highly knowledge-intensive organizations, the distinction between men and women doesn't matter, because in these institutions the relevant factor is the competencies of workers (in this case professors and researchers) and not their gender.

A second important aspect that can affect the results is the difference in number between men and women.

Data readily available from the website of the Ministry of Education and Research highlights the lack of representativeness of women in the world of scientific research and their difficulties in gaining access to the highest positions in academia (Fig. 12.3).

The figure shows that the number of women professors is always lower than that of men.

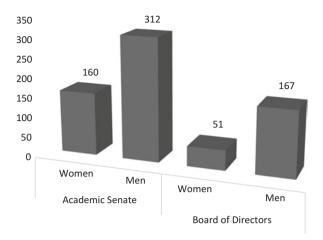
The percentage of women decreases even if analysing the top of the academic hierarchy (Fig. 12.4).

With regard to the women position, the academic context is not different from the overall job market: it is observed that the percentage of women decreases as you rise to the top of the professional hierarchy, this in spite of the large number of women who graduate or attain a PhD.

In this perspective, it is also reported the decrease in the number of women in some PhDs who will, in short, to a further decrease of the woman presence in the Italian scientific context. This decrease can be partly explained by the increasing difficulties that young women have to match the scientific activities with the construction of a personal and family life (Frattini & Rossi, 2012).

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Fig. 12.4 The numbers of men and women in the government of universities



However, even if women do not have impact on the performance of universities, women are relevant rather in the creation of positive work environment (Granelli & Robotti, 2016). A positive work environment is important because it allows getting a higher performance. The empirical analysis was carried out on indicators calculated by the university by a few years; a positive work environment is built up in the long-term period; therefore, the data cannot be affected by the influence of this factor.

12.8 Conclusion

This study sought to gain an understanding as to whether and how the gender capital can affect the intellectual capital in the university.

Our research is based on the hypothesis that intellectual capital influences the university's performance assessed by the quota premium that universities receive from the ministry for research and teaching activities.

Therefore, once gender capital indicators are identified, which represent the presence of women in the university, these indicators were correlated with the intellectual capital components.

In this first step of the research, findings show that there is not a strong correlation; therefore in the universities, which could be considered highly knowledge-intensive organizations, the distinction between men and women doesn't matter: in these institutions, the relevant factors are the competencies of the workers and not their gender.

This result could be affected by some variables. First, the lack of correlation may be due to the difference in number between men and women. Moreover, the analysis was performed with data gathered in a limited number of years. As it has been identified in women, the ability to generate a positive working environment (Granelli &

Robotti, 2016), that is, a condition very hard to meet in a short-term period, the data may not have been still influenced by this factor, and therefore the results may not include the women's skills real contribution.

This study is the first step of our research and, therefore, it presents many limitations due to a preliminary approach to the topic of analysis.

The limits of research are numerous and different:

- It was not possible to identify intellectual capital variables that were not related to performance.
- The variables that identify the gender capital are exclusively numerical.
- The analysis of structural capital has not yet been developed.
- Control variables that can eliminate the possible heteroscedasticity problem have not been used.
- With regard to the composition of the sample, only public universities were considered.

Therefore, future research will be aimed:

- At finding alternative variable which identify the gender capital
- At identifying other university performance indicators
- At deepening the analysis by dividing the gender capital into disciplinary scientific sectors in order to identify possible differences
- At carrying out a comparative analysis to understand what is the contribution that women produce to the result of an organization relating to the men's contribution

Acknowledgment This paper is the result of a group effort of analysis and reflection, *Raffaele Trequattrini*, authored Sects. 12.6 and 12.8; *Fabio Nappo*, Sects. 12.3 and 12.4; *Alessandra Lardo*, Sect. 12.1 and 12.5; and *Benedetta Cuozzo*, Sect. 12.2 and 12.7. All authors read and approved the final manuscript.

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Chapter 13 Interval-Based Gender Diversity Composite Indicators in Gender Studies

Federica Doni, Carlo Drago, and Paola Paoloni

Abstract This study aims to construct an original interval-based composite indicator of the gender diversity considering different assumptions on the development of the composite indicator. In this way the composite indicator built can be considered more robust than a classical version of the same indicator. Composite indicators are a very important tool to analyse and evaluate policies and sectors. The problem in using composite indicators is that the results which can be obtained can be dependent to the assumptions given on their construction. In this sense we have already considered an initial approach in the construction of composite indicator (Paoloni et al. (2016) Towards a new architecture of knowledge: Big data, culture and creativity. Proceedings, 15–17 June 2016 Dresden Germany (pp. 1944–1958)). We take into account different assumptions, and we are able to construct an intervalbased composite indicator. In this way we can consider a value which is useful for the comparison (the chosen assumption), a centre of the composite indicator, and the range which is related to the variability due to the different assumptions. Our work contributes to the existing literature on composite indicators in gender studies. In particular our work is addressed on providing a composite indicator of gender diversity for the listed European companies. This study is useful to policy purposes because it helps the process of decision-making which can be based on the different rankings which are derived from the interval-based composite indicators.

Keywords Gender • Composite indicators • Europe • ESG • Corporate reporting • Women • Board

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© Springer International Publishing AG 2018
P. Paoloni, R. Lombardi (eds.), *Gender Issues in Business and Economics*,
Springer Proceedings in Business and Economics,
DOI 10.1007/978-3-319-65193-4_13

13.1 Introduction

A composite indicator can be defined a quantitative or also a qualitative measure which departs from a series of different observations for a series of statistical units. A composite indicator can be used in order to combine the information which can be obtained by considering the different statistical measures. In this sense it is possible to use the different composite indicators computed in order to compare different scenarios, analysing trends and also discussing policy implications (Nardo et al., 2005). That said, there are many different types of composite indicators which are related to various problems and frameworks (e.g. it is possible to mention composite indicators related to competitiveness, transparency, innovation and so on.). The usefulness of the composite indicator is clear: by evaluating many different (and usually different) indicators measuring different multidimensional concepts. The concept which is defined by the composite indicator cannot be measured by considering only one an aspect depicted by the different indicators, so it is necessary to identify a way to take into account this type of complex information on a unique composite indicator.

A relevant problem for composite indicators is the choice of the different weightings (Nardo et al., 2005). There are important cases in which it is not possible to explicitly define a unique specification for a composite indicator. It is, for example, the case of having different types of components on the same indicator and is not so clear which specific weighting approach is necessary to use. In fact using different weights is possible to obtain different composite indicators and different results.

At the same time, a relevant problem is also the choice of the different types of assumptions which need to be considered on a composite indicator (Nardo et al., 2005; Aiello and Attanasio n.d; see also Munda, 2011). These different choices are related to the combination or aggregation approach to be used, on the standardization use (or the scaling) of the different variables and also on the use of different components on the composite indicator at the same time (the selection and the definition of the sub-indicators used). It is possible to note that also in this case, these different choices can have an impact on the different ranking composite indicators (Nardo et al., 2005; see also Saisana et al. 2005).

Which specific methodological assumptions are necessary in order to build a composite indicator? This could be an important decision to consider on the construction of a composite indicator. In this case it is usually performed in literature a sensitivity analysis in order to evaluate the robustness of the different composite indicators chosen and the sensitivity of the results to the changes on the adoption of a methodological choice.

13.2 Background of Studies and Literature Review

Gender studies embrace a huge range of different fields, but recently the possibility to use big data can provide interesting opportunities to develop and enhance different tools which are able to assess several gender topics. In this view, it is possible to investigate various fields within gender studies through different statistical methods.

For example, it is possible to improve performance metrics and to provide high-returned applications of data and related analytics. An interesting topic is the analysis of the extent and the quality of gender-related information disclosed within corporate reporting. The adoption of a specific focus on the gender perspective in the context of corporate reporting can support company's board and management to maximize the impact of this process on the organization's value creation process (Paoloni, Doni, & Drago, 2016).

Recently, an important milestone issued by the European Commission (EU Directive 2014/95/EU) highlighted the relevance of the gender diversity information as it regards disclosure of nonfinancial information and diversity information by certain large undertakings and groups in the European Union. This initiative can be brought back to a large impetus from several organizations to provide frameworks and guidelines for reporting of nonfinancial information, in particular on social issues, with a specific focus on gender diversity (Guiding Principles on Business and Human Rights, UN, 2011; Guidelines for Multinational Enterprises, Organisation for Economic Co-operation and Development OECD, 2011; ISO 26000 Social responsibility, International Organization for Standardization ISO, 2010; Tripartite declaration of principles concerning multinational enterprises and social policy, International Labour Organization ILO, 2017; GRI Sustainability Reporting Guidelines; Global Reporting Initiatives, last version G4, 2013).

In respect of this dramatic growing interest on these issues, this paper can contribute to the previous studies which usually analyse the gender-related information using disclosure score indices (Robb, Single, & Zarzeski, 2001; Vanstraelen, Zarzeski, & Robb, 2003) with the aim at investigating the quantity and the quality of these issues through the methodology of content analysis taking the form of judgements of kind, magnitude and frequency of data (Hayes & Krippendorff, 2007). This analysis can codify the text or content of a piece of writing into various groups (or categories) depending on selected criteria (Weber, 1990). Content analysis is a well-established method in social science, and it involves classifying text units into categories (Beattie, McInnes, & Fearnley, 2004; Beattie & Thomson, 2007). This method has been widely used in assessing the extent and nature of corporate social reporting (see for example Adams, Coutts, & Harte, 1995; Adams & Harte, 1999; Gray, Kouhy, & Lavers, 1995). Several problems linked to the use of content analysis (Dumay) and the development of disclosure score indices can lead to some difficulties and criticisms to investigate nonfinancial information disclosure. For example, there are some problems on delivering a reliable content analysis (Boyatzis, 1998; Weber, 1990), on the choice of different unit analysis adopted, such as words, sentences or pages (Beattie & Thomson, 2007; Gray et al., 1995). There is also the need for testing the reliability of the coding decision rules (Milne & Adler, 1999; Krippendorff, 2004; Krippendorff & Bock, 2009).

Various approaches can be taken to analyse annual reports in order to reveal the presence, the extent or foci of nonfinancial information following two different paths: (1) the number of disclosures or (2) the amount of disclosures (Gray et al., 1995).

Instead of measuring the extent of the disclosures, the simplest way is to establish the presence or absence of certain themes and indicators in each sampling unit, here defined to be corporate annual reports as a major channel for corporate communication supported by a number of studies (Adams et al., 1995; Gray et al., 1995; Tinker, Neimark, & Lehman, 1991; Vuontisjärvi, 2006).

Given these premises, to limit these criticisms of content analysis and to reach a great level of reliability avoiding subjectivity, the gender-related information should be analysed by specific indicators developed with Environmental Social and Governance (ESG) data. In this perspective it is possible to obtain some specific issues on gender selecting from a huge number of indicators such as women employment (social issue), women management (social issue), female executive (governance issue), women on board (governance issue), female CEO or equivalent (governance issue), female chairperson or equivalent (governance issue) and women management to employee ratio (social issue).

