Some Data on the Underrepresentation of Women in Philosophy in Italy

An update with data from 2022

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0. Introduction

In this paper we present an update of the data on the (under)representation of women in Philosophy in the Italian Universities and Philosophical Societies we gathered at the end of 2022.
As stated in the 2019 report – which is available here – we decided to update the SWIP Italia report every two years, in order to monitor trends of development in Philosophy compared to other scientific areas. We also decided to update this survey every year more specifically with regard to the data about the presence of women and men in the Italian University ranks in the Philosophy area.
Therefore, in 2021 we made a fourth survey – which is available here – specifically dedicated to the Philosophy area, whereas in 2022 we engaged in the complete update of the data in the Philosophy area, we are reporting in this paper.
The data are part of an ongoing project of the Italian Society of Women in Philosophy (SWIP Italia), which aims to monitor and compare not only the past and present state of women representation in Philosophy, but also how it will develop in the future.

The survey has been divided into three parts:
1) a collection of data on the number of female and male staff employed by the Italian Universities in Philosophy and other scientific areas at the end of the year 2022;
2) a collection of data on the number of female and male members (with or without appointments) of the Italian Philosophical Societies at the end of the year 2022;
3) a collection of data on the number of female and male members in the XXXV cycle of Italian PhD programs including philosophical scientific sectors.
All data are collected at the following osf address, in the spirit of Open Science: https://osf.io/tnmah/

1. First part of the survey

The first part of the data collection aims to understand whether there is a difference in the distribution of women vs. men in the following Italian University ranks (a tentative translation of titles is provided in parentheses):

Professoressa Ordinaria vs. Professore Ordinario (Female vs. Male Full Professor: FP F vs. FP M);
Professoressa Associata vs. Professore Associato (Female vs. Male Associate Professor: AP F vs. AP M);
Ricercatrice vs. Ricercatore a tempo indeterminato (t.i.) (Female vs. Male Permanent Researcher: PR F vs. PR M);

Ricercatrice vs. Ricercatore a tempo determinato di tipo B (t.d. B) (Female vs. Male Temporary Researcher type B: TRB F vs. TRB M);
Ricercatrice vs. Ricercatore a tempo determinato di tipo A (t.d. A) (Female vs. Male Temporary Researcher type A: TRA F vs. TRA M).
Assegniste vs. Assegnisti (Female vs. Male Postdoctoral researchers, Postdoc)

1.1 Methodology

We gathered the data at the end of December 2022 at the following public web page provided by MIUR: cercauniversita.cineca.it/php5/docenti/cerca.php.
As classified by the Italian Minister of Instruction, University and Research (MIUR) (L. 240/2010, art. 5; https://miur.gov.it/settori-concorsuali-e-settori-scientifico-disciplinari), Philosophy is not a single scientific area but it is scattered in three scientific areas: area 11 (History, Philosophy, Education and Psychology), area 12 (Law), and area 14 (Political and Social Sciences). We therefore included under the label "Philosophy", the following scientific sectors:

11 C1: Theoretical Philosophy
11 C2: Logic, History and Philosophy of Science
11 C3: Moral Philosophy
11 C4: Aesthetics and Philosophy of Languages
11 C5: History of Philosophy
12 H3: Philosophy of Law
14 A1: Political Philosophy

In order to understand the trend of the women vs. men staff employed by MIUR in Philosophy in comparison with other scientific areas, we also collected the data, sorted by gender, in the following areas (and relative macrosectors in parentheses) (L. 240/2010, art. 5; https://miur.gov.it/settori-concorsuali-e-settori-scientifico-disciplinari, what follows is a tentative translation of the Italian classification):

