Precarious Researchers in Italy: Gender Asymmetries in SSH and STEM Departments

Annalisa Murgia
University of Trento

www.garciaproject.eu
Objectives and themes

• **Focus:** Early stages of scientific careers.

• **Fieldwork:** STEM and SSH disciplines.

• **Project structure:** 18 months of research + 18 months of experimentation and actions.
Tackled key areas

1) Influence of welfare and gender regimes on academic careers.

2) Gender biases in management and decision-making processes.

3) Organisational gender practices and stereotypes.

4) Leaky Pipeline phenomenon.

5) Gendered subtexts in recruiting criteria defining scientific “excellence”.

On the basis of the research results a Gender Action Plan has been implemented in each involved university.
### Percentage of TEMPORARY research staff + PHD

**GARCIA beneficiary departments 2013**

<table>
<thead>
<tr>
<th>Department</th>
<th>SSH Department</th>
<th>STEM Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Trento (IT) (without PhD)</td>
<td>28.7% (18.7%)</td>
<td>88.4% (52.6%)</td>
</tr>
<tr>
<td>University of Louvain-la-Neuve (BE) (without PhD)</td>
<td>94.3% (35.4%)</td>
<td>91.9% (42.6%)</td>
</tr>
<tr>
<td>Radboud University Nijmegen (NL) (without PhD)</td>
<td>46.6% (26.4%)</td>
<td>65.7% (41.9%)</td>
</tr>
<tr>
<td>University of Lausanne (CH) (without PhD)</td>
<td>70.5% (64.4%)</td>
<td>86.6% (84.4%)</td>
</tr>
<tr>
<td>ZRCSAZU – University of Ljubljana (SLO) (without PhD)</td>
<td>55.6% (35.7%)</td>
<td>52.7% (29.7%)</td>
</tr>
<tr>
<td>University of Iceland (IS) (without PhD)</td>
<td>49.4% (nd)</td>
<td>65.0% (15.9%)</td>
</tr>
</tbody>
</table>

Source: Farah Dubois-Shaik and Bernard Fusulier (eds.) (2015) Academic Careers and Gender Inequality: Leaky Pipeline and Interrelated Phenomena in Seven European Countries, GARCIA working papers n. 5, University of Trento (ISBN 978-88-8443-641-2);
### Percentage of FEMALE by position - GARCIA beneficiary departments 2013

<table>
<thead>
<tr>
<th></th>
<th>UNITN (IT)</th>
<th>UCL (BE)</th>
<th>UNIL (CH)</th>
<th>RABBOUD (NL)</th>
<th>LZRCSAZU/LJUBJANA (SLO)</th>
<th>Univ. of ICELAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SSH</td>
<td>STEM</td>
<td>SSH</td>
<td>STEM</td>
<td>SSH</td>
<td>STEM</td>
</tr>
<tr>
<td>Tenured and</td>
<td>30.4</td>
<td>10.0</td>
<td>39.6</td>
<td>23.1</td>
<td>41.7</td>
<td>26.8</td>
</tr>
<tr>
<td>Tenure track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non tenured</td>
<td>52.2</td>
<td>21.8</td>
<td>69.0</td>
<td>35.9</td>
<td>58.0</td>
<td>51.2</td>
</tr>
<tr>
<td>PhD</td>
<td>56.3</td>
<td>26.2</td>
<td>46.7</td>
<td>34.0</td>
<td>69.2</td>
<td>55.2</td>
</tr>
</tbody>
</table>

Source: Farah Dubois-Shaik and Bernard Fuselier (eds.) (2015) Academic Careers and Gender Inequality: Leaky Pipeline and Interrelated Phenomena in Seven European Countries, GARCIA working papers n. 5, University of Trento (ISBN 978-88-8443-641-2);
Research design and methodology

• Quantitative analysis at national and organisational level.
• Web-survey with non-tenure researchers + “movers/leavers”.
• **Semi-structured interviews** with female and male:
  • Assistant professors (4 STEM + 4 SSH);
  • **Postdocs** who:
    • are currently working (6 STEM + 6 SSH)
    • worked in the recent past (10 STEM + 10 SSH)
    • **Average age**: 36.7 SSH and 35.6 STEM
• **Focus on University of Trento** (Italy), Departments of:
  • Information Engineering and Computer Sciences (DISI)
  • Sociology and Social Research
Economic crisis, *budget constraints and cuts.*

Radical changes both in the governance and in the processes of recruitment, evaluation and promotion of academic staff. Emphasis on “objective” and “neutral” procedure based on *meritocracy* and *excellence.*

**Flexibilization of the early stages of academic careers.** Increase of research personnel with temporary positions (*postdocs and fixed-term assistant professors*), concentrated among the new generations of researchers.