These indicators have been extracted from corporate reports drawn up by listed companies by authoritative databases such as Bloomberg LP and Asset 4 Thomson Reuters that are able to provide a high number of ESG metrics. For example, Bloomberg ESG data is collected from company-sourced filings such as Annual Reports, Corporate Social Responsibility reports, company websites and a proprietary Bloomberg survey that collects directly data from over 20,000 companies worldwide across more than 50 countries (Bloomberg, 2017).

In other terms these ESG themes are able to describe the different levels of involvement and engagement of women in business activities, and they can provide an early broad representation of the presence of women in listed companies.

Given these premises, it may be useful to summarize these gender-related issues in a unique indicator, i.e. a *composite indicator*, which is able to summarize gender issues concerning the role and the equality conditions within the business context. In this perspective, the use of composite indicators could provide a relevant advantage in order to synthesize and measure complex phenomena (Freudenberg, 2003; Nardo et al., 2005). In this respect, composite indicators usually provide a summary of different single indicators which can be integrated (Freudenberg, 2003).

Literature on composite indicators shows that these metrics can be used at different levels, especially at country level, to define and to measure a concept (e.g. on gender issues) that should be operationalized in the same manner. For example, composite indicators can be designed to measure and compare existing structural gender equality in the countries of the European Union using three different dimensions—education, work and power—including 18 indicators that can be calculated annually (Bericat, 2012). In the same view, we can measure the multidimensional concept of gender inequality through the Multidimensional Gender Inequality Index (MGII) using the multiple correspondence analysis (MCA) to classify the separate forms in which gender inequality looks in developed and developing countries, respectively (Ferrant, 2014).

The availability of composite indicators can permit the measurement of multidimensional social concepts such as the structural gender equality that affects several aspects of life. Composite indicators can be considered, in other words, as a series of individual indicators compiled into a single index based on an underlying model (Nardo et al., 2005). These indicators are useful tools to represent multidimensional gender-related concepts as they are a valid, robust and detailed description of reality (Bericat & Bermejo, 2016) (Table 13.1).

 Table 13.1
 Gender composite indicators: a brief overview

Author/s	Journal/year	Indicator/s	Note
McGillivray M. and Pillarisetti J.R.	Journal of international development, 2004	GDI (gender-related development index) and GEM (gender empowerment measure)	This paper examines intercountry inequality in indicators of human well-being. It is primarily concerned with inequality in two gender-related, composite indicators of development levels proposed: The gender-related development index (GDI) and the gender empowerment measure (GEM)
Permanyer, I.	Feminist economics, 2013	GII United Nations development program (UNDP, 2010)	This is a critical assessment of the GII developed by UNEDP suggesting a new composite index of gender inequality that incorporates the GII variables but uses a much simpler functional form
Castellano R. and Rocca A.	International journal of manpower, 2014	GGLMI (gender gap labour market index) is a new composite indicator index specifically focused on gender gap in labour market	GGLMI is an index which combines different dimensions of gender disparities in labour market. The GGLMI provides insights into gender disparities taking into account participation and conditions, integration, returns and discrimination in labour market of European countries. This index can be useful to help policymakers to understand the ramifications of gaps between women and men
Ferrant G.	Social indicator research, 2014	MGII (multidimensional gender inequality index)	MGII is a weighted measure of the multidimensional concept of gender inequality
Castellano R. and Rocca A.	International journal of social economics, 2015	Analysis of the GGLMI structure	The authors show the findings of a composite indicator for the gender gap in the labour market, together with a sensitivity analysis on the results based on a multimodelling approach, involving the activation of different sources of uncertainty, with the aim of testing the stability of the composite indicator methodology

(continued)

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Author/s	Journal/year	Indicator/s	Note
Bericat E. and Bermejo E.S.	Social indicator research, 2016	Annual time series and the average annual growth rate of EGEI for the EU and its 27 member countries for the period 2000–2011	This analysis provides the scientific community a valid and precise synthetic description of the current situation and evolution, from 2000 to 2011, of structural gender equality in European

Table 13.1 (continued)

Source: Authors' elaboration. This table shows a non-exhaustive list of gender composite indicators

countries

13.3 Interval-Based Composite Indicators

A solution on this problem is to consider an approach based on interval data. In particular it is possible to consider different assumptions related to the same composite indicator, and it is possible to compute all the different composite indicators belonging to each approach. At the end of the procedure, it is possible to obtain a specific composite indicator. In this way we obtain a set of different composite indicators for each statistical unit. Which indicator is necessary to consider on this case?

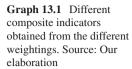
Each group of the different specific indicators obtained can be considered for the construction of a specific interval. The approach suggested by Drago (2014) is considering the set of the composite indicators obtained and computing the different minima and the maxima for each composite indicator obtained by the different methodological choice. The advantage of this approach is to have a composite indicator which can take into the account the different assumptions, and so it could be robust and can be used on the policy analyses. At the same time, the centre and the radius of the composite indicator could be also computed in order to give relevant information which could be used on the creation of the different ranking.

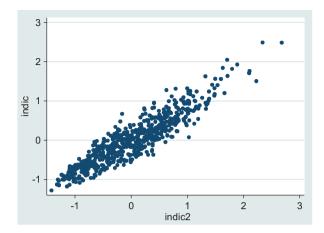
13.4 Interval-Based Composite Indicators for the Analysis of Gender Policies

We consider the work of Paoloni et al. (2016) as statistical benchmark. In this sense we consider different methodological approaches in order to construct the different composite indicators. In particular we evaluate the different composite indicators which can be obtained by considering different specific weightings. In particular we can have the result shown in the Graph 13.1.

We obtained the below scatterplot by considering the different weightings:

Then we consider and compute another composite indicator based on different weightings than the first two (we are weighting more the first variable the woman employment). Each different composite indicator is useful to provide higher robustness on the analysis. In particular it is possible to see also from Graph 13.1 that there





is a high correlation between the results obtained from the composite indicators based on different assumptions (in particular based on different weightings). Finally we compute the centres and the radii for each different statistical unit (the firm), and we obtain the rankings considering the different centres identified from the interval-based composite indicator. Our result is important because in this case, we are not considering explicitly a unique composite indicator, but we are considering different composite indicators, so the centre measure represents a robust evaluation of the phenomenon we are trying to measure and identify, i.e. gender diversity. These results confirm a general weakness of the position of women in the managerial roles. We do find that increasing the responsibilities of the position that considered the role of the woman tends to be less than proportional (see also Paoloni et al., 2016). The result seems to be robust considering our approach.

13.5 Conclusions

Our results show that the gender and the associate in workplace are a relevant issue especially for Europe, and so it is necessary to monitor adequately these issues.

Gender issues, with a specific focus on gender inequality in Europe, are a fundamental right which can strongly incentive the development of some composite indicators which seem to be the most useful tool to measure a multidimensional phenomenon such as the presence of women in the business context with several social implications. The influence of women at the managerial level or on the corporate governance structures can be represented through relatively new indicators, i.e. composite indicators. An index or composite indicator is a complex descriptive structure, based on both a theoretical framework and a conceptual definition, which forms a measurement model that is empirically operationalizable and capable of quantifying an aspect or phenomenon of social reality (Bericat & Bermejo, 2016, p. 57). In this respect it is possible to construct a unique composite indicator by

collecting several gender-related data on a multidimensional concept such as gender diversity disclosures. These indicators allow us to overcome the main limitations of the usual indices, and they can offer a summary recognition of the position and the role of women in large listed companies. This analysis can monitor and evaluate structural gender issues in Europe. However, this index has certain weaknesses and could be improved in the future. Despite the scarcity of data about the ESG gender-related issues, it would also be very important to broaden the field of observation by creating indices that target other important areas, which also require special attention in European social policy, such as gender violence and women's health and individual well-being (Bericat & Bermejo, 2016).

The analysis performed in 2016 (Paoloni et al., 2016) on the presence of women in some companies in Europe shows unexpected findings. The values taken by some variables analysed did not provide an optimistic view about the representation of women on boards and on management. This last finding argued an under-representation of women on board which was a heavily discussed topic in the popular press, but we found a similar result also for other variables (Women management; Female Executives). Although in several European countries, such as Norway, Spain, Italy, Germany, France, Netherlands, etc., there is a strong pressure for governance reforms to enhance the presence of female in the boardroom (Joecks, Pull, & Vetter, 2013), the situation is still critical. Some countries such as Italy and France required women quotas (Bohren & Strom, 2010), but the female representation in boardroom is still rather low (Farrell & Hersch, 2005). This almost predictable result is worsened by the other findings about the presence of women at the executive and managerial levels. Given the high representation of men as managers and executives, our findings about the percentage of women at the employment level are very unusual and unexpected. During the last decades, we can assist at the increase of the overall percentage of women in the workforce (Joecks et al., 2013); hence a rather low value referring to the women employment is quite surprising (Grosser, Adams, & Moon, 2008).

While these findings are relevant for ethical and social issues, performance effects of an increased female representation on the board are still a crucial topic. Several studies demonstrated rather ambiguous and mixed results (Campbell & Minguez-Vera, 2008; Rhode & Packel, 2010); hence it is important to assess this topic through the development of a composite indicator which is able to represent different gender items (He & Huang, 2011). A further development of this study may lead to the investigation of the potential association between gender diversity indicators and firm's environmental performance (Post, Rahman, & Mcquillen, 2015; Setò-Pamies, 2013).

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Chapter 14 Feminism on the Radio in Italy of the 1970s: The Case of Radio Donna on Radio Città Futura

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Abstract The aim of the research is tracing the origins of the representation of feminist movements in Italy in the 1970s starting from public discourse carried by some radios from the middle of the decade in an interdisciplinary framework. Through the analysis of audio documents of Radio Donna, launched on Roman Radio Città Futura from March 1976, this article wants to reconstruct how expressive and communicative feminist movements in Italy have expressed their demands and spread their views. The analysis of communication, through the thousands of radio born in Italy in the 1970s, allows to show a specific point of view and a new mode of dissemination of gender issues within the Italian public at this stage. The project aims to bring to light the public dimension of gender issues through listening of sound sources of Radio Città Futura, Radio Donna. The paper intends to analyse public discourse, undergoing a critical analysis which would grasp how radio tool was used by the feminist movements and what were the objectives of the flood operation. Moving from this example, the research points to see if and how the birth of the free radios in Italy has promoted a greater chance of access to the media to gender issues. The methodology studies the radio source by analysing the content and how it has been received towards the audience, focusing on two fundamental dimensions considered by Jérôme Bourdon in media analysis (Bourdon, Introduzione ai media, Il Mulino, Bologna, 2001). Next to the radio sources, I will make extensive use of the consultation of the daily and periodical press in order to cross our sources and provide the framework for public discussion. This paper contributes to study symbolic representation of feminist movements Italy of 1970s through the radio, focusing on an interdisciplinary perspective that combines historical and political reconstruction with the symbolic and communicative dimension of the media.