Area 1: Mathematics and Computer Science (A1: Mathematics; A2: Computer Science);
Area 2: Physics (2A: Physics of Fundamental Interactions; 2B: Physics of Matter; 2C: Astronomy, Astrophysics, Physics of Earth and Planets; 2D: Applied Physics, Didactics and History of Physics);
Area 5: Biology (5A: Vegetal Biology; 5B: Animal Biology and Anthropology; 5C: Ecology; 5D: Physiology; 5E: Experimental and Clinical Biochemistry and Molecular Biology; 5F: Applied Biology; 5G: Experimental and Clinical Pharmacological Sciences; 5H: Human Anatomy and Histology; 5I: Genetics and Microbiology);
Area 8: Civil Engineering and Architecture (8A: Infrastructural and Territorial Engineering; 8B: Structural and Geotechnical Engineering; 8C: Architectural Technological Design and Planning; 8D: Architectural Design; 8E: Graphic Design, Restoration and History of Architecture; 8F: Urban and Territorial Development Planning);
Area 9: Industrial and Information Engineering (9A: Mechanical, Aerospace and Naval Engineering; 9B: Manufacturing, Systems and Industrial Engineering; 9C: Energy, Thermo-mechanical and Nuclear Engineering; 9D: Chemical and Materials Engineering; 9E: Electrical and Electronic Engineering and Measurements; 9F: Telecommunications and Electromagnetic Engineering; 9G: Systems Engineering and Bioengineering; 9H: Informatics Engineering);
Area 10: Antiquity Sciences, Philological and Literary Studies, Historical and Artistic Studies (10A: Archaeological Sciences; 10B: Art History; 10C: Music, Theatre, Cinema, Television and Audiovisual Media; 10D: Antiquity Sciences; 10E: Philologies and Medio-Latin and Romance Literature; 10F: Italian Language Studies and Comparative Literature; 10G: Glottology and Linguistics; 10H: French Language Studies; 10I: Spanish Language Studies; 10L: British and

American English Language Studies; 10M: German and Slavic Language, Literature and Cultural Studies; 10N: Asian and African Cultural Studies);
Area 11: History, Philosophy, Education and Psychology (11 A: Historical Disciplines; 11B: Geography; 11C: Philosophy; 11D: Pedagogy; 11E: Psychology);
Area 12: Legal Sciences (12A: Private Law; 12B: Business and Labour Law; 12C: Constitutional and Ecclesiastical Law; 12D: Administrative and Tax Law; 12E: International Law, European Union Law, Comparative Law, Economic Law, Market and Maritime Law; 12F: Procedural and Civil Law; 12G: Criminal Law and Procedural Criminal Law; 12H: Roman Law, History of Medieval and Modern Law, Philosophy of Law);
Area 14: Political and Social Sciences (14A: Political Theory; 14B: Political History; 14C: Sociology; 14D: Applied Sociology).

We selected these areas, because previous work on the underrepresentation of women in Philosophy in other nations (e.g. UK, USA) showed that there are many similarities with the proportion of women in STEM (science, technology, engineering and mathematics), while less similarities with the proportion of women in other scientific fields, such as biology, social and psychological sciences, and other disciplines included in the humanities, especially in area 10 (e.g. Healy 2011; Dougherty 2015; Figdor & Drabek 2016; Williams 2018).

1.2 Results

The data analysis of 2022 replicated the one conducted in the previous surveys. Conventionally, a p value < 0.05 was taken to indicate statistical significance.
As regards Philosophy (up to December 2022), there were still significantly more men (N=861) than women (N=393) employed in permanent positions ($p < 0.003$; women: 31.34%, men: 68.66%), but no significant difference between women (N=187) and men (N=226) employed in precarious staff ($p = 0.337$; women: 45.28%, men: 54.72%) as in 2019 ($p < 0.0679$) and in 2018 ($p < 0.0514$).
In the case of permanent staff, the results still showed a significant difference between women and men employed as Full Professor ($p = 0.0006$; $N_{women}=113$, $N_{men}=312$), Associate Professor ($p = 0.002$; $N_{women}=184$, $N_{men}=404$) and Temporary Researchers with tenure track (TRB; $N_{women}= 62$, $N_{men}= 107$) ($p = 0.0103$). There was instead no significant difference between women (N=34) and men (N=38), when employed as Permanent Researchers (PR) ($p = 0.7816$) (see Fig. 1).