*Postdoc is not formally considered as an employment,* then postdocs are not entitled to receive any unemployment benefit or other *social security provisions.* From a fiscal point of view they are considered as *freelancers.*
1. The phenomenon of «domestication»

- Postdocs from both STEM and SSH experience the phenomenon of “domestication” (Bologna and Fumagalli 1997): they emphasised autonomy in terms of management of their time and activities. Nevertheless, the flexibility of the research activity is experienced in an ambivalent way.

- The boundary-crossing between home and work, in terms of time and space, can lead both to greater freedom and a greater constraint to be always available and never stop working.

The downside of working at university is that there are no fixed working hours. This makes people feel forced to work, without ever disconnecting. (Ex-Postdoc STEM, Woman, 35)

When I don’t have to work during the weekends and the evenings this will be a novelty. (Current Postdoc SSH, Man, 40)
Postdocs perceive themselves in a precarious position: they have to do research, to publish, to look for other posts, scholarships or research funds. This fragmented and demanding workload has negative impacts on their personal lives.

Despite these working conditions, the interviewees very often considered the long hours’ culture to be an “intrinsic” characteristic of academic jobs – high competition, continuous performance evaluation, and high productivity levels.
2. An ambiguous exchange between aspirations and precariousness (2)

I work 60 hours a week, maybe more. I’m happy, I’m working very hard in this period, but I don’t mind.
(Current Postdoc STEM, Man, 37)

I work long hours, but in the end if someone wants to do research ... [...] either they do it because they have a passion or I think it's better not to do it. So when you do things because you like what you do then it's easy to work beyond the usual eight hours. (Ex-Postdoc STEM, Woman, 36)

R: Did you work during the evenings and at the weekends?
I: Always. I worked at Easter, Christmas... it makes me laugh because it’s like a collective disease in this environment. (ex-postdoc SSH, Woman, 36)
2. An ambiguous exchange between aspirations and precariousness (3)

- The “passion trap” (Murgia and Poggio 2014) is a mechanism useful for understanding the weak and few complaints by the researchers and the acceptance of their working conditions.

- All the interviewees shared the “sacrificial ethos” (Gill 2010), but women stressed more than men their devotion to academia.

- Female postdocs have to cope with the organisation’s requirement of a masculine work identity in order to assure high performances in the system.
3. Precarious employment conditions (1)

- Although **precariousness** and **economic instability** were the **main concerns** for interviewees, in relation to construction of both their professional careers and private lives, it is possible to evidence significant **differences between the STEM and the SSH researchers**.

- STEM postdocs earned between 2,000 and 2,500 euros per month, while those who worked in the SSH disciplines earned an average of 1,500 euros per month.
The salary is enough for me, I can also save a lot of money – nearly half of my salary – but it’s a fixed-term contract and I’d prefer a permanent contract even if it meant losing half of my salary. (Current Postdoc, STEM, Woman, 37)

As soon as I don’t have an international project to support me, I’ll be unemployed, and at the age of forty, that’s not the best experience that you want to have. (Current Postdoc SSH, Man, 40)

- In the analysis of contractual instability, what matters is not so much gender differences as the differences between scientific disciplines.
4. Precariousness and Parenthood

- 7 out of 33 interviewees had children: 3 men (postdocs) and 4 women (who left their departments after the postdoc).

- The majority of the interviewees considered maternity as an obstacle to an academic career. Several female interviewees (legitimately) don’t desire to have children, but our focus was in the organisational culture where maternity has no citizenship.

In academia being a woman with a child is disabling. You can’t think of working like before. (ex-postdoc SSH, Woman, 34)

I think that until my daughter was six months old... I don’t know if I really worked. [...] I don't feel really good. I don’t feel that I work enough and that I work in the way I worked before. (Ex-postdoc STEM, Woman, 29).
Conclusion

- **Precarization** is marked by profound generation and gender differences, and the academic labour market is no exception.

- As in knowledge work, **precariousness in academia** is experienced in ambivalent ways: **individualization** and limited career chances, but important degrees of autonomy, where research is the ‘**labour of love**’ (Worthington and Hodgson 2005, Clarke et al. 2012).

