21 GENDER BALANCE

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Gender balance is commonly defined as the equal participation of women and men.¹ It allows the monitoring of human resources across sectors and over time and thus provides data to support arguments for the implementation of gender equality measures. Gender balance can be achieved both vertically and horizontally within an organisation.² Vertical gender balance means an equal proportion of women and men in ranked positions of power while horizontal gender balance means equal proportions of women and men across different fields of practices.³ This chapter unpacks the concept of gender balance and articulates its functions and limitations. It situates the concept within a broader theoretical framework and gives some short examples of how the concept is implemented in higher education (HE) in Norway. It closes with a discussion of some limitations of the concept.

On a structural level gender balance refers to the numerical distribution of women and men in an organisation or unit. In recent years the discourse on gender balance in academia has shifted from moral-based arguments connected to democratic values of fairness and towards more performance-based arguments: it is assumed that more gender balanced working environments use all talents, become more creative, include more perspectives, and thus enhance credibility, relevance, innovation and quality of research.⁴ Those arguments, however, connect to a major dilemma: what if a gender balanced working environment does not increase output and production?

Balance can be broadly defined as the drive to equalize in weight, number or proportion. Based on a binary understanding of gender, gender balance commonly relates to numbers, bodies, and human resources as men and women. However, since weight can also be interpreted as influence or power exercised in relations, the concept connects to participation and recognition.

Organisational studies have developed various models to explain the processes that lead to gender imbalance the top levels in academia, such as those described by

the well-known metaphors 'leaky pipeline', 'glass ceiling', or 'sticky floor'. Leaky pipeline refers to the 'drop out' of women from the academic career ladder.⁵ This phenomenon is at play when women comprise the majority of the student population but remain unrepresented in top academic positions. In comparison, the glass ceiling metaphor refers to structural and cultural barriers and points towards the existence of visible or invisible obstacles for women in power and decision-making positions'.⁶ The notion of barriers that prevent the ascension of women has further been nurtured by the concept of a 'sticky floor', which describes the forces that tend to maintain women at the lowest levels in the organisational pyramid.⁷ What these explanatory models have in common is that they all focus on women. The 'lack of women' as a central problem representation⁸ has led to research designs, the development of gender equality measures, policy recommendations, and data visualisation primarily designed within the gender frame 'fixing the women'.⁹ Measures to promote gender balance in academia (such as mentoring programmes, promotion, writing retreats, and more time for research) are further designed on the individual level to help women to succeed in a working environment that is built on male premises.¹⁰ Although some of this attention might be beneficial, the overwhelming focus on women can, however, be counterproductive for both women and men and the relation between them. It can further lead to persistent victimisation, marginalisation, and othering.

The term 'gender balance' is widely used in the Nordic countries and indicates a goal to aim for. Statistics have previously been framed within terminology that shows a problem that needs to be solved (such as gender segregation, gender discrimination, or gender gap). In 2022, for example, the Global Gender Gap report showed by means of visualising proportion of women and men that the COVID pandemic had reopened gaps when it comes to the division of labour that had previously been closed. Whereas terms like 'gap' and 'segregation' picture a static condition, the term balance evokes the imagination of the activity of distributing power so that an equilibrium comes into being. The term 'gender balance' has further a more positive connotation and invites action, namely, to balance representation, participation, influence, and power.

It is telling that the concept has made it into a variety of initiatives driven by research and policy in the Nordic Countries since 2013, the year when the Nordic Council of Ministers published the report *The Nordic Region – A Step Closer to Gender Balance in Research? Joint Nordic Strategies and Measures to Promote Gender Balance among Researchers in Academia.*¹¹ In Norway, the concept of gender balance is broadly implemented in the HE sector and promoted by funding institutions. It is moreover legally legitimated by the Ministry of Education, which appoints the 'Committee for Gender Balance and Diversity in Research' which 'provides support and recommendations on measures contributing to gender balance and diversity in the Norwegian research sector'.¹² The committee changed its name from the 'Committee for Mainstreaming – Women in Science' (2004) to the 'Committee for Gender Balance in Research' (2010) to the 'Committee for Gender Balance in Research' (2014). These changes indicate a general shift in policymaking from the 'women in science question' towards a broader

focus on diversity which brings ethnicity, race, sexuality, age, ability, religion, social and economic background, and other markers of difference into the metrics. A further indicator for a changing discourse is that the word 'women' is replaced with the term 'the underrepresented gender'.

