INTERVENTI

Francesca D'Angelo

International Conference "Inequality vs Inclusiveness in Changing Academic Governance: Policies, Resistances, Opportunities", 16-17 September 2019 – University of Naples Federico II

Conferenza internazionale "Inequality vs Inclusiveness in Changing Academic Governance: Policies, Resistances, Opportunities", 16-17 Settembre 2019 – Università di Napoli Federico II

Abstract

The report reconstructs the most important issues debated at the conference *Inequality vs Inclusiveness in Changing Academic Governance: Policies, Resistances, Opportunities* through the main contributions presented. First, an insight into the concept of vertical and horizontal segregation in academia will be provided, with examples from both, humanities and STEM (Science, Technology, Engineering, Maths). Second, an analysis of the stereotypes and cultural bias on the basis of gender discrimination will be advanced, to explain the origins of inequality in academia, together with a description of the consequent masculine image of science. Then, Gender Equality Plans and a series of mentoring programs implemented in Germany, France, and Italy, will be compared and contrasted as a measure to improve inclusiveness in research.

Key words: Inequality, Inclusiveness, Gender Discrimination, Mentoring, Gender Equality Plans

Abstract

Il report offre una sintesi degli argomenti più importanti discussi al convegno *Inequality vs Inclusiveness in Changing Academic Governance: Policies, Resistances, Opportunities* attraverso un'analisi dei maggiori contributi presentati. Innanzitutto, viene introdotto un approfondimento del concetto di segregazione verticale e orizzontale nel mondo accademico, con esempi tratti dall'ambito delle discipline umanistiche e STEM (Science, Technology, Engineering, Maths). In secondo luogo, è proposta un'analisi dei principali stereotipi e pregiudizi culturali, alla base della discriminazione di genere, per spiegare l'origine delle diseguaglianze in accademia e la conseguente rappresentazione maschile della scienza nell'immaginario collettivo. Infine, un confronto tra una serie di *Gender Equality Plans* e di programmi *mentoring*, adottati in Germania, Francia e Italia, è presentato come misura per implementare il concetto di maggiore inclusione femminile nella ricerca.

Parole chiave: Diseguaglianza, Inclusione, Discriminazione di Genere, Mentoring, Gender Equality Plans

Introduction

The main aim of the international conference "Inequality vs Inclusiveness in changing academic governance: policies, resistances, opportunities" organised by the European Network of Mentoring Programs (Eumen-net) together with the Department of Political Science of the University of Naples Federico II, discussed the profound social and cultural transformations affecting the academic world in the last decades, which lead to the need of "more responsible and inclusive research practices to respond to the challenges of contemporary society". In particular, the debate focused on the impact that the aforementioned changes had on academia in terms of gender and diversity as well as on the most important achievements reached through gender equality plans (GEPs) and mentoring programs by researchers from different academic fields, decision-makers in academia, government bodies, and practitioners from academia and research institutions (i.e. project coordinators of GEPs, HR development professionals etc.).

On the Vertical and Horizontal Segregation

Nowadays, there is strong evidence to maintain that research institutions and academia still mirror the social values responsible for gender bias and discrimination. A double

type of segregation, i.e. horizontal and vertical, has been presented and described by many conference speakers. The expression "horizontal segregation", refers to the concentration of women and men in certain scientific fields, that is, men are more inclined to study and research into STEM (Science, Technology, Engineering, Maths) subjects whereas women are more likely to take up social science and human studies (Blackburn et. Al., 2002). Academic fields are still stereotypically gendered, with most areas of research characterized as male, and some less 'scientific' fields, like pedagogy or languages, as female and with men dominating the fields that are perceived as being exciting, fast-moving or 'relevant'. This also contributes to devaluing the contribution of women to research – i.e. the more 'scientific' the field, the more power and resources are invested in the position, and, therefore, the more attractive it is to men or exclusive of women (European Commission, henceforth E.C., 2008).

On the other hand, another major issue concerns the so-called "vertical segregation", that is to say, all hierarchical positions are mainly occupied by men. Indeed, a common portrait presented by all the conference speakers deals with the statistical data also found in the European Commission *She Figures* handbook (E.C., 2018), which only records the presence of 33% of female researchers in Europe. It is interesting to notice that the under-representation of women in academia occurs the more they reach top-level positions. That is to say, there is not a huge quantitative difference between male and female Ph.D. European graduates (i.e. 47% female vs 53% male). However, despite the slow and recent growth of female researchers, recent data only see 20% of women involved in the top grade of their scientific careers.