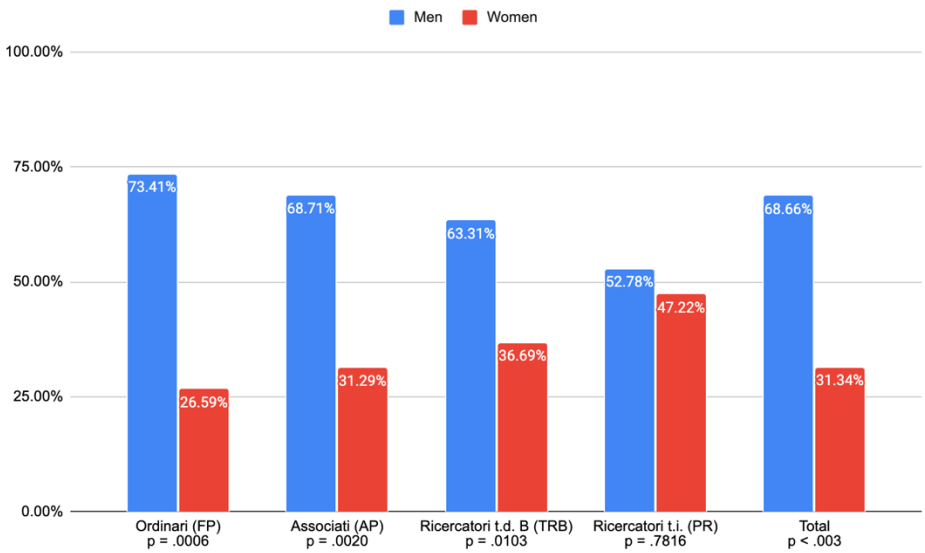

Fig. 1 Percentage of women and men employed in Philosophy as Permanent Staff (including Temporary Researchers with tenure track)

In the case of precarious staff, the results presented a significant difference between women (N=36) and men (N=82), as Temporary Researchers without tenure track (TRA) ($p = 0.0017$) and no significant difference between women (N=151) and men (N=144), when employed as postdoctoral researchers ($p = 0.8426$) (see Fig. 2).

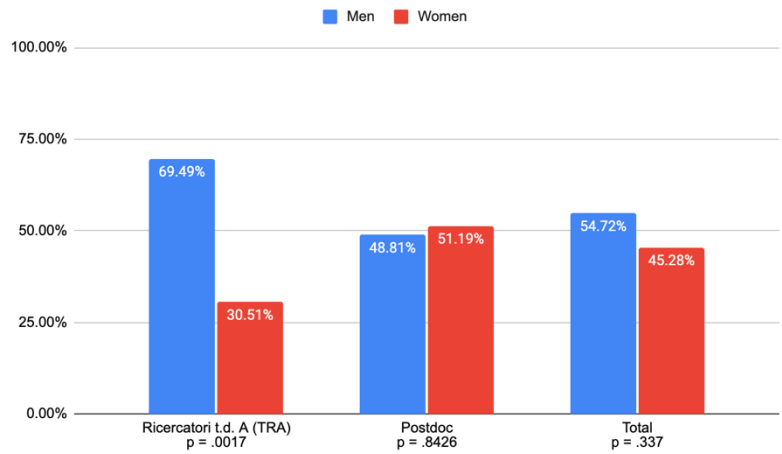

Fig. 2 Percentage of women and men employed as Precarious Staff

Interestingly, in 2022 the results presented no significant difference between women (N=2344) and men (N=2458) in the overall area 11 (History, Philosophy, Education and Psychology) and between women (N=2764) and men (N=2338) in the overall area 10 (Antiquity Sciences, Philological and Literary Studies, Historical and Artistic Studies). Also, in 2022 no significant difference was found between women (N=883) and men (N=1125) in the overall area 14 (Political and Social Sciences) and between women (N=2007) and men (N=2960) in the overall area 12 (Law Sciences), to which Philosophy belongs, except in the role of Full Professor ($p < 0.0008$) (see Fig. 3).

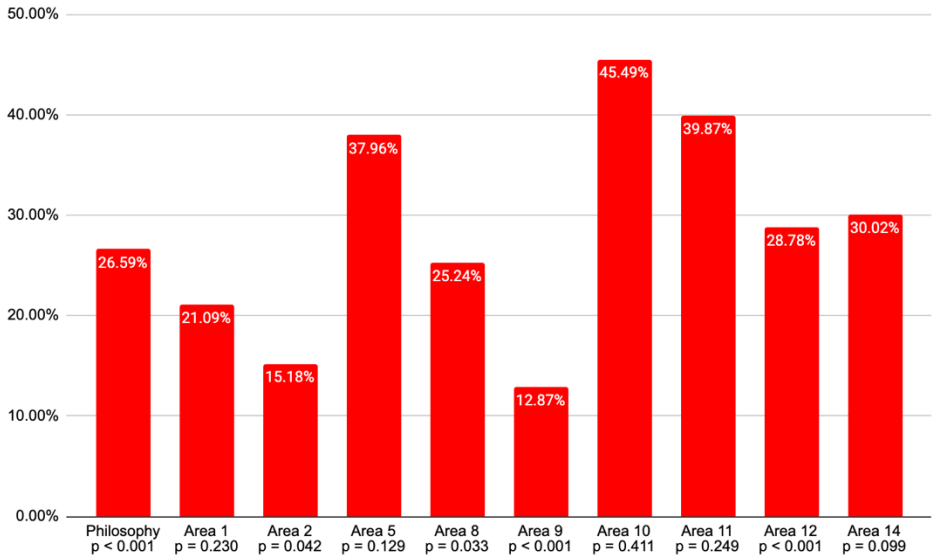

Fig. 3 Percentage of women in the rank of Full Professor across scientific-disciplinary areas