Keywords Feminism • Gender issues • Radio • Italy • 1970s

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14.1 Feminism on the Radio in Italy of the 1970s: The Case of Radio Donna on Radio Città Futura

14.1.1 Introduction

During the 1970s Italy lives a wave of feminist claims of vast dimensions. From the beginning of the 1970s, many groups and feminist collective were born in the wake of the commitment in the referendum campaign on divorce in 1974 and in favour of a law on abortion (Lussana, 2012). The intense development of a strong political subjectivity also binds looking for new tools of expression (Pisa & Boscato, 2012). The need to communicate was expressed with force already from the 68 movements. From that experience was also a strong appeal to the oral communication, expressed in the meetings and in the slogans of parades (Balestrini & Moroni, 2007). The step of stronger claim of rights of women in Italy ranks at this historic moment and manifests itself in several protagonists. In the context of feminism is not a single movement and organized centrally. Many groups are born, often different between them. In this regard Elda Guerra speaks of "femminismi" to the plural "to try to account for the plurality of the forms, the multiplicity of the voices and gestures which is incarnated expression of subjectivity of women in terms of political subjectivity" (Guerra, 2005, p. 25–27). In its analysis Paola Di Cori recognizes the complexity of an unambiguous definition of the Italian feminist movement in the 1970s (Di Cori, 1997). According to Anna Rossi-Doria, the Italian feminism of 1970s can be split in four phases: the birth of the first groups (1968–1972), the formation of collectives (1972–1974), the mass movement (1975–1976) and finally the crisis (1977–1979) (Rossi-Doria, 2005). Since 1975 the appearance of the first free radios which arise outside the state monopoly of Rai offers a space for debate and a new opportunity to disseminate feminist issues in public opinion. The spiral of radios will be even greater after the ruling of the Constitutional Court in July 1976 in which radio stations are authorized to broadcasting in the local area (Doro, 2017). According to the sources estimated, in a few years, the number of local radio stations on Italian territory would come at over 2500 units (Ortoleva, Cordoni, & Verna, 2006). In previous years there were some examples of feminist publications such as the magazine "Effe", published since 1973, a real space of discussion of issues and culture according to a gender perspective. In the mid Seventies feminist themes found their space on the waves of several alternative broadcasters from one point to another in Italy. Rome together Milan and Turin was the place where in previous years there were formed many feminist groups, among us which of via Pompeo Magno, born in 1971, who would later become the Cfr (Roman Feminist Collective). In the Italian extra-parliamentary left, groups of women who participate in these experiences come especially from Lotta Continua, Avanguardia operaia and Pdup. The radios that best convey the themes of the feminist movement were those closest to the groups of the new left and to the Radical Party. This Party had been among the most active players in the campaign for the 1974 referendum in favour of divorce, and it was among the most active in promoting a policy of recognition of equal social and political rights to women. By the Radical Party arose the Mld (Women's Liberation Movement) in 1974, while radical exponents promoted many initiatives against illegal abortions. Radio Radicale function was important in the circulation of the debates held by the party and by the movement, guaranteed at this stage a broad public dissemination of women's claims. Radio Radicale in Rome is one of the first to leave ample space to the discussions and to direct line with listeners (Sorace, 2005). Feminist issues are debated punctually and they take up a significant part of the programming. The movements and organizations of the new left had first grasped the possibility of using local radio as a tool of political propaganda and as a means to give voice to subjects hitherto excluded from mainstream communication channels.

14.2 Radio Donna on Radio Città Futura in Rome

The radios that are spread in big cities and in provincial centres are a means to give voice to those who feel the need to express, to participate and to claim a specific presence and to provide a different perspective from traditional media. At this stage we are in a period of cultural fervour in the field of theatre, music and art, and even the radio is offered as a tool for experimenting. The purpose of this paper is to show how the radio has been used to deliver the content and claims of feminist collectives in order to raise awareness and to engage in a political battle. Several experiences, especially in the context of the most politicized radio, leave ample space to women's voice, in the phase defined as the mass movement of feminism between 1975 and 1976. One of the symbols of this phase is the demonstration in favour of abortion of the feminist movement in Rome in December 1975, which would have seen a large autonomous participation of women, not without tension with the "male" part of the movement (Lussana, 1997, p. 559–565). The role of feminist movements and their ability to be recognized as autonomous subjects had emerged in full force even on the Congress of Lotta Continua of Rimini in 1976, which would have decreed the dissolution of the same organization (De Luna, 2009). The explosion of these tensions would gradually also affected other organizations of the Italian new left.

In this context "Radio Donna" in Rome was an original experience, inventing something new: a different information, only for women. Radio Donna was a space of feminist information inside Radio Città Futura, managed by a group of women in complete autonomy; it arose as circular information centre that did communicate directly women among them. Women, especially housewives, and also students and pensioners, always users and passive object of information, become active players. The news was relayed by women to other women, through phone calls live (Comerci, 1984).

Radio Città Futura was founded by the publisher Giulio Savelli and Renzo Rossellini and the broadcasts begin in January 1976. This station is linked to the

movement of Avanguardia operaia and is defined by the press as "the radio most transgressive and sleepless in Italy" (Ficoneri, 1976).

Starting from the need to have an information tool, some militants of Radio Città Futura decided to create "a separatist editorial staff which was at the same time space of policy development and a women's liberation tool". Since March 15, 1976, the program was broadcast from Monday to Saturday, 2 h of programming a day, one in the morning and one in the afternoon "in total autonomy, becoming in a short time the microphone of Roman feminist Galaxy and a sounding board for his creativity" (Stelliferi, 2014; Giacotto, 1976).

The purpose of one of the first feminist radio projects, presented on the magazine "Effe" in the spring of 1976, underscored the will to seek alternative ways in communication field that reflected the need for new forms and tools of militancy:

"We are a group of feminists and we have decided to work on a radio for women that is an alternative to the traditional way of speaking about our problems, to make music, to talk about culture. [...]

We want that this radio is made by all the women who want to help us and tell us about the problems that they have in the home, in the family, at work because none of us is an expert and a specialist. We have the problems of every woman who tackles a job that she has never done. We will continue therefore all themes that you may ask to address. What we proposing is to contribute to the awareness of all us women, together".

This experience elicits soon periodical press attention as evidenced by an article appeared on "L'Espresso":

"In the capital city, women have a radio all for them. It is called "Radio Donna" and is created by a group of 40 women between 16 and 40 years. Two-hour daily they broadcast on the same frequency of "Radio Città Futura", the station of the extra-parliamentary left. "Our radio is a radio in the radio, say the editors. And take immediately to clarify that in their work does not participate even a man". (*Qui trasmette Radio donna*, "L'Espresso", 25 Avril 1976).

The rubrics conducted in Radio Donna space revealed an innovative style starting with *autotutela legale* (legal self-protection). Attorney Tina Lagostena Bassi, invited by the editors to denounce the machismo of jurisprudence, read sentences concerning cases of violence against women, explaining the mechanics of a system that doesn't protect women. The desire to express an alternative point of view, which came out from traditional conventions of information, was expressed by the slant of the New Bulletin *Controgiornale*: news and events concerning women, examined according to the perspective of alternative information from the point of view of women. This information strategy remained one of the most prevalent trait of all radios linked on the extra-parliamentary movement (Baldelli, 1972; Eco & Violi, 1976). In the same way, musical proposal of songs of the feminist movement and reading "criticism" of the lyrics of songs that had women as dependent on men helped define the will to increase awareness among listeners and push for a reflection on gender inequality.

The circularity between a public speech conveyed by the media and the intimate dimension of the topics discussed promoted an atmosphere of sharing and allowed

in one of the first opportunities for women to talk about their lives, recognizing themselves even in the words of presenters. Telephone, a true constitutive element of radios born in the mid-1970s (Menduni, 2001), made possible a collective dialogue, trying to transform that space into an instrument at the service of women. In 1976 the editorial staff gave voice to women members of parties and institutions. During the campaign for the elections, Radio Donna invited every day for the duration of the electoral campaigns a female representative for each party that confronted with feminist movement. The radio gave way to a broad discussion on the difference between emancipation and women's liberation, on the relations between political parties and movements and about women's rights, hosting among other, Emma Bonino (Radical Party) and Maria Magnani (Socialist Party). The column *Dalla parte delle bambine* promoted a different upbringing while *Inchieste e testimonianze* with a simple language debated issues related to job and feminine unemployment (Stelliferi, 2014).

In a document of May 1977, the collective Radio Donna returned on the motivations that led to the birth of this experience, demonstrating that at this stage, free radios were of public spaces in which to express different social sectors who claimed their space in the channels of information:

"Not as journalists, not as readers or listeners but simply as women aware of being always marginalized from the world of information, we felt the need to take a space like that of Radio Donna and defend and strengthen it by encouraging the emergence of many other Radio Donna. Radio Donna is a feminist newspaper of radio information, that has chosen his space within a democratic radio, guaranteeing a total political and economic autonomy. Only daily feminist in Europe, in over a year of broadcasts has aggregated and involved in a direct participation housewives, students, workers, trade unionists, artisans, teachers, professionals and then still feminist collectives of district, of factory, clinics. Radio Donna is not an abnormal and random phenomenon. It is instead the result of the efforts of a group that has as reference the feminist movement, who works for free and which rejected all those that are the usual privileges of journalists, denying any type of hierarchical structure, refusing every kinds of professional competitiveness and questioning every possible role through the practice of self-knowledge".

The same document clarified better the choice of radio as a tool to communicate the views of the feminist collective:

We started from an instrument such as radio, which we believe to be authoritarian, not least because the microphone one speaks and everyone else can only listen, but we were able in part to break through listener phone calls that, going live, without prior censorship, overturn the instrument management. Radio Donna "arises from the need to express our needs, our creativity and the aim is the comparison. In this way of communicating, we bring it forward with the language of our emotional experiences, but broadcast on radio for the first time goes beyond the narrow scope of the private sphere to regain all its political outcomes. When this language of women tackles the language imposed and hegemonic it begins a moment of true fight against the male monopoly of information" (Il collettivo femminista e le ascoltatrici di Radio Donna, 1977).

In 1977 even through listening, programs had formed a collective of housewives, which would establish its headquarters in the women's house in Via del Governo Vecchio. The birth of this organization testifies to the ability of Radio Donna to be a point of aggregation and comparison among women.

The collective had a weekly space within Radio Donna that served as a time to reflect on the status of women as domestic workers. In January 1979 during a broadcast, five components of the collective of the housewives were victims of the attack of Nar. They were seriously injured by shots and the launch bombs that caused a fire in the premises of Radio Città Futura (*La tentata strage a Radio Città Futura*, "Lotta Continua", 10 january 1979).