This latter concept of vertical segregation has been presented under a particular perspective within the conference framework by Maria Cristina Antonucci (Eumen-net 2019, 9), from the Italian National Research Council. She argues that the introduction of the new format of recruiting for the two top levels of academic jobs, in 2012, initially did not considerably affect the already present gender unbalance. However, after a series of additional changes in the academic teaching staff, that is through a replacement of the system of access by medians with access through the thresholds, the aim was the reshaping of the system to reach a higher level of inclusiveness. The presentation analyses the effects of vertical segregation, following the recruiting reform, regarding a particular field, sociology, which is not traditionally associated with horizontal segregation as it falls into the category of human sciences. Nevertheless, it has been demonstrated how the different subsectors of Italian sociology (i.e. general sociology,

sociology of culture and communication, economic sociology, etc.) are differently affected by the vertical segregation, especially if one considers the top academic positions.

An example of both types of segregation, vertical and horizontal, has been presented by D'Isanto, Masullo and Barone (Eumen-net,2019, 15) with an analysis of the phenomenon of gender discrimination in the Hard Sector. The study investigates some overlooked aspects of the discrimination phenomenon, such as the implementation of organisational models, the productivity indicators, time management, etc. which, generally speaking, all traditionally refer to male workers. The study was conducted taking samples from the National Institute for Nuclear Physics in the south of Italy and showed that the models adopted within the organisation are detrimental for both men and women in that if on one hand they affect the traditional discrimination indicators (i.e. kind of occupation, wages, tasks to be carried out, etc.), on the other they are detrimental for the quality of life of the workers, particularly if they are women. The authors concluded that these models need to be found in the way society and the labour market are structured, which is in the unbalanced distribution of familiar and work tasks.

The origins of gender discrimination

Indeed, the very base of gender discrimination has been recognised in the unconscious or implicit gender bias rooted in our society (Rudman et. al., 2000). It has been argued that people's judgments and decisions are deeply affected by their thought patterns, assumptions, or interpretations without being aware of doing it. This represents a serious issue when it affects the assessment and evaluation of people (i.e. for positions, awards, etc.) for it impedes to be objective and fair. For instance, a recent study shows that both men and women judge attractive women differently from less attractive women because of feelings of sexual insecurity, jealousy, and fear. The effect has been shown by academic research to have persisted despite decades of feminism and more awareness of the damaging consequences of gender stereotyping. In particular, Leah Sheppard from the WSU Carson College University, main author of the paper, argues that highly attractive women can be perceived as dangerous and that matters when we are assessing things like how much we trust them and whether we believe that what they are saying is truthful (Sheppard & Johnson, 2019). Thus, this represents a serious issue

when it comes to research as attractiveness becomes an additional obstacle for female academics to build their own career and develop trust in their own field of study.

The masculine image of Science

The major issue to address, as a consequence of the stereotypical view of women, is the masculine image of science shared worldwide. Indeed, a study by Miller et.al. (Miller, Eagly and Linn, 2014) shows that strong relationships exist between women's representation in science and national gender-science stereotype. That is to say, men tend to be more associated with science than women even in those countries where women were approximately half of the nation's science majors and employed researchers.

As stated in the European document "Mapping the Maze: getting more women to the top in research" (E.C., 2008), the question of why women do not generally fare well in research decision-making today is often met with very specific assumptions about women and men. Such assumptions "turn laws and regulations into mere text, commitment into simple rhetoric and measures into window-dressing" (E.C., 2008: 12). Indeed, even though women actively take part in all the different fields of research, it is still a common gender stereotype to see women as talented teachers, exploiting their communication, soft skills, an open ear for students, etc. On the other hand, men tend to be more associated with research as hard thinkers, analytical, more objective, etc. This image is reflected in the 'gender-biased division' of labour in academia with female staff concentrated in the teaching and lower-ranked administration areas, and the males in research: to say it in other words "women teach, men think".

4. Mentoring Programs

A topic of crucial importance, discussed at the conference, has been the mentoring programs considered as one of the most effective instruments to actively address the described issues and implement equal opportunity policies. Indeed, it has been widely acknowledged that to empower women to reach positions in decision making in research, mentoring is an interesting measure to consider. However, without changes to selection committees and in organisations, there will be no real change in the situation. To say it in Londa Schiebinger's words, it is not enough to fix the women if we do not also fix the institution, and work together with men (Schiebinger, 2011). Among the different contributions taken from the conference papers, a series of mentoring schemes

are presented and described from different areas of Europe, i.e. Italy, France, and Germany.