- It is necessary to find not only interpretive categories, but also **organizational solutions**, beyond the trade-off between work and life, which also implies specific gender expectations.

- Instead of chimeric perfect balance between supposed separate spheres of experience, **full visibility and active citizenship to the lives** of women and men (work, affect, caring, leisure, politics, etc.), starting from **early stages of academic career**.
COST – Dynamics of Virtual Work
Vilnius, 14-16 September 2016

Thanks!!!

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University of Trento

www.garciaproject.eu
Actions implemented at the Departments of:

- Information Engineering and Computer Sciences (DISI)
- Sociology and Social Research (DSRS)
“Training workshop: integrating a gender perspective in research”
- Conducted by Yellow Window (trainers: Catarina Arnout and Maxime Forest)
- ICT Days (2016), a highly participated scientific event launched in 2009 as an initiative by the DISI of the University of Trento dedicated to the broad subject of Information and Communication Technology.

March 10  |  March 11  |  March 12

Dipartimento di Ingegneria e Scienza dell'Informazione

10.00 - 18.00  |  Povo 1, Room Garda

GARCIA Project - Workshop Yellow Window

This one-day interactive workshop will give the research community practical tools to integrate gender aspects into research projects, a topic which contributes to excellence in research and is highly valued in Horizon 2020 calls.

During the morning a general introduction to gender in research will be provided, while in the afternoon we will work on practical exercises focussing on ICT research. Lunch and coffee breaks will be provided.

The training will be delivered in English by Yellow Window on invitation by GARCIA Project.

In order to find more information and to register please follow the link http://bit.ly/1UtPhdT
WP4 - STEM DEPARTMENT
Training course on how to integrate gender in research

- 26 attendees: 18 female and 8 male

Figure from the Yellow Window presentation.
Research Laboratory “Gender differences in students' experiences” (24 hours) aim: how to integrate a gender-sensitive approach in social research, applied to the study of the transition from school to work.

135373 - Il genere nella società contemporanea

Academic Year 2015/2016

<table>
<thead>
<tr>
<th>Professor</th>
<th>FRANCESCA SARTORI ANNALISA MURGIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td>Second semester</td>
</tr>
<tr>
<td>Teaching style</td>
<td>Front learning</td>
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More Information

In parallel to the course, for attending students, a supplementary (optional) teaching activity is planned, conducted in form of research laboratory. The laboratory is titled “Gender differences in students' experiences” and its duration is of 24 hours. In particular, a case study will be conducted, with students attending both SSH (Social Sciences and Humanities) and STEM (Science Technology Engineering Mathematics) faculties. A practical training on the construction of a research design will be offered, together with competences in data collection and in the analysis of quantitative and qualitative data. The activities will be focused on methodological issues related to: a) elaborating an interview guide and conducting qualitative interviews; b) elaborating, administering and analysing a survey. At the end of the course a presentation of the research works carried out by students is...
Program of the Research Laboratory

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>3 March 2016</td>
<td>Introduction of the course and presentation of the fieldwork.</td>
</tr>
<tr>
<td>10 March 2016</td>
<td>Gender differences in higher education and in career development</td>
</tr>
<tr>
<td>17 March 2016</td>
<td>Statistical background and some information on available data and questionnaires</td>
</tr>
<tr>
<td>4 April 2016</td>
<td>“Voices from the fieldwork” – Roundtable with a male and a female master students in STEM disciplines and a male and a female master students in SSH</td>
</tr>
<tr>
<td>7 April 2016</td>
<td>Introduction to qualitative methods: the interview</td>
</tr>
<tr>
<td>14 April 2016</td>
<td>Elaboration of a semi-structured interview guide</td>
</tr>
<tr>
<td>21 April 2016</td>
<td>Presentation and correction of the students’ interview outlines</td>
</tr>
<tr>
<td>28 April 2016</td>
<td>Presentation of the interviews conducted by the students and discussion on the main topic that could be included in a questionnaire.</td>
</tr>
</tbody>
</table>

Second part: How to develop gender-sensitive qualitative research instruments: the interview guide.

<table>
<thead>
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<tbody>
<tr>
<td>5 May 2016</td>
<td>Introduction to quantitative methods – the questionnaire.</td>
</tr>
<tr>
<td>12 May 2016</td>
<td>Elaboration of a questionnaire</td>
</tr>
<tr>
<td>19 May 2016</td>
<td>Presentation and correction of the students’ questionnaires</td>
</tr>
<tr>
<td>26 May 2016</td>
<td>Test and discussion of the final questionnaires</td>
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</tbody>
</table>

Third part: How to develop gender-sensitive quantitative research instruments: the questionnaire.