The story of Radio Donna and then Radio Città Futura would end with the arrival of the 1980s, with the crisis of the movements that would leave space given way to a different narrative of feminist issues in public opinion. Simultaneously also free radios progressively turned into private and local radio stations, losing even in terms of content in their original and innovative style.

A new phase started, but the relationship between the women's movement and the free radios developed between the mid- to late 1970s turned out to be extremely important in the development of a communicative strategy of propaganda and a political communication "feminist".

14.3 Radio and Identity

The experience of Radio Donna would influence numerous feminist collectives in other places of Italy. Free radios were a decisive instrument in spreading and in public circulation of the themes and the claims of the feminist movement. The importance of this tool was even higher in years in which women were fighting, claiming autonomy from men's environment domestic and working. Radio carries out the function of public arena where experimenting new languages and styles of broadcasting. The radio, medium of orality (Arnheim, 2003), due to its ability to reproduce the features of an oral interview, has increased the effectiveness of this instrument as a virtual place where women could meet.

Another element to consider is the local nature of radios: in fact the broadcast limited to a neighbourhood or a town promoted also a feeling of participation and recognition. The form of media access afforded by radios allowed them to bring out issues that hardly would have found space into the programming of Rai. This happened at a time when the "media visibility" (Thompson, 1995) of the many rivulets of the feminist movement had increased at the same time expanding the opportunities to make public issues and claims and especially to explain a new kind of language. The topic of symbolic self-representation of the feminist movement recurs in the iconography of that season, but it should be emphasized that the meeting between free radios and spontaneous charge of the feminist movement until their crisis was decisive.

The radio can bring out of isolation, allowing various women's groups to meet and exchange their experiences, as well as to engage in a political mass battle.

At the end of the 1970s, the feminist movement began to favour forms of written communication with respect to orality that was one of the distinctive traits of the decade (Candinas & Rangeri, 1978).

14.4 Conclusion

Free radios, at the peak of the season's most intense political commitment in the 1970s, had shown how this tool, at this point available to small groups and economically manageable with low costs, had represented an important means towards a broader legitimization of feminist themes in public discourse. As we have seen however, the radio also favours the spread of a gendered perspective on many aspects of communication and information: from the analysis of the information to contents on self-defence legal in an era where a measure against the violence of women was still very far. The "capture of speech" (De Certeau, 1994) of housewives, of students, and of workers, by choosing to leave big space to direct line and the relationship between editorial staff and listeners, overturned traditional codes of communication, promoting a bidirectional flow of communication.

This paper aims to contribute to historical research on the languages of gender communication in the 1970s through the media's capacity to represent in a given historical moment new issues until then unknown to the public. Thanks to the possibilities offered by free radios, new contents were introduced in public debate, providing an important means of dissemination for topics that regarded directly the process of emancipation of women in Italy, in a decade considered decisive even in terms of legislation. After the referendum on divorce of 1974, the new family law that recognized the equality between spouses of 1975 and the law on voluntary termination of pregnancy of 1978, then confirmed by referendum in 1981, would have been among the most significant measures of this phase (Colarizi, 2000).

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Chapter 15 Gender Effects in Injustice Perceptions: An Experiment on Error Evaluation and Effort Provision

Lucia Marchegiani, Tommaso Reggiani, and Matteo Rizzolli

Abstract As performances are rarely observable, evaluation errors may occur. We observe how women react to evaluation errors and wrongful reward assessment in organizations. In particular, we focus on severity and leniency errors in the evaluation of performances. Severity errors occur when workers do not receive the reward although they exerted high effort and reached the target. Leniency errors occur when workers are rewarded even when they exerted low effort and did not reach the target. They are both detrimental to motivation and effort provision. Our findings from a laboratory experiment show that, when gender is considered, asymmetric results are shown for men and women. Whereas males drop their contribution more under severity errors rather than leniency errors, female tend to do the opposite. We discuss these results contributing to the literature on organizational justice by investigating the role of gender in the perception of justice within organizations.

Keywords Injustice • Performance appraisal • Gender • Leniency bias • Severity bias • Economic experiment

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© Springer International Publishing AG 2018
P. Paoloni, R. Lombardi (eds.), *Gender Issues in Business and Economics*,
Springer Proceedings in Business and Economics,
DOI 10.1007/978-3-319-65193-4_15

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15.1 Introduction

Rewarding the workforce is a central issue in several research fields that span from personnel economics to organizational behavior to human resource management. Indeed, as the human resources have begun to be considered strategic resources for firms, it is now clear that the effective way of rewarding their efforts, incentivizing their skill development, and motivating their job is more than a managerial exercise, but it rather conceives firms' performances and economic output. Starting from these assumptions, it is also crucial to embrace a diversity management perspective. As individuals may react differently to injustice, it is interesting to investigate whether a gender effect occurs in reacting to wrongful rewards. Indeed, it is common knowledge that women are paid less than men for similar job positions, due also to their weaker attitude toward wage negotiation (e.g., Babcock & Laschever, 2009). Thus, investigating their reactions against organizational injustice in rewarding may shed new light on the relation between women and wages. In light of these evidences, our article deals with employees' performance evaluation and the differences in their motivation to exert effort. More in details, as individual performances are seldom perfectly observable in organizations, errors in performance evaluation may occur. Such errors are in turn detrimental to employees' motivation and hinder their effort provision. We are interested in verifying what kind of detrimental effects such errors may have on individual motivation, as incentive systems may be ineffective when errors in the evaluation are persistent. The present study adds to the management literature by examining the outcomes of perceptions of justice for employees according to their gender. Based on gender role theory, we propose that men react more strongly to perceived injustice in the workplace with respect to rewarding system.

15.2 Theoretical Background

Rewarding the workforce is a central issue in several research fields that span from personnel economics to organizational behavior to human resources management. Several streams of research analyze the effects of monetary incentives on employees' motivation and their ability to meet organizational goals (Steers, Mowday, & Shapiro, 2004). Equity theory (Adams, 1965) is the first attempt at explaining the link between employees' perceptions and organizational outcomes. Being based on the notions of cognitive dissonance, relative deprivation, and social comparison (Festinger, 1962), it predicts that individuals are expected to compare their own input-to-output ratio to that of a referent. The referent could be the self, considered at another point in time, or others (other than self) either in the past, at present, or in the expected future.

According to equity theory, if the compared ratios are unequal and thus perceived as "unfair," the individual may be motivated to engage in behaviors that will restore

the cognitive perception of equality. Equity theory distinguishes between (a) positive inequity and (b) negative inequity, showing that both kinds negatively impact the employee's motivation, although negative inequity is comparatively more detrimental. Some more recent papers have shown the limits of this formulation and the need for other complex mechanisms to be taken into account (Huseman, Hatfield, & Miles, 1987; Pritchard, 1969). Among these, expectancy theory sees behavior as purposeful, goal directed, and largely based on conscious intentions. In this view, employees tend to rationally evaluate various on-the-job work behaviors (e.g., working harder) and then choose those behaviors they believe will lead to their most valued work-related rewards and outcomes (Mitchell, 1982; Vroom, 1964).

Organizational justice perspective (Greenberg, 1987) distinguishes between distributive, procedural, and interactional justice (Cropanzano, Bowen, & Gilliland, 2007; Konow, 2003). The perceived fairness of rewarding schemes lays on (a) the allocations of reward, (b) the means by which rewards are allocated, and (c) the way the employer interacts with the employees. The relationships between employees' perceptions of fairness and organizational justice have been replicated in many empirical studies, in both the laboratory and the field (Viswesvaran & Ones, 2002), showing that the organizational justice framework fairly accurately predicts workers' behavior. In a sense, these approaches complement the equity theory in accounting for the possibility that the employee does not take only other employees as referents but values the justice of the outcome with respect to his own perceived input. Nonetheless, these views assume that there is a perfect correspondence between the employee's effort and the employer's assessment of her performance.

We combine this literature with the stream of research on gender impact on justice perception (Foley, Hang-Yue, & Wong, 2005; Lee & Farh, 1999). The reward system may be one of the prime causes of injustice within organizations. It has been found that women tend to be less dissatisfied or more accepting of inequitable pay than men (Lee & Farh, 1999). Seminal contributions emphasize that women show a lesser competitive attitude than men (Niederle & Vesterlund, 2007). In addition, robust experimental evidences show that women are more risk-averse, partially due to more intense nervousness and fear of anticipated negative outcomes (Croson & Gneezy, 2009). As a result, women engage less in negotiation and show a general weaker attitude toward wage negotiation (Babcock & Laschever, 2009; Blau & Kahn, 2000). Previous studies confirm gender effects in the reactions to organizational injustice. In fact, perceived distributive justice is more strongly associated to job satisfaction for men than for women (Brockner and Adsit, 1986), whereas fairness in performance appraisal is more strongly associated to commitment for women than for men (Sweeney and McFarlin, 1997).

In our study, we design a specific setting to test the reactions to injustice in performance appraisal. More specifically, we focus on errors in the performance appraisal, as follows. Supervisors—whether managers, teachers, shareholders, or otherwise—can manipulate rewards for observable performance as a way to incentivize unobservable effort. High yet achievable performance goals, remunerated with non-negligible rewards, should induce rational agents to exert high effort.

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Unsurprisingly, if effort is only stochastically related with performance, evaluation errors occur. Imperfect monitoring can lead to two types of error:

- A supervisor may observe high performance when in fact the agent (he) is exerting
 low effort. Therefore, she may reward the agent undeservingly. This is a Type I
 error or leniency error.
- A supervisor may observe low performance when in fact the agent is duly exerting high effort, and thus she may not reward a deserving agent. This is a Type II error or *severity error*.

Whenever individual unobservable effort is only stochastically related to observable performance, any reward system necessarily produces a certain balance of Type I and Type II errors. The supervisor can affect this balance by, for instance, setting different performance goals that the agent must match in order to obtain the reward. A very low goal implies a high probability that an agent exerting low effort is nevertheless rewarded (Type II error). This clearly demotivates the agent from exerting high effort. On the other hand, a very high goal implies a high probability that an agent willing to exert high effort is nevertheless not rewarded (Type I error). Both errors are thus detrimental to effort provision. What, then, is the optimal tradeoff between the two error types? This depends inter alia upon the elasticities of individuals' willingness to exert high effort to each type of error. Although it is accepted that not receiving deserving bonus is detrimental to employees' motivation, the literature does not say much about the detrimental effects of lenient errors in the performance assessment. In a previous study, we showed that severity errors are more detrimental to effort provision than leniency errors (Marchegiani, Reggiani, & Rizzolli, 2016), but gender differences may lead to diverse reactions to severe and lenient supervisors. This would imply that when fallacy in the assessment process exists, in one case employees tend to anticipate that they would not receive a deserved bonus and thus refrain from exerting efforts. We could label it as a "vengeance" behavior. At odds, when they anticipate that they could receive the reward even though they did not deserve it, (a) an opportunistic behavior may occur or (b) an "over-compliant" effect may arise. Theories, while explaining why the vengeance behavior occurs, do not provide with any prediction about the opportunistic or over-compliant effects. We tackle this research question through a lab experiment.