HE institutions in Norway are requested by law to provide statistics on gender balance that are made openly accessible by the Database for Statics in Higher Education and the Nordic Institute for Studies of Innovation, Research, and Education. This accessibility of data on gender balance is exemplary worldwide and has been a source for applied statistics in building innovative gender balance measures such as the *BalanceXplorer*.¹³ Since all HE institutions in Norway are monitored and evaluated by the Ministry of Education and Research according to their gender balance index, institutions with large gender imbalance are expected to implement effective gender equality measures. The recognition has so far been a major incentive for gender balance and gender balance has become a prestigious marker within the HE sector that strives for excellence.¹⁴

Besides the national efforts in collecting quantitative data, the Research Council of Norway has initiated the BALANSE programme specifically tailored for research and intervention projects. This programme is a worldwide unique funding programme that aims at promoting gender equality and gender balance in Norwegian Research.¹⁵ Between 2012 and 2022, the programme funded 37 projects to develop new knowledge, learning and innovative measures.¹⁶

There are many ways to visualise the ratio of women and men, but only a few have so far been applied in gender equality work. A team of researchers at UiT The Arctic University of Norway has conducted creative experiments with innovative data visualisations that resulted in the *Balancinator*.¹⁷ This is a free and open online tool which visualises gender balance by means of diverging pips (Figure 21.1) and allows one to ground percentages in absolute numbers.¹⁸ Visualising vertical gender balance by means of diverging pips (Figure 21.1) and allows one to ground percentages in absolute numbers.¹⁸ Visualising vertical gender balance by means of diverging pips indicates the total number and hence the bigger picture. Other innovative measures are the BalanceXplorer¹⁹ or the GENDIM toolbox.²⁰

Numerical measures for gender representation allow one to detect gender segregated working places. Although they cannot map discrimination and unequal treatment, having the numbers can help deliver the arguments to counter these. Mapping the ratio of men and women in a given context displays relevant disparities and enables cross-comparisons of accumulated data and rankings that matter in competitive systems. A major advantage of implementing the concept of gender balance in DEI work is that it allows for the establishment of measurable goals, and the setting of specific targets. Annually updated statistics on gender balance can help policymakers to priorities effective policies.

Increased monitoring of gender balance in HE needs a discussion of what the concept can accomplish, and what it cannot. A major limitation of the concept is that it builds on a binary understanding of gender and hence cannot map the representation of non-binary people. In times of a broadening of the gender spectrum, this is a challenge for those who work with the concept. Since statistics are a powerful tool that impact thinking practices and actions, they need to be

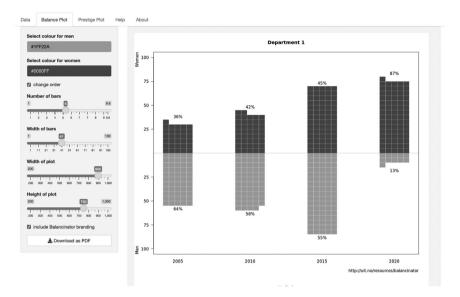


FIGURE 21.1 The *Balancinator* is a free and open access online tool that allows users to build generic plots by simply inserting Excel sheets. It makes use of a novel way to visualise numerical distributions of women and men by means of diverging pips. CC BY 4.0

complemented by qualitative data and critical reflection.²¹ DEI workers need to be cautious of the increasing measurement obsession that does not automatically lead to changes of the gender order. Feminist critique has shown that balanced representation does not necessarily lead to a redistribution of power.²²

Those who work with the concept need to keep in mind that even though a specific target is reached, statistics should not be used to make people stop speaking about ongoing discrimination, inequality, or violence against women, non-binary people, or other minorities in higher education. Thinking of gender balance in the broader sense as an equilibrium (such as the power balance of a curling humming-top) bears the potential to fundamentally rethink the 'balancing act'²³ itself. More relational approaches can turn the attention of gender balance work towards values, qualities, and differences beyond identity politics. Here, the arts and humanities can play a central role in developing innovative tools that attend to the multiplicity of identities and gender expressions. Finally, in order to lead to sustainable gender equality there is a need to scrutinise mechanisms that perpetuate gendered power relations.²⁴

Summary

- Gender balance is defined as the equal participation of women and men.
- Gender balance can be achieved both vertically and horizontally within an organisation. Vertical gender balance is defined as the equal proportion of

women and men in ranked positions of power. Horizontal gender balance is defined as the equal proportion of women and men across different fields of practices.

- Aiming for gender balance in academia can be one pathway towards more equal, diverse, and inclusive societies.
- Innovative measures to improve gender balance in academia have recently been developed in Norway (e.g. *Balancinator, BalanceXplorer, GENDIM toolbox*).
- A major limitation of visualisations of gender balance is that it builds on a binary understanding of gender which leads to statistical data handling that does not take gender diversity into account.

Questions for discussion

- How is gender balance conceptualised, measured, visualised, monitored, and discussed within your organisation?
- Which measures has your organisation implemented to balance the field?
- Who is responsible for the 'balancing act' in your organisation?

Suggestions for further reading

- For a discussion of the term gender imbalance: Bradshaw, C. 2