As regards the Italian case, Masullo and Pelizzoni (Eu-menet,2019, 22), from the National Institute for Nuclear Physics (INFN), analyse the presence of female researchers and technologist employees, which only represent 21% of the total population. These figures drop to 15% when the highest career positions are considered. The data are not surprising as they fit into the already described European scissor diagram in academia, especially in the STEM research area. Thus, there is a considerable loss of female researchers after the Ph.D. due to several factors such as the intrinsic work organisation, career paths inside the research world, and the masculine culture and male model in academia and research institutions (especially STEM). Taking this scenario as a starting point, the INFN Single Guarantee Committee (CUG) promoted an experimental mentoring program focused on the career of young researchers on one hand, and the need to rethink about the work organisation on the other. Interestingly, the program involved two different women groups, that is mentees (fellowships, and young entry level researchers/technologist-stuff) and mentors (researchers, technologists, professors). Both groups share the same challenges: they have gone through and reconsider the entire work organisation under a gender perspective.

In Germany, an important contribution to mentoring programs has been presented to provide an overview of the employment situation. In particular, Ehmler and Drosch (Eumen-net, 2019, 17) present the actions carried out by the Forum Mentoring Association towards the development of mentoring programs to highlight the keys to successful mentoring and which support is fundamental for coordinators. To face structural differences in academia, several measures have been adopted in Germany. For instance, in 2008, the Ministry of Education offered special funds to universities to recruit more female scientists on top-level positions. Besides, several mentoring programs mostly focused on science, have been established at university. What is worth highlighting about the Forum Mentoring Association is that it represents a network of coordinators of different mentoring programs in science. Nowadays, the network supports 120 mentoring programs in Germany, Austria, and Switzerland and has developed valuable contributions and quality standards. Its main aim is the achievement of equal opportunities in science and research and tries to develop further mentoring services.

As far as the situation in France is concerned, the analysis provided by Morris, Batut, and Kvaskoff (Eumen-net 2019, 23) does not differ from the scenario in the rest of Europe. That is to say, the number of female and male university students in the field of science, is quite balanced. However, the proportions change considerably the more they reach higher academic positions, especially after the Ph.D. The reasons have been identified in a general lack of support to encourage young women to pursue their professional careers, by valuing their scientific expertise and skills. Therefore, to address this issue and guide female scientists in their early career, an association has been created in France (Femme & Science) to promote science and technology in school and higher education establishments. In particular, among the different initiatives of the association, a special focus deserves the mentoring programs that provide a trustworthy environment, where girls and young women are encouraged to discuss their career path and learn how to value their skills. What is original about the mentoring program advanced by Femme & Science is the combination of individual and collective training sessions, such as regular meeting between mentees and mentors, mentoring circles where different mentors and mentees debate on particular issues, training sessions and career development workshops where inspiring women act as role models for academic and professional career. It provides a fundamental tool for mentees and mentors to share similar concerns, grow together and support each other.

Thus, it can be argued that mentoring represents a fundamental measure available, which also needs to be wisely tuned to reach its objective. The recent setting up of the European Network of Mentoring Programmes (Eumen-net) for women in academia and research promises to provide a platform for high standard mentoring programmes.

Gender Equality Plans

Within the framework of the conference, to discuss the topic of inclusivity in academia, a roundabout was hosted advancing suggestions for improvement from different fields of research. Maria Rosaria Pelizzari, director of the Observatory for Gender studies and Equal Opportunity (OGEPO) focused on the R&I Peers Pilot experience for improving gender equality in research organisations. After a general overview of the European project, she described the Gender Equality Plan set up by the University of Salerno with its main objectives, such as: development of a gender perspective in research and curricula, amelioration of work-life balancing measures, realisation of mentoring programs for young female researchers, and reduction of gender gap in decision-making

bodies. It is worth highlighting that GEPs have also been considered as a suitable and effective tool to monitor gender inequality. Indeed, in her contribution, Vervoorts (Eumen-net,2019, 30) argues that GEPs usually include an assessment of current data relating to the underrepresentation of women at different stages of their scientific careers.

The roundabout also hosted the contributions of Maria Carmela Agodi, member of the scientific committee of the conference, from the University of Naples Federico II, Arianna Montorsi from the Polytechnic University of Turin, and Giovanna Declich, coordinator of the ASDO team in the TRIGGER project, promoting structural change to achieve gender equality in medicine and engineering, the two academic fields that show the worst gender figures.

Conclusions

Thus, to conclude, what makes the concept of inclusivity in academia such a necessary objective to reach? From the analysis of the main contributions of the conference and the main issues debated on the topic, it can be stated that social, economic, and academic benefits support and promote gender inclusivity in academia and higher research institutions.

First, inclusivity creates a better work environment, where staff freely develop their skills and fulfil their expectations adopting a gender-sensitive perspective. This translates into the prevention of verbal, psychological and physical gender-based offenses on one hand, but also into enabling work-life balance in the organisation, distribution, and planning of work.