15.3 Method: The Experiment

The research question of the present work deals with a variable—evaluation error—that is basically impossible to observe in the field because of the unobservability of effort and the stochastic relation between performance and effort. In the lab, instead, we can superimpose an exogenous probability of error in evaluating performance and at the same time we can perfectly observe effort. This ideally allows us to identify precisely the impact of errors on effort provision and thus on performance.

Thus, we ran a set of experimental sessions. These were real effort experiments where individuals could choose whether to exert effort or leave the session. With the treatment variable being errors' tradeoff, the session comprised four phases, namely, (i) risk-aversion elicitation, (ii) individual high-effort-performance elicitation, (iii) experimental treatment, and (iv) questionnaire. The experimental design was between subjects with strategy method, programmed in z-Tree.

The experimental design was composed of three different phases: The preliminary Phase I was used to elicit individuals' risk attitudes via a standard incentivized choice of lotteries. Following Holt and Laury (2002), subjects were asked to carry out a standard series of lotteries to measure individual risk aversion. Outcomes of the lotteries were communicated to subjects only at the end of the experiment in order to prevent revenue effects. In Phase II individual ability in the default task was measured. Following Abeler, Falk, Goette, and Huffman (2011), the real effort task consisted in counting the number of occurrences of the digit 1 in as many tables as possible, where each table was composed of 50 digits and, among these, the number of 1 s was randomly generated. In order to elicit individual productivity, subjects were offered a pure piece-rate compensation scheme. They received €0.03 for each table correctly processed. Furthermore, both a countdown timer and a counter reporting the number of tables processed were provided. After 10 min subjects received summary statistics on the number of tables correctly processed, the number of tables incorrectly processed, and the total amount of money generated in this phase. Let us define *qphaseII* as the number of tables correctly processed by each individual. This number is key to computing the individual performance target in the next phase. The average *qphaseII* was 45.9 with standard deviation of 11.5. The number of tables counted in the second phase, paid by the piece, represents a reliable measure of an individual's ability. In Phase III we imposed on each individual specific performance targets based on their piece-rate performance in Phase II. The intent of scaling the individual's specific target to his own ability was to roughly normalize the cost of effort for the task across subjects. This is because if, on one hand, individuals with different abilities counted in Phase II different numbers of tables, then on the other hand, by setting individual performance targets proportional to these numbers for Phase III, the costs of effort required to reach these targets should be roughly the same for each individual.

Phase III lasted 40 minutes, four times the length of Phase II. The performance target was set equal to $4 \rightarrow 0.9 \rightarrow qphaseII$. We implemented all three treatments (fair, severe, and lenient) in each session, and we had two sessions for the low configuration and two sessions for the high configuration (Table 15.1).

Absent any evaluation error (e.g., in T0), the accomplishment of the task was rewarded with ϵ 6.60 on top of the initial endowment that characterized the two alternative treatment configurations: ϵ 0 in the low endowment configuration and ϵ 5.28 in the high endowment configuration.

Each subject could choose between (i) leaving the room with the baseline wage $w\theta$ or (ii) attempting to perform the task and gain wr. They had to declare their choice (i or ii) for each of the three possible treatments. However, after the three choices, only one treatment was randomly selected and its parameters applied (Fig. 15.1).

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Session	Conf.	Treatment Order	Endowment (w0)	Reward (wr)	Subjects
i	Low	$TO_L, T1_L, T2_L$	€0	€6.60	23
ii	Low	$TO_L, T2_L, T1_L$	€0	€6.60	17
iii	High	$TO_H, T1_H, T2_H$	€5.28	€11.88	23
iv	High	$TO_H, T2_H, T1_H$	€5.28	€11.88	21

Table 15.1 Experimental sessions

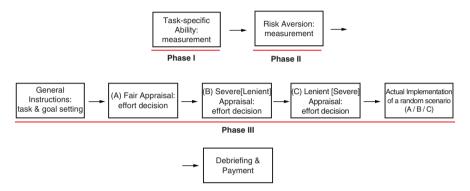


Fig. 15.1 Flow of the experiment

Subjects were informed about which treatment was actually randomly implemented only after they had stated their decisions for all three scenarios. If, for the implemented treatment, the subject had chosen (i), then he immediately had to proceed to the questionnaire phase; if he had chosen (ii), the task begun and the subject had to let 40 min pass before moving to the questionnaire phase.

Subjects made truthful choices for the three scenarios because the choices implied real consequences: if the subject chose A, then he had to spend 40 min in the lab anyway before moving to the questionnaire and to the payment phase, and if he chose B, then the real effort task was skipped entirely. Therefore, the subjects had no reason to misrepresent their true preferences.

The three main treatments were deployed in two different configurations (high and low). This was to check whether different levels of initial endowment could play a role in determining systematically different perceptions of the evaluation errors.

Between each of the phases, subjects had the opportunity to rest. Common instructions for the subsequent phase were read and described aloud while instructions concerning each single treatment were delivered on screen. Feedback information, on the outcomes of the lotteries in Phase I and on whether the supervisor automaton had made an evaluation error in the implemented scenario, were provided at the end of the experimental session. Control questions for each of the different phases and treatments were administered through the computer.

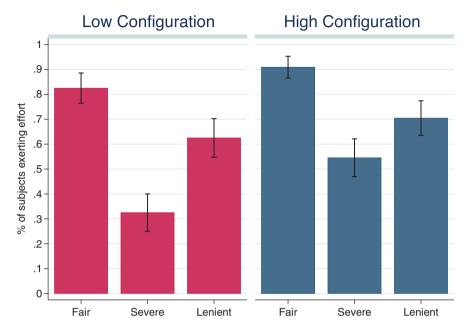


Fig. 15.2 Percentage of subjects exerting effort under the three treatments, by configuration (whole sample, low and high configurations)

15.4 Discussion of the Results

As first results, we found differences in the average contributions under the three treatments considering the whole sample. Figure 15.2 shows the results of the experimental sessions, comparing the percentage of the population exerting effort under fair, severe, and lenient treatments in low and high configurations. Compare the share of agents exerting effort under the severe and the lenient treatments. Figure 15.2 shows that the percentages of individuals exerting effort under the lenient and severe treatments are by no means equal. This experiment provides evidence that severity bias and leniency bias do not generate symmetric effects on subjects' effort provision: the negative effect of the severity bias in T1L and T1H is substantially and significantly greater than the effect of the leniency bias in T2L and T2H, respectively.

To answer our research question, however, it is necessary to distinguish between male and female participants and to compare their behavior in terms of effort provision under the three scenarios related to the different treatments (fair, severe, lenient).

Figure 15.3 shows that on average female participants are more prone to exert high effort than men, regardless the treatments. This is in consistent with the literature on gender effects in effort provision.

The gender effect is evident also considering the differences in the treatments. When severity errors occur, both male and female participants drop their effort

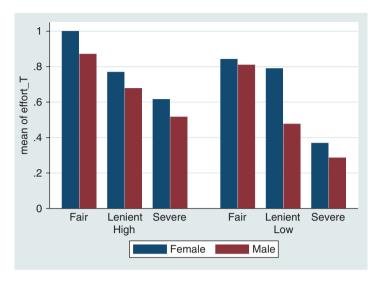


Fig. 15.3 Percentage of subjects exerting effort under the three treatments, by sex and configuration (whole sample, female vs. male, high vs. low configurations)

provision with respect to the fair scenario (baseline), but female still exert more effort. When leniency errors occur, both male and female participants drop their effort provision with respect to the fair scenario (baseline), but their effort provision is significantly higher than the one shown under severity. This result is consistent under the low and high configurations. In order to test the statistical significance of this gender effect, we ran nonparametric tests, which show statistical significance. Moreover, we ran an OLS regression model testing the impact of treatment, configuration, sex, and attitude toward risk on effort provision. Table 15.2 shows the results. Although risk aversion is not significantly associated with effort provision, the treatments are significantly associated with effort provision, as well as the configuration. Sex (in the OLS regression table – Table 15.2, *Male* dummy=1) is moderately significant, as we anticipated.

It is interesting to investigate better the nature of the gender effect. What is most relevant is the difference in the perception of the lenient scenario, where leniency errors occur under the low configuration. In this case, female participants drop their effort provision only to a marginal amount with respect to the fair treatment. This result suggests that, under some circumstances, women perceive injustice less than men. More specifically, the low configuration represents the worst wage arrangement, as no baseline is provided to the participants. Moreover, the lenient scenario would predict that the reward could be granted even without exerting effort. The behavior of female participants could be explained in terms of (a) risk aversion (Croson & Gneezy, 2009), (b) resistance to engage in wage negotiation (Babcock & Laschever, 2009; Blau & Kahn, 2000), and (c) over-compliance. In

Variable	Outcome: EFFORT
Severity bias (TI)	-0.428***
Leniency bias (T2)	-0.202***
High configuration	0.154**
Risk aversion	0.017
Ordering	-0.015
Male	-0.122*
Constant (TO)	0.754***
Obs.	252

Table 15.2 OLS linear probability model: probability of exerting high effort—marginal effects

Significance levels: ***p<0.01, **p<0.05, *p<0.10. Clusters at individual level

order to shed more light on this, we compared the response given by the participants after the experimental sessions had been completed.

15.5 Conclusions

Our study shows a significant gender effect in the reaction to unjust reward systems. As a matter of fact, women tend to react less fiercely to injustice when errors occur in the evaluation of performance. This result confirms previous studies on gender effect in organizational justice perception, which suggest that women perceive less overconfidence than men and are less willing to negotiate their wages. More interestingly, we add to this literature by investigating the behavior of women under lenient and severe scenarios. Women tend to reciprocate the lenient supervisor and refrain from dropping their effort provision when wage conditions are at worst. We interpret this result by means of the female attitude to avoid competitive environments and engage in cooperative relations.