As regards the other scientific areas up to December 2022, we observed a significant difference between women (N=240) and men (N=711) employed as Full Professor ($p < 0.0326$) in area 8 (Civil

Engineering and Architecture). Interestingly, also in 2022, as in 2020, Philosophy and Area 9 (Industrial and Information Engineering) shared a similar pattern of results, with significantly more men than women employed as Full Professor ($p < 0.0001$; $N_{women}=248$, $N_{men}=1679$), Associate Professor ($p < 0.0001$; $N_{women}=556$, $N_{men}=2052$), Temporary Researchers with tenure track (TRB) ($p < 0.0009$; $N_{women}=185$, $N_{men}=564$) and without tenure track (TRA) ($p < 0.0002$; $N_{women}=258$, $N_{men}=756$).
Differently from Philosophy, there was a significant difference between women (N=421) and men (N=199) employed as Permanent Researcher (PR) in area 5 (Biology) in 2022 ($p < 0.0328$) as in 2020 ($p < 0.0445$) as in 2018 ($p < 0.0421$) and 2016 ($p < 0.0484$).

1.3 Discussion

Overall, the results in the Philosophy area at the end of 2022 are similar to the results presented at the end of 2021: in the ranks with more academic power or possibilities of career (FP, AP, TRB ranks), women are significantly less than men and the statistical significance of the difference increases as the status of the rank increases. The PR rank still represents an exception, with no significant women (N=34) vs. men (N=38) difference (in 2022: $p < 0.7816$, women: 47.22%, men: 52.78%; in 2021: $p < 0.4220$, women: 42.24%, men: 57.76%; in 2020: $p < 0.2015$, women: 38.41%, men: 61.59%; in 2019: $p < 0.1441$, women: 37,85%, men: 62,15%). Arguably, after that L. 240/2010, art. 24, 3, b) has been put Into effect, with the introduction of the rank of Temporary Researcher with tenure track (type B) (TRB), it seems that staff in the PR rank have less career possibilities when compared to TRB staff (who become AP staff when obtaining national qualification and positive evaluation of the Department). The same law, L. 240/2010, confirmed the choice, already made by law L. 230/2005, to make PR rank depleted.
As in the results presented at the end of 2021, there is a significant difference between women (N=36) and men (N=82) employed as Temporary Researchers without tenure track (TRA) (in 2022: $p < 0.0017$, women: 30.51%, men: 69.49%; in 2021: $p < 0.0027$, women: 31.68%, men: 68.32%; in 2020: $p < 0.0092$, women: 32.18%, men: 67.82%; in 2019: $p < 0.0193$, women: 35.00%, men: 65.00%), while the difference between women (N=151) and men (N=144) is not significant in the rank of postdoctoral researchers (in 2022: $p < 0.5620$, women: 45.10%, men: 54.90%; in 2021: $p < 0.8426$, women: 51.19%, men: 48.81%; in 2020: $p < 0.1228$, women: 40.24%, men: 59.76%; in 2019: $p < 0.2947$, women: 43.40%, men: 56.60%).When compared to other areas, the pattern of results suggests that, as in 2020, in 2022 women (under)representation in Philosophy is more similar to women (under)representation in scientific areas, as area 8 (Civil Engineering and Architecture) and Area 9 (Industrial and Information Engineering), rather than in Humanities areas such as area 10, or even areas 11 (History, Philosophy, Education and Psychology) and 14 (Political and Social Sciences), to which Philosophy belongs.

2. Second part of the survey

The second part of the data collection in 2022 aims to understand whether there is a difference in the distribution of women vs. men in the following roles in Italian Societies:

(ordinary) members (Soci);
members in the Board (Consiglio Direttivo);
members with specific appointments (MSA);
President.