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</tr>
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<td>26 May 2016</td>
<td>Test and discussion of the final questionnaires</td>
</tr>
</tbody>
</table>
1) Cycle of seminars “GENDER STUDIES: INTERDISCIPLINARY PERSPECTIVES” organized with the Interdisciplinary Centre for Gender Studies
   - 167 people (153 women and 14 men) enrolled for the cycle of seminars
   - 80 people (71 women and 9 men) admitted to the course

2) Film festival on gender and science

3) “Researchers’ Night 2015” (September 2015)
The GARCIA Project team+FESTA Project team organized and interactive itinerary entitled "FEMALE SCIENTISTS FOR A NIGHT! THE WOMEN RESEARCHERS’ NIGHT! Stories of women scientists of the past, present and ... the future! ". Target: all citizens and particularly to younger people.
WP6 - ONLINE MENTORING

WEBSITE

- Participatory design
- Stakeholders involved: the rector office, the Equality & Diversity division, the administrative directors of doctoral schools, the ICT team of UNITN, the Communication office, the Webteam, the Legal office and the Technology transfer office.
- Page with the postdocs Rights&Duties
1. Publishing
   • Which are the most useful tips you may share for publishing in important journals?

2. Networking
   • As a researcher yourself, is there any useful tip you may give to help creating a successful network of academic relations?

3. Career planning
   • Which steps would you suggest to follow in order to apply for a tenure track position? In particular, which advices would you give to prepare a job interview to both male and female early career researchers?

4. Funding// writing a project proposal
   • Do you have any advice regarding the process of writing a project proposal?
   • Where would a young researcher look for funding?

5. Gender
   • Researches show the presence of many women in the first career steps but then, slowly, they decrease. Which suggestions would you give to female early career researchers?

6. Scientific communication
   • In your opinion, which are the best ways to communicate scientific results?
   • Do social media play an important role to share the academic work of a young researcher and to create his/her network? How would you suggest to use them?
**Aim:** to inform and empower early stages female and male students/early stages researchers in social sciences about the working opportunities in the private sector.

**Action:** workshop with two people who had achieved their PhDs at the DSRS department and then moved to the private sector by obtaining successful results and still doing research, but outside the academic borders, exploiting the acquired skills in other professional contexts.

We promoted the seminar through the DSRS Department and UNITN websites and the UNITN Alumni network.

**Participants:** master students, PhD candidates and postdocs of the Sociology and social research department, both man and women.
WP7 – Gendered subtexts in recruiting criteria defining scientific “excellence”

STEM DEPARTMENT

Facilitators: Bianca Elzenbaumer; Fabio Franz, and Maurizio Teli

Morning session:
The session involved professors of the University of Trento and of the COOP community
Aim: to discuss the criteria that are used to recruit Assistant Professors and to question them.
Participants: 3 women and 2 men, all full professors.
Main areas of discussion: Excellence, Networking, and Academia as a highly competitive environment
Output: Vademecum with advices for academic career development

Facilitators: Bianca Elzenbaumer; Fabio Franz, and Maurizio Teli

Afternoon session:
The session involved PhDs, post-docs and research fellows of the University of Trento, in particular from the DISI and other STEM departments, and the COOP community.

Participants: 6 female and 2 male early career researchers + people from the GARCIA project
长城——为了未来的脆弱博士后和博士生的宣言

A MANIFESTO FOR THE FUTURE OF PRECARIOUS POST-DOCS AND PH.D. STUDENTS*

OUR LIVES AND WORK ARE OFTEN INVISIBLE.
THE RULES OF THE GAME ARE INVISIBLE TOO.
MAKE THEM VISIBLE, MAKE OUR LIVES BETTER.

× We are not just writing machines. We are gendered bodies, we have friends, lovers, and families. Think about it when you evaluate us.

× We are asked to be totally available, always. Gender imbalance in the academia is built from the early stages of the scientific path. Don’t consider young researchers who also chase their personal development unable to meet this criteria.

× We play the academic game but its rules are opaque. Show us its mechanisms so we can be strategic players.

× We are required to be excellent. Let us understand the parameters of excellence, who defines them and how.

× We produce and share knowledge with colleagues around the world. Intellectually encourage, materially support, and institutionally value this.