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Chapter 16 Relational Capital in Universities: The "Ipazia" Observatory on Gender Issues

Paola Paoloni and Paola Demartini

Abstract The purpose of this paper is twofold: first, to carry out a literature review in order to know whether and to what extent the studies conducted so far have addressed relational capital in universities and, then, to provide a new framework for good practice that combines research, education, external universities (third mission) and internal relations. Our investigation aims to answer the following RQ: "How is relational capital formed in universities? How is it managed?" From a methodological point of view, we start with a literature review on relational capital and then we develop a case study. As far as the literature review is concerned, a search on Scopus was conducted, using a set of selected keywords, because it guarantees a high quality for publications. Selected papers have been analysed in an attempt to identify the main issues. The case study is a research strategy particularly suitable for an in-depth examination of current real-life events. The case chosen focuses on the foundation and development of the scientific observatory on gender issues entitled "Ipazia". All relationships built in order to merge research, teaching and third mission within universities will be analysed and discussed. The analysed case study allows us to investigate whether and how the use of relational capital enables universities to combine research, education and third mission. Meanwhile, our research highlights how "Ipazia" can be seen as an activator of relationships for gender studies. Our research project aims to extend the analysis of relational capital in universities. This project could allow us to gain a greater understanding of a relevant subject, especially for those, scholars or politicians, who are involved in developing, managing and measuring relational capital in universities. Finally, this paper contributes to the expansion of the literature on gender studies, and for this reason, it offers a new perspective applied to a topic of high relevance such as relational capital in universities.

Keywords Relational capital • Gender studies • Entrepreneurial university

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© Springer International Publishing AG 2018
P. Paoloni, R. Lombardi (eds.), *Gender Issues in Business and Economics*,
Springer Proceedings in Business and Economics,
DOI 10.1007/978-3-319-65193-4_16

16.1 Introduction

Today universities are moving even more towards an organisational and entrepreneurial model (Etzkowitz, 2004; Gibb and Hannon, 2006; Lazzeroni and Piccaluga, 2003). In this case, we refer to a phenomenon of corporatisation of European universities (whether public institutions or private organisations), understood as the introduction of the principles of business administration and management and the management and organisation of them both. This is due to two basic reasons: a lack of funds available and the competition between universities to obtain the resources to be devoted to teaching and research. The result is the use of a business logic that aims for the affordability, efficiency and effectiveness of the Italian and European university systems.

Among the fundamental principles of university business is a commitment to the realisation of the "third mission". The universities have expanded their interest, from using the traditional twin missions of teaching and research towards a much more active role for economic and cultural growth, the so-called third mission (Etzkowitz and Leydesdorff 2000; Vorley and Nelles, 2008). In general, third mission activities include three dimensions in which the universities commit to working abroad: the technological transfer and innovation, continuous training and social engagement (Secundo, Dumay, Schiuma, & Passiante, 2016).

Third mission brings with it the demand of stakeholders for greater transparency, increasing competition between universities, organisations and companies involved in research and teaching, pressure from universities towards greater autonomy and the adoption of new management and performance systems that incorporate intangible assets and IC (Paloma Sánchez, Elena, & Castrillo, 2009; Secundo et al., 2016; Secundo, Elena-Perez, Martinaitis, & Leitner, 2015; Secundo and Elia, 2014).

The theme of the third mission is now increasingly important in a logic of value creation, and for the particular importance of its implementation, it's important to understand how the universities are able to activate and build relationships with stakeholders and the environment. For this reason, we concentrate on studying relational capital in universities.

The concept of relational capital in universities refers to the intangible resources capable of generating value linked to the university's internal and external relations. This includes its relations with public and private partners, position and image in (social) networks, the brand, involvement of industry in training activities, collaborations with international research centres, networking with professors, international exchange of students, international recognition of the universities, attractiveness and so on.

Our objective isn't to define/map out the relational capital in universities but to investigate the dynamics that give rise to capital university and how it can be managed to achieve all of the objectives that universities have today and last but not least to create and transfer knowledge.

Our research questions are:

- How is relational capital formed in the universities?
- How is it managed?

From a methodological point of view, we start with a literature review on relational capital (RC) in universities, and then we develop a case study, focusing on the creation of a scientific observatory called "Ipazia", entirely devoted to gender studies. The analysed case study allows us to investigate whether and how the creation of a scientific observatory enables universities to combine research, education and third mission. Meanwhile, our research highlights how "Ipazia" can be seen as an activator of knowledge on gender studies. Therefore, the paper confronts the theme of the creation and management of relational capital in universities but also offers cues for analysing such an experience. Thus, it allows to answer the following third question:

As far as RC in universities is concerned, what can be learned from the "Ipazia" case study? Is there any specificity when the idea of launching a scientific observatory stems from a woman?

The remainder of the paper is structured as follows: in Sect. 2, the literature review is presented and the theoretical background is described. Methodology follows in Sect. 3. Findings are outlined in Sect. 4. Conclusions, practical implication and suggestions for future research are presented in Sect. 5.

16.2 Theoretical Background

16.2.1 A Literature Review on University Relational Capital

With the aim to produce a literature review on relational capital in universities, we decided to search for academic contributions on the Scopus database. Scopus, in fact, is a bibliographic database containing abstracts and citations for academic journal articles. It covers nearly 22,000 titles from over 5000 publishers, of which 20,000 are peer-reviewed journals in the scientific, technical, medical and social sciences.

Our research protocol concerned:

- Definition of the subject area, as the social media phenomenon that interests researchers from different research fields: life sciences, health science, physical sciences and social sciences. Our investigation addresses the topic of relational capital in universities, and we decided to limit our search to journals belonging to the social sciences domain.
- Definition of the data range time period of publishing. We decided not to limit
 the publications to a specific period. However, as a matter of fact, all the outcomes have been published from 2005 to now.
- Selection of key words to find papers through the Scopus searching engine. To
 this end, we used the search words "relational capital" or "intellectual capital"
 and university in the article title, abstract or keywords of different document
 types (articles, books or book chapters)
- Perspective/model/framework for analysing selected documents. The framework for the analysis of the papers is related to our research questions, and therefore,

the content of the papers was examined and discussed, addressing how relational capital is formed in universities and how is it managed.

Forty papers were extracted combining the words IC and university. Results show that a large part of those papers is written by European authors (more than 50%) and are published in specialist journals (i.e. *Journal of Intellectual Capital*, *International Journal of Learning and Intellectual Capital*, *Knowledge Management Research and Practice* and others).

Three streams of research emerge:

- a. New form of accountability based on the intellectual capital reporting, improving transparency and internal management (Bezhani, 2010; Córcoles, 2013; Corcoles, Peralver, Jesus, & Ponce, 2012; Córcoles & Ponce, 2013; Karami & Vafaei, 2012; Leitner, 2004; Low, Samkin, & Li, 2015; Lu, 2012; Paloma Sánchez et al., 2009; Ramírez Córcoles, Santos Peñalver, & Tejada Ponce, 2011; Ramírez & Gordillo, 2014; Ramírez, Lorduy, & Rojas, 2007; Ramirez, Tejada, & Manzaneque, 2016; Ramírez-Córcoles & Manzaneque-Lizano, 2015; Renzl, 2006; Vagnoni, Guthrie, & Steane, 2005; Veltri, Mastroleo, & Schaffhauser-Linzatti, 2014)
- b. Strategic management in universities, thanks to specific intellectual capital-based KPIs or IC-based models (Garnett, 2001; Lee, 2010; Elena-Pérez, Saritas, Pook, & Warden, 2011; Nava-Rogel & Mercado-Salgado, 2011; Nazem, 2011; Bucheli et al., 2012; Tahooneh & Shatalebi, 2012; Sampedro, Sánchez, Santaló, & Castañé, 2012; Siboni, Nardo, & Sangiorgi, 2013; Bratianu, Voges, Dima, & Glaser-Segura, 2014; Carayannis, Del Giudice, & Rosaria Della Peruta, 2014; Mercado-Salgado, Gil-Monte, & Del Rosario Demuner-Flores, 2014; Mumtaz & Abbas, 2014; Altenburger & Schaffhauser-Linzatti, 2015; Secundo et al., 2015; Vagnoni & Oppi, 2015; Teimouri, Sarand, & Hosseini, 2017
- c. Knowledge transfer and university spin-off (Handzic & Ozlen, 2011; Miller, Moffett, McAdam, & Brennan, 2013; Feng, Chen, Wang, & Chiang, 2012; Szopa, 2013; Hakkak, Vahdati, & Neia, 2015

All these streams demonstrate that universities are moving towards an organisational model, more consistent with the promotion of economic development (Etzkowitz, 2004). These developments can be considered under the umbrella "entrepreneurial university" (Secundo et al., 2016), in which new dynamics and collaboration with industrial communities and social institutions are facilitated.

Following Secundo et al. (2016), a collective intelligence framework can support the understanding of how organisational and governance structures, connectivity patterns and technological platforms can improve the flow of information, inspiration and resources across creative and innovation ecosystems to generate the desired innovation outcomes.

In other words, collective intelligence describes a phenomenon where, under conditions of diversity (of the people involved), independence (contributions of one individual are not influenced by those of other individuals) and aggregation (mechanisms for pooling and processing individual estimations to a collective estimation), large groups can achieve better results than any single individual in the group. This phenomenon is also known as the "wisdom of crowds".

Only one paper was extracted combining the words RC and university, Smolag, Ślusarczyk, and Kot (2016) which focuses on the role of social media in connecting universities to its stakeholder. The wide use of ICT tools has a great impact on business, due to the possibility of developing external and internal networks at the organisation, which increase stakeholders' engagement and brand value. Similar tendencies are observed in education, and this is a new phenomenon extremely relevant for future research in the field of RC.

However, none of the papers analysed concentrate on how the relations a university creates with its stakeholders are formed. For this reason, we aim to fill this gap in the literature

16.2.2 The Research Design

In particular, our research revolves around the launch of new cultural activities that favour the creation and transfer of knowledge, thanks to the creation and management of relational capital, which have a positive impact on all of the missions of universities (see Fig. 16.1).

In order to answer the first RQ (how is RC formed in universities), we focus on:

- The role of promoter(s) of a cultural initiative/project as the activator of the initial network.
- His/her/their personal characteristics (e.g. skill, competence, attitude, behaviour, motivations) are crucial at the first stage. We consider the promoter as an intrapreneur (Antoncic, & Hisrich, 2001) in the university context, whose behaviour and interactions with initial stakeholders are relevant to activate the first network and to launch the initiative/project (in our case the Ipazia observatory).
- The transformation of a cultural initiative, mainly based on informal relationships between academics, into university RC, here intended as high-quality relationships between the organisation and engaged stakeholders influencing brand and reputation.
- We posit that actors of the initial network, who are officially in charge of the project (i.e. the director, the Scientific Committee, etc.), may have an influent role in building university RC.

In order to answer the second RQ (how is RC managed in universities), we focus on:



Fig. 16.1 The dynamic of relational capital in universities

- The activities managed under the umbrella of the Ipazia observatory in order to reach the expected outcomes in terms of teaching, research and "third mission".
- We posit that for cultural organisations (such as universities), the key factor for success consists in the ability to engage stakeholders (students, researchers, public, private and non-profit organisations) in common cultural projects by adopting a participatory approach.

Coherently, we formulate the following propositions:

- P 1: The promoter influences the characteristics of the first network supporting the launch of the cultural initiative.
- P 2: Actors who are officially in charge of the initiative (i.e. the director, the Scientific Committee, etc.) may have an influent role in building university RC.
- P 3: Effectively managing RC is a key factor to creating value in universities.