We considered the Italian Societies (N=17) listed below:

1) **AISC** (Associazione italiana di scienze cognitive/Italian Association of Cognitive Sciences)
2) **AISFET** (Associazione italiana per gli studi di filosofia e teologia/Italian Association for Studies in Philosophy and Theology)
3) **AISS** (Associazione italiana di studi semiotici/Italian Association for Semiotic Studies)
4) **BIOM** (Società italiana di storia, filosofia, e studi sociali della biologia e della medicina/Italian Society for History, Philosophy and Social Studies of Biology and Medicine)
5) **SFI** (Società filosofica italiana/Italian Philosophical Society)
6) **SFL** (Società di filosofia del linguaggio/Italian Society for Philosophy of Language)
7) **SIE** (Società italiana di estetica/Italian Society for Aesthetics)
8) **SIFA** (Società italiana di filosofia analitica/Italian Society for Analytic Philosophy)
9) **SIFD** (Società italiana di filosofia del diritto/Italian Society for the Philosophy of Law)
10) **SIFIT** (Società italiana di filosofia teoretica/Italian Society for Theoretical Philosophy)
11) **SIFM** (Società italiana di filosofia morale/Italian Society for Moral Philosophy)
12) **SIFP** (Società italiana di filosofia politica/Italian Society for Political Philosophy)
13) **SILFS** (Società italiana di logica e filosofia delle scienze/Italian Society for Logic and the Philosophy of Science)
14) **SINe** (Società italiana di neuroetica/Italian Society for Neuroethics)
15) **SISFA** (Società italiana di storia della filosofia antica/Italian Society for the History of Ancient Philosophy)
16) **SISPM** (Società italiana per lo studio del pensiero6edievale/Italian Society for the Study of Medieval Thought)
17) **SISS** (Società italiana di storia della scienza/Italian Society for History of Science)

2.1 Methodology

We gathered the data in December 2022 through the websites of the philosophical societies considered (where available) or contacting the secretary office of the societies. We sorted the data by society X gender X role: members, members in Board, members with specific appointments (MSA), President. It has not been possible to gather data about all roles for each society since the data of some societies were not available. We did not consider the societies for which we did not have data in the analysis of each role.

2.2 Results

The data analysis of 2022 replicated the one conducted in the previous surveys.
As in previous years, in 2022 the results showed a significant difference between women (N=2) and men (N=15) in the role of President (2022: $p < 0.0001$; 2020: $p < 0.0036$; 2018: $p < 0.0013$) and in the Board (2022: $p = 0.0207$; $N_{women}=79$, $N_{men}=131$). However, different from previous years, no significant difference was observed between women (N=30) and men (N=45) in the role of members with specific appointment (MSA) (2022: $p = 0.0892$; 2020: $p < 0.0072$; 2018: $p < 0.0029$). As in 2020, in 2022 no significant difference was observed between women (N=1265) and men (N=1761) in the role of (ordinary) members (2022: $p = 0.4229$; 2020: $p < 0.2845$) (see Fig. 4).

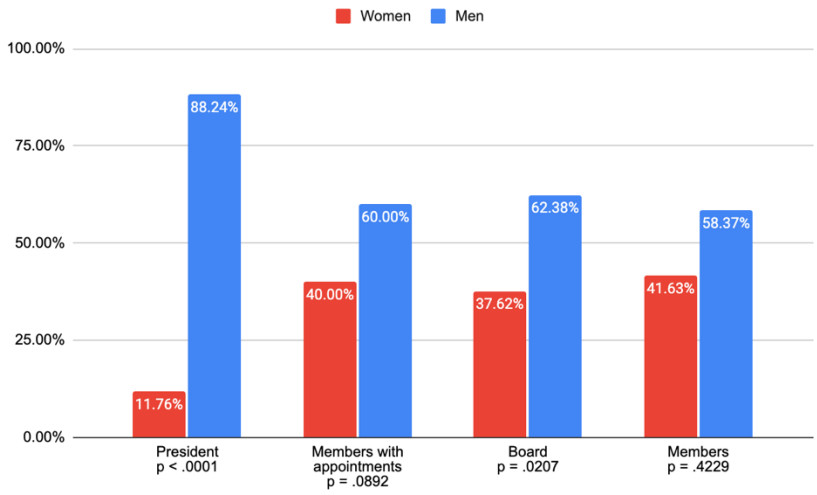

Fig. 4 Percentage of women and men in each role of the Italian Philosophical Societies

2.3 Discussion

In comparison to 2020, 2022's results suggest that women are still underrepresented in Italian Philosophical Societies when having a specific role (President) or taking part to the Board, where decisions for future research and organization of the Societies are taken. On the contrary, women are better represented as ordinary members and also, in 2022, as members with specific appointments. However, the data reported in the attached .xls file also show that the Italian Philosophical Societies taken into consideration highly differ from one another in the representation of women in boards and with specific appointments. For instance, the percentage of women in the board (F members in board) varies among societies from a minimum of 16,67% (in the following societies: AISFET, SIFD) to a maximum of 66.67% (in the following society: SISFA). The percentage of women with specific appointments (F MSA) varies among societies from a minimum of 0% (in the following societies: SFL, SIFP, AISFET) to a maximum of 75% (in the following societies: SIFM).