* This manifesto emerged from the proposals collected during the “Making Academic Careers Together” workshop, part of the GARCIA project and hosted by the COOP2036 conference. The workshop saw the participation of professors, post-docs, and Ph.D. students attending the conference and/or affiliated to the University of Trento.

We are not just writing machines in Trento
We care for other people, we can have health issues. Officially consider this while evaluating our CVs for different positions or grants. Don’t think we should necessarily and often change the city we live in.

We play the academic game in Trento
We are evaluated through logics we cannot see. Tell us what the rules of the game are. Let us understand your politics. Our contracts are short-time. Define the renewal conditions since the beginning.

We are required to be excellent in Trento
Make evaluation criteria explicit. How are publications, teaching, and grants evaluated? Tell us who evaluates us. Make public the names of the committee members at the time of application. When you have evaluated us, help us improve through publicly available reports.

We produce and share knowledge in Trento
Seeking professional development, we attend conferences, co-author with international colleagues and visit universities around the world. Encourage these activities. Grant all of us the time and money to participate in them. Consider this when evaluating us.

We are academics and professionals in Trento
Make all our work visible. Recognise us as Principal Investigators for externally-funded projects. Recognise the work we invest in thesis supervision, independently from our teaching. Recognise the administrative work we do. Value and appreciate the peer-to-peer work we do, for example mentoring younger scholars.
Workshop “Come valorizzare i talenti nella ricerca?” (How can we promote talents in research?) conducted by Antonio Chiesi and Daniela Falcinelli (STAGES) (2 hours workshop)

Participants: 14 professors (4 females and 10 males) out 37 full and associate professors of the DSRS.
Workshop “Professional Development Workshop: Career Planning for Early Career Researchers”.

+ **individual follow-up colloquia**

(personalised counselling on professional development)

**Participants:** 6 (5 female + 1 male) and 9 colloquia (4 female + 5 male)

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**June 13th, 2016 – h. 14:00**

Meeting Room – 3rd Floor, Via Verdi 26 Trento

**Professional Development Workshop: Career Planning for Early Career Researchers**

presents

**Barbara Risman**

The seminar is designed for non-tenure researchers. It will be in English. Professor Risman will focus on the practical skills needed by early career researchers for their career development such as cv-writing, preparation of job applications and interview strategies. Professor Risman will also have **individual follow-up meetings** with some of the participants. These individual advising and counselling appointments will be on the researcher present projects, future applications and more broadly about his/her career development. If interested in booking an individual session, please email francesca.fiore@unitn.it. The number of individual colloquium is limited.
GARCIA Project + the **Scientific Research and Technological Transfer Division**

**Infoday on ERC STARTING GRANT 2016:** information session to support researchers in the preparation of their application for an ERC Starting Grant 2016 proposal

**Speaker:** Serena Borgna - APRE H2020 NCP European Research Council

+ **individual meetings with an APRE expert** in order to receive tailored advices on ERC project proposal. and social research

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**Programme:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30-8.45</td>
<td>Registration (please observe punctuality in order to start presentations in due time)</td>
</tr>
<tr>
<td>8.45-9.00</td>
<td>Welcome (Vanessa Ravagni - Scientific Research and Technological Transfer Division - University of Trento).</td>
</tr>
<tr>
<td>9.00-12.30</td>
<td>- Modalities of the ERC Starting Grant call 2016: eligibility requirements, proposal description and budget, application procedure, evaluation rules (Serena Borgna - APRE H2020 NCP European Research Council).</td>
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<tr>
<td></td>
<td>- Questions and Answers</td>
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<td></td>
<td>** Afterwards:**</td>
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<tr>
<td></td>
<td>Individual meetings (room 9) upon request (to: <a href="mailto:citta.research@unitn.it">citta.research@unitn.it</a>; tel. 1148)</td>
</tr>
</tbody>
</table>
Local level: unemployment benefits for postdocs

- In Italy postdocs are not entitled to unemployment benefits.
- The PAT - Autonomous Province of Trento (differently from other Italian regions) has a special mandate/autonomy for the management of the welfare and social benefits.

The GARCIA team worked with UNITN Rector and other bodies:
1. A negotiation was opened among UNITN; APT; the Employment Agency of the APT and the local trade unions.
2. Approval of the Agreement on the unemployment benefits for postdocs from the APT (600 euros for max 6 months).
3. Definition of the measures, involving directly postdocs, needed to respect the principle of conditionality.
THANKS !!!

annalisa.murgia@unitn.it

www.garciaproject.eu