Given that RC consists of a set of formal and informal, temporary and permanent relationships, which can help to create value for organisations, it is worthwhile to expound on this concept in the next paragraph.

16.2.3 Relational Capital: A Dynamic Approach Applied to Universities

All of the stakeholders, and not only the customers, create relations with the organisation, and in the case of start-up initiatives, the existing relations between the environment and the promoter/founder (friends, family relations, professional and informal networks) create fruitful and functional relations for the development of the project.

The objectives that compel an organisation to create relations with the outside world influence the different types of bonds. In light of the indications provided, we must divide relations into formal and informal categories.

Formal relations are those that are characterised by the presence of a need/requirement or an obligation of the following variety:

- Legal (e.g. the one that connects the organisation with financial administration)
- Managerial (e.g. the one that connects the organisation with consultants, professionals, category associations)
- Economic (e.g. the one that connects the organisations with customers, suppliers, financial providers)

Informal relations are, however, often cut off from any other type of economic logic but are formed and strengthened by indirectly providing support to help organisations and activities and/or the initiative responsible during the various stages of company life. They are not characterised by restrictions but by personal or family-related choices that imply the involvement between person-company and the stakeholder and, consequently, between the latter and the company as an economic entity.

Examples of informal relations are those that exist with family members, friends, neighbours, colleagues or acquaintances (friends of friends), which are created for emotional and personal reasons, even those involved in the professional sphere.

For example, a relationship with a friend can lead to new ideas and new relations that put the entrepreneur/founder in contact with new environments related to his company activities or provide new information and/or useful acquaintances.

Furthermore, there is nothing wrong with a relative or friend (informal stakeholders) becoming a supplier, customer or consultant due to his existing relationship of trust. Nor, on the contrary, is it wrong for one of the aforementioned professionals (formal stakeholders), with whom an initial relationship of a professional nature was created, to become a confidant and/or friend, thanks to a relationship of esteem and trust.

Apart from identifying the type of bond according to the type of relationship with the stakeholder, for purposes related to a much more detailed analysis, relations may be divided up according to the regularity in which this relationship is activated and also according to the level of solidity. On the basis of this criteria, we can therefore classify relationships into permanent or temporary.

The first type of relations implies the existence of a long-term relationship, extended over the years and consolidated by trust and assurance. The solidity of a permanent relationship, in terms of reiterated relationships, is proof of appreciation of the relationship by both parties in the name of a mutual economic advantage and the existence of a shared choice, leading to fidelity that generates a lifetime value (see paragraph 2) with the stakeholder.

Temporary relationships, or circumstantial relationships, are however characterised by random relationships or exchanges, not accompanied by trust and wealth but by expectations that are never fulfilled and therefore interrupted within a short period of time or even before they are born.

Relational capital according to relations with stakeholders.

Formal relations	Necessary or obligatory for company management
Informal relations	Additional, voluntary for company management

Relational capital according to the frequency of relations.

Permanent relations	Solid relations, consolidated by trust
Temporary relations	Random or circumstantial relations

Temporary relations as well as permanent ones can be created with formal stakeholders and informal stakeholders, in the presence of trust and appreciation that may be of a personal or professional nature. By connecting the type of relation with its intensity, a matrix can be built, which we call "the matrix of relations" as illustrated in Fig. 16.2, in which we can identify four types of network relations that a company can employ. Along the x-axis, this matrix indicates the "intensity of the relation" variable (permanent or temporary), and on the y-axis, it indicates the "type of relation" variable (formal or informal) (Table 16.1).

Fig. 16.2 The flower of Ipazia



Table 16.1 Matrix of relations

Type of relation	Formal	A	В
	Informal	С	D
		Permanent	Temporary
Intensity of relations			

The matrix highlights the existence of four possible models of network relations according to the use of formal or informal relations, whether in a temporary or permanent manner:

- Type A: uses relations of a formal nature in a permanent manner
- Type B: uses relations of a formal nature in a temporary manner
- Type C: uses relations of an informal nature in a permanent manner
- Type D: uses relations of an informal nature in a temporary manner

The network prototypes may make changes during the life cycle of an organisation, varying and adapting at the moment or throughout the period that the company is going through this process. Furthermore, the presence and use of different types of relations is characterised by the dimension and/or the legal form of the company. A large company classified as a company with share capital, for example, will mainly have an A or D type network due to its numerous legal obligations.

A smaller company, however, whose legal form is a partnership or an individual company, where the wilful power lies in the hands of the entrepreneur/owner, will follow a natural trend to use the B or C type of networks, much more efficient and easier to handle according to the specific type of management.

The prototypes of networks utilised can be changed throughout the course of a university's life cycle, modelling and adapting themselves at any particular moment. The presence and use of different types, in addition, differ according to the dimension and/or legal status that the company assumes. A large university with many legal obligations will present a type of network, which predominately inclines towards type A or D. A university modest in size, however, with a private or even public legal status, closely linked to the province or reference context, will follow a natural tendency to acquire a type B or C network, which is more efficient and manageable for its specific type of management.

16.3 Methodology

The theoretical paradigm underlying our research is the interpretivist model. In light of interpretivism, sociological phenomena cannot simply be observed but must also be interpreted by the researcher. This means that there is not one absolute reality but rather different possibilities that are generated by the perspective adopted to interpret facts (ontological dimension). Moreover, there is no separation between researcher and subject since the process of understanding derives from deductive-inductive development (epistemological dimension).

From a methodological point of view, we address the research question by adopting a qualitative research approach based on the case study (Yin, 2013). The case study looks at the meaning of the experiences of people because it is a research strategy suitable for situations, where the object is to perform in-depth examinations of real-life events

- First, we explore the characteristics of relationships developed in the launch of the Ipazia Scientific Observatory to understand the rationale behind the activation of this network and the selection of the people involved.
- Second, we examine how these relationships are managed and how they can create value for a university.

Accordingly, it is extremely important to define our role, as researchers inside the company, which was neither as researchers just observing phenomena nor as consultants, but rather driven by "action research" principles. Action research attempts to combine the process of research and action based on what Shein (1987) describes as a key assumption—that one can never really understand any human system without trying to change it.

Reason and Bradbury (2006, p. 1) define action research as a process that "[...] seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people".

The researchers, personally involved in the creation of the Scientific Observatory "Ipazia", act on that situation with a double role. They act as academic intrapreneurs and simultaneously analyse processes and outcomes in the light of the theoretical framework. This methodology not only reflects upon the observations of the researcher but also on the impact the interventions have on the organisation. The main benefit is the ability to develop insights into the implementation of new management innovations in organisations, increasing the degree of awareness of the involved actors (Dumay, 2010).

There is not an agreed set of methodological protocols, or rules, shared by all researchers. However, as always in action research, this process consists of:

- A research phase (document studies, observation and analysis of interaction among different stakeholders)
- A participatory phase (direct involvement in the Ipazia observatory management)

These phases aim to evaluate how to create and manage relational capital in universities and generate interventions to create value, in the light of the triple mission: teaching, research and the so-called third mission.

This approach allowed us to have a richer understanding of network activities.

As a result, our approach resembles action research: a form of collective, self-reflective enquiry undertaken by participants in order to improve the rationality, coherence and satisfactoriness of their own practices (McTaggart and Kemmis, 1988). In action research, the researcher provides special knowledge to encourage the community with whom the researcher is conducting research, to self-reflect and subsequently to change its practices (Melrose, 2001, p. 160). In our double role as researchers and main actors involved into the process, we did precisely this; we offered special knowledge and made interventions with the aim to stimulate self-reflective enquiry and improve the management of relational capital in universities.

We used our data collection and participatory experience as input for a research design, with the aim to validate and extend existing theory. Our perspective is close to postpositivism, as we compare our results to prior theories and findings (see Gephart, 2004). As a result, we adopt the perspective that qualitative data can be used to test or validate theories as well as extend them (George and Bennett, 2005).

The study includes observation and direct participation, document and data analysis and introspection (Conger and Kanungo, 1998, p. 112).

The data we used for analysis included the notes from conversations; the preparatory memos that we made before each meeting, seminar and workshop involving the main stakeholders; the reports/documents from these meetings and events; and the notes we took during the entire process (see Table 16.2).

In order to answer our research questions (e.g. How is relational capital formed in universities? How is it managed?), data and information have been gathered from 2015 to now.

Our investigation focuses on the relationships that the Ipazia observatory promoter first activated and that were, subsequently, increased and managed by the Scientific Committee. Coherently, with our research model, data is analysed in the next section, outlining the following aspects:

- Characteristics of the observatory (choice of name, legal status, activities performed, location) and the foundresses (age, marital status, number of children, academic role)
- Start-up and operational network (synthetic evocation of the most important stages of the observatory, focusing on the start-up and relational phase.
- 3. Motivation/objectives that have led them to the creation of Ipazia, the academic entrepreneur (self-realisation, scientific interest, independence, motivations related to career, economic motivations etc.) and the institution (strengthening the image, synergies between teaching, research and third mission, economics, etc.)
- 4. Network (types of existing relations and use of networks A, B, C, D)
- 5. Development and performance

Project phases,		
periods	Network (no. of engaged stakeholders)	Data/information
Launch of Ipazia— January– April 2015	Initial network: Promoter (1), other members of the scientific committee (5), chairpersons (1), researchers (5) and staff administration (3) of the promoting university, female entrepreneurs (4)	Notes from conversations with main stakeholders, preparatory memos/ reports before/after no.3 scientific committee meetings and no.1 Ipazia workshop
Management of Ipazia Scientific Observatory—May 2015—today	Enlarged network, including: Academics belonging to other scientific disciplines (e.g. history, law, social science, statistics, no. 6), public bodies (e.g. representative of Italian minister for equal opportunities and local public authorities, no. 4), associations (e.g. scientific or oriented to promote female entrepreneurs/managers union), female entrepreneurs and firms managed by women. Extended network including: Other universities, students and researchers interested in gender issues	Notes from conversations with main stakeholders, preparatory memos/ reports before/after no.6 scientific committee meetings and no.2 Ipazia workshop

Table 16.2 Ipazia project periods, networking and data gathering

16.4 Findings

In order to answer the research questions RQ1 and RQ2, our protocol analysis developed the above steps that led to the following results.