Second, in terms of economic benefits, it is important to notice that not only research represents a source of intensive human capital but it is also based on funding. Therefore, to access public funding, along with the principles of "responsible research", it has been observed that gender equality represents an additional factor that boosts applications. Additionally, since a considerable part of research aims at increasing products, service, and policy delivery, constructing a gender-balanced team, the addition of specific gender expertise as well as a gender perspective in research production and dissemination can bring additional economic benefits. That is to say, new target audiences, beneficiaries, and final users (E. C., 2016).

Third, as regards the most important aspect improved by gender equality and inclusivity, that is the academic benefits, there are two main points to discuss: attracting

and retaining talents on one hand, and reaching excellence in research quality on the other. Indeed, from the analysis provided in this paper, it emerges that there is a vicious circle which sees women leaving research in great numbers for all the reasons mentioned above, such as work-family load, lack of self-confidence in their scientific skills, the inadequacy of mentoring programs and support, etc. On the other hand, research becomes an environment less and less attractive to women. Therefore, attracting and retaining female talents must be reached addressing the full spectrum of gender bias and inequalities. The addition of the gender dimension in research and innovation content not only improves the overall quality of research but is also encouraging a multi-disciplinary approach. In terms of research effectiveness, this can be seen as a tool allowing a broader set of viewpoints, enhanced creativity as well as shared knowledge.

Thus, which measures should be taken to fulfil all the objectives analysed above? As stated in the European Institute for Gender Equality's (EIGE) document "to address structural reproduction of inequalities in research and higher education institutions, it is crucial to identify and act upon the mechanisms that need to be changed" (E.C., 2016: 7), However, isolated actions against the system could not be as effective as addressing the whole structure. Therefore, a comprehensive and holistic approach aiming at identifying and addressing inequality in all domains of academic and higher research institutions is required to take up institutional changes aimed at removing the obstacles to gender equality that are inherent in the research system itself and address all the mechanisms reproducing inequalities.

References

Eumen-net, (2019). Abstract Book of the International Conference "Inequality vs Inclusiveness in changing academic governance: policies, resistances, opportunities", 16-17 September 2019 – Eumen-net, University of Naples Federico II (Italy) (available at www.eument-net.eu/wp-content/uploads/2019/02/Abstract-book.pdf).

Blackburn, Robert B., Browne, Jude, Brooks, Bradley, Jarman, Jennifer (2002). Explaining gender segregation. *British Journal of Sociology*, 53(4): 513-536.

European Commission. (2008). *Mapping the Maze: Getting More Women to the Top in Research*, Luxembourg: Publication Office of the European Union.

European Commission. (2016). *Gender Equality in Academia and Research, EIGE (European Institute for gender Equality) Gear Tool*, Luxembourg: Publication Office of the European Union.

European Commission. (2018). *She Figures Handbook 2018: Statistics and Indicators on Gender Equality in Science*, Luxembourg: Publication Office of the European Union.

Miller, David I., Eagly, Alice H., Linn, Marcia C. (2015). Women's Representation in Science Predicts National Gender-Science Stereotypes: Evidence From 66 Nations. *Journal of Educational Psychology*, 107(3): 631-644.

Rudman, Laurie, Greenwald, Anthony, Mcghee, Debbie. (2000). Implicit Self-Concept and evaluataive Implicit Gender Stereotypes: Self and Ingroup Share Desirable Traits. *Personality and Social Psychology Bulletin*, 27(9): 1164-1178.

Schiebinger, Londa. (2011). Getting more women into science: Knowledge issues. *Gender and Science: Studies across Cultures*, 3-19.

Sheppard, Leah D., Stefanie K. Johnson. (2019). The Femme Fatale Effect: Attractiveness is a Liability for Businesswomen's Perceived Truthfulness, Trust, and Deservingness of Termination. *Sex Roles*, 1-18.

Francesca D'Angelo è Dottoressa di ricerca in Studi Linguistici, Storici e Letterari (curriculum linguistico), rappresentante della campagna comunicativa "*L(')Otto tutto l'anno*" (Associazione Dottorandi e Dottori di Ricerca in Italia) per promuovere la parità di genere nella ricerca. Consulente di normative europee di pari opportunità con particolare riferimento al mondo accademico presso l'OGEPO (Università di Salerno).

Francesca D'Angelo - Philosophy Doctor in Linguistics, promoter of the cultural campaign "*L(')Otto tutto l'anno*" (Association of Italian Ph.D. Candidates and Doctors) for gender equality in research, consultant with expertise on gender studies and women's rights in academia at the Observatory for the diffusion of Gender studies and Equal Opportunity culture (OGEPO), University of Salerno.