3 Third part of the survey

The third part of the 2022 data collection aims to understand whether there is a difference in the distribution of women vs. men in the Italian PhD programs including philosophical scientific sectors.

3.1 Methodology

We gathered data starting from the following public web page provided by MIUR at the following link: https://cercauniversita.cineca.it/php5/dottorati/cerca.php. We selected all Italian PhD programs including philosophical scientific sectors, limiting our analysis to the XXXV cycle. We consulted the web pages of each selected PhD program; for those that did not have public data about the scientific sectors of PhD students in XXXV cycle, we contacted the coordinators of the PhD programs to ask for the data about the number of women vs. men for each philosophical scientific sector.

The philosophical scientific sectors of interest were the same analyzed for the first part of this survey, i.e.:

11 C1: Theoretical Philosophy
11 C2: Logic, History and Philosophy of Science
11 C3: Moral Philosophy
11 C4: Aesthetics and Philosophy of Languages
11 C5: History of Philosophy
12 H3: Philosophy of Law
14 A1: Political Philosophy

The data collection has been difficult and partial because not all coordinators of the PhD programs provided us with the requested data and because not all the webpages of the PhD programs have information about the scientific sectors of each PhD student. For those PhD students whose webpages did not indicate their scientific sectors but just their tutor of studies, we considered the tutor's scientific sector.

3.2 Data analysis, results and discussion

Of 106 Italian Phd Programs including philosophical scientific sectors, 51.89% of them provided a website with data on the number of women vs. men enrolled in the Phd programs for a philosophical scientific sector, while 48.11% did not provide this piece of information.
As in 2020, results showed that the difference between women (N=19) and men (N=31) in philosophical sectors as regards the XXXV cycle of relevant PhD programs was not significant ($p < 0.2999$, 38% women and 62% men), suggesting that the trend of (under)representation of women in Philosophy in Italian Universities may depend on disparities in higher career ranks, more specifically starting from the RTDA rank. However, the collection of data could not be systematic as in the previous cases (see sections 1 and 2), for the reasons mentioned above and thus also the results of the analysis are still very partial and need to be considered in the overall developmental trend of the careers in Philosophy.

4 Conclusion and further research

Overall, the results of this research show that women are underrepresented in Philosophy in Italy, specifically in those ranks or roles where they could have more possibilities of career and their research could be independent.
This research presents some limitations that we aim to overcome in future research and data analysis:

1) Data analyses are partial, they also can be refined, for instance analysing statistical differences between the same rank in different years or improved via other statistical methods.
2) This research considered specific sectors only in Philosophy, while it considered subareas in other scientific fields. It would be worth considering sectors also in other scientific fields, to properly compare Philosophy to other scientific fields. For instance, it would be possible to better compare women's careers in areas with a similar percentage of women X rank, as in the case of mathematics, which should be then distinguished from computer science (together in area 1).
3) The research about doctoral students in Philosophy in Italy could be enlarged by collecting data about other PhD cycles, to obtain data on the developmental trends in time of the presence of women and men in PhD programs including philosophical scientific sectors.

References

Healy K. (2011). Percentage of Ph.D.s awarded in the U.S. to Women in 2009. Available at: www.kieranhealy.org/blog/archives/2011/02/04/gender-divides-in-philosophy-and-other-disciplines/.

Dougherty T., Baron S., Miller (2015). Female Under-Representation Among Philosophy Majors: A Map of the Hypotheses and a Survey of the Evidence. Feminist Philosophy Quarterly 1, (1). Article 4. doi:10.5206/fpq/2015.1.4.

Figdor C., Drabek M.L. (2016). Experimental Philosophy and the Underrepresentation of Women. In W. Buckwalter & J. Sytsma (eds.), A Companion to Experimental Philosophy. Wiley-Blackwell. pp. 590-602.

Williams W.M. (ed.) (2018). Editorial: Underrepresentation of Women in Science: International and Cross-Disciplinary Evidence and Debate. Front. Psychol. 8:2352. doi: 10.3389/fpsyg.2017.02352.