16.4.1 Observatory History/Characteristic: Start-Up

The idea was born in 2015 as a result of an institutional request (by the dean) for the organisation of a conference on women at the university. This request was made by a professor who researches experience in the field of gender studies. The idea has been developed with the involvement of other appointed colleagues who work in the same disciplinary area (business administration), which has a scientific committee. This committee was established, thanks to informal and permanent relations of those appointed (women academics from different universities and geographic regions, linked by a common curriculum, who work on the theme or are connected to it because of previous research paths). Such a permanent informal network drives forward the development of the business idea that soon will be freed from the only context regarding the conference on women, but it aims to create an organisation that can develop a research path based on the genre (female entrepreneurship, corporate governance, analysis of the trend on literature). Hence, with the idea to give continuity to the experience of the group, Ipazia was born, an observatory on

gender issues. "Ipazia", a symbol of free scientific thought, can also be a reference for interested public bodies, private organisations, associations, schools, students and researchers, no matter what the reason, in order to promote gender differences and equal opportunity. "Ipazia", born from a passion for business economics, within its first year, already recognised the idea that the path of women in business and work only reveals itself if the historical and social transformations, the routes taken and the motivations of circumstances and events clearly emerge. Gender inequalities in the public and private sphere have definitely decreased, as well as the number of families. However, women's education and their presence in the public scene in Italy, Europe and all over the world have expanded and diversified. However, it is necessary to emphasise the importance of the paths taken and the richness of events using the past as a key to understanding the present and the future. In order to acquire full comprehension and thematic transversality, an interdisciplinary study that knows how to develop research paths and increase complementary investigations on the entire female population is needed, highlighting the work of gender, management and organisation. For this reason, it is deemed very appropriate to consider such liveliness when trying to define the most recent research topics and at the same time to analyse the evolutionary dynamics. Ipazia has broadened its horizons by involving interdisciplinary colleagues from different corporate economic disciplines and has begun to work on a broad spectrum of gender studies.

16.4.2 Individual Motivation of the Academic Entrepreneur and Institutional Objectives of Universities

We know that when the manager's objective is in line with the corporate objective, the economic and financial performance and personal satisfaction are at their greatest. Even in universities, when the objectives of individuals are in line with that of the university (and vice versa), the results achieved can help improve the working environment and results.

The analysis of this issue was carried out with the so-called agency theory (Eisenhardt, 1989). If both sides aim to maximise their own interests, it is unlikely that the agent (in this case, the academic promoter/founder) will act effectively in the best interests of the principal (in this case, the university as an institution). The relationship between principal and agent can only result in an exchange contract. For this reason, it is important to strive for the fulfilment of institutional needs/motivations in addition to the personal needs of the agent, in order that the objectives converge to become one.

There are two types of motivations that should coincide in order to achieve better results: personal objectives and institutional objectives.

The motivations in the case study of Ipazia can be identified as:

Personal motivations: linked to personal fulfilment, scientific interest, independence, career, economic motivations of the promoters and academics.

Institutional motivations (university as an organisation) linked to enhancing its image, synergies between teaching, research and third mission, economic, etc. Among these, the aim to strengthen interdisciplinary research emerges.

In order to achieve both personal objectives and the institutional ones, the observatory aims to implement research on gender studies and to organise and promote significant scientific initiatives (workshops, seminars, conferences, studies, science labs) on these issues at a national and international interdisciplinary level, through the continuous implementation of the network created, which we will discuss in the next section.

16.4.3 The Network

Given that, in teamwork, ideas and goals are continuously evolving, the mission is to set up a scientific observatory, with the main goal of giving a complete and up-to-date picture of the gender initiative and services, as well as to achieve and divagate—through research, seminars and workshops—information, knowledge and needs that best highlight the condition of women at a local, national and supranational level.

In order to achieve this objective, the activated network involves both the sphere of education, research and third mission with different activities put in place.

16.4.3.1 Activated Network with Educational Activities

By means of these activities, Ipazia seminars, group projects, term papers, dissertations, workshops, internships and doctoral classes can represent and reinforce *informal temporary relations* (undergraduates and graduate students, seminar speakers from the scientific and institutional business world). However, *temporary formal relations* (with entrepreneurs and institutions) can be formed, which can also become informal and permanent (with speakers who then become collaborators and lead other contacts to collaborate with the observatory).

16.4.3.2 Activated Network Research

Through thematic group work and annual Ipazia workshops, the creation of other networks is activated, on the issue of gender equality both nationally and internationally.

These new contacts are created as temporary formal relations for groups activated with national and international scientific bodies with which it collaborates, for example, AIDEA, SIDREA, SISR, FKAD, and other networks, which then become the

¹ http://www.accademiaaidea.it/.

² http://www.sidrea.it/.

³www.sisronline.it.

⁴http://www.ifkad.org/.

⁵https://www.aidda.org.

permanent informal relations in time, thanks to personal arrangements between shared scientific components or interests. The reinforcement of relations takes place, thanks to a continual presence at meetings, where ideas and work in progress are exchanged; however, it also strengthens the relationship of trust, respect and mutual sympathy. The relations are fostered through ideas and scientific contributions that implement a shared sense of belonging to the scientific community of reference and, at the same time, help relationships and personal understanding thrive.

16.4.3.3 Networks Activated for Third Mission

The relationships created through the established contacts with seminar and workshop speakers are established as temporary relationships depending on the circumstance and for the specific event. However, the objective and intention are already clear that they will become permanent relations. For this reason, it is important to establish relationships that are institutional (national and European organisations for the creation of projects and collaborations), professional (with entrepreneurs that relate to those who attend the seminar) and other associations that deal with topics related to AIDDA,⁶ unwoman⁷ and Bic Lazio Sportello Donna.⁸

16.4.4 Development and Performance

Given that the ideas and objectives of the group work are constantly evolving and the overall mission going in the right direction, however, also changing and being perfected, complete and constantly updated research, services and initiatives (scientific or otherwise) that are planned and paid for by women will be made. In this way, the intention is to acquire and divulge, through seminars and workshop conventions, information, knowledge and requirements that best clarify and outline the status of women locally, nationally and internationally.

Through the activities of the Scientific Committee, space was given for the analysis and research of existing literature on gender both at the national and international levels in order to develop new academic networks and new lines of research aligned with the identified scientific, social and political needs for women's action. These activities are related to the desire to create a solid network with the local, national and international territories. Contacts with entrepreneurs are of fundamental importance, called to make their contribution in terms of testimony and actual experience in the field (intermediate seminars and workshops), including the institutions, key actors of joint action to spread a culture on gender over an extensive area. Through the involvement of teachers, students, entrepreneurs and institutions, the

⁶https://www.aidda.org.

⁷www.unwomen.org.

⁸ www.biclazio.it/it/home/gli-sportelli-donna-forza-8.bic.

Teaching	Researching	Third mission
Intermediate seminars (no. 18); thesis (no. 10); doctoral lessons	Annual workshops (no.3) Seminars (no. 18)	Collaborations with companies and institutions (no. 20)
(no. 4)	International	and histitutions (no. 20)
	conferences(no.5)	
	Books (no.1)	
	Special issues in	
	international journals	
	(no.2)	
	E-book proceeding (no.1)	
	Papers presented at	
	conventions (no. 30)	

Table 16.3 The performance achieved

plans to link the three basic components of academic activities are revealed—research, teaching and third mission (see Fig. 16.1)—activating a series of relationships with different characteristics (formal, informal, temporary and permanent).

Specifically, the activated network, in its first three start-up years, thanks to the work of the director and the Scientific Committee of the observatory, has realised the performance summarised in Table 16.3:

It's important to specify that in teaching:

- The intermediate seminars had a dual objective: the implementation of a national and international network (through the involvement of external speakers at the university who then turned into permanent relationships) and the dissemination of scientific knowledge on gender studies to students, even starting from their first year.
- The assignment of doctoral theses; it allowed them, as part of the teaching activity, to place their students in this "laboratory of research and studies", the first one they encounter in their studies. Through the close examination of the topic on gender studies, students will also be exposed to early research methodology concepts in order to develop their own scientific product that will become their dissertation.

As far as the research is concerned, the main objective of the observatory is the implementation of the literature on gender studies and to organise and promote significant scientific initiatives (workshops, seminars, conferences, studies, science labs) on these issues at a national and international interdisciplinary level. After the annual Ipazia workshops, both nationally (the worlds of women) and internationally (two special issues with Palgrave communication were activated, including a book proceeding with Springer as well as numerous papers presented at national and international conferences), they collected all of the research and the scientific contributions of the scholars involved in the Ipazia network. As for third mission, collaborations with companies and institutions through intermediate seminars and participation in focus groups supporting women's businesses are always growing, in addition to the development of projects and workshops, which help to disseminate best practices in universities on gender issues. Awareness that communication and dissemination of information through social media are critical to networking (Cesaroni, Demartini, & Paoloni, 2016), through all these activities, is the realisa-

tion of a dedicated website (www.questionidigenere.it) and a page Facebook (https://www.facebook.com/Ipazia-Osservatorio-Scientifico-871501819558794/? ref=aymt_homepage_panel) in order to increase the visibility of the activities of the observatory's network.

16.5 Conclusion

At the end of a study, it is appropriate to make some observations on the relational capital of the case study examined and briefly note developed ideas, with reference to RO 3: What can be learnt from the Ipazia case study?

An interesting aspect is the presence of a network of only women. Research has shown that, in the start-up phase, there are several types of problems related to a lack of information, psychological order and bureaucracy.

The foundresses tend to overcome all of these obstacles through the use of a C-type support network, which responds to a principal need for security.

With regard to the context in which it develops the initiative, it has been shown that the use of informal and permanent networks in the start-up phase is not necessarily connected to the type that activates the network (female) but, instead, to its intrapreneurship which is easier to convey in an organisational dimension of minor dimension like the one in which Ipazia was developed.

All of the small university realities, in fact, operate more informally than larger universities and, therefore, feel the need to develop strong synergies with stakeholders, employees and the surrounding environment in order to achieve their goals.

International contacts and relationships that are established for the development of third mission rely on personal and informal connections, often random, or based on long-term relationships that are part of the academic personal sphere. It then develops into an institutional network (CR of the university), based on formal and permanent relations with institutional stakeholders, such as other universities, research organisations and local, national and international companies.

For small universities, normally, the ability to build relationships is functional for the creation of networks that are extremely effective at promoting their development, and often, the survival of reality itself and the capacity and innovative performance also depend on how open they are to international collaboration and the internal capacity of their organisational nature.

A third and final aspect to be highlighted is the issue of alignment of the interests of individuals (academics/researchers/employees of the university) with the establishment (in this case, the university as an organisation). The analysis of this issue, as it is known, was carried out with the so-called agency theory (Eisenhardt, 1989). If both parties pursue the maximisation of its related utilities, it is unlikely that the agent will act effectively in the best interests of the principal. The relationship between principal and agent (universities and individual teachers/researchers) can only result in an exchange contract. For this reason, it is important to strive to fulfil the institutional needs/motivations in addition to the personal needs of the individual, in order that the objectives converge to become one.

16.5.1 Limitations

As this study has examined, only one case study conducted by a university in Italy could be impacted by its specific socio-economic conditions. Additionally, a common issue with participatory research is that the mere presence of the observer may affect the actions of those being observed. For this reason, in the future, interviews and focus groups engaging different actors of the Ipazia network will be examined with the triangulation method, well known in qualitative research (Patton, 2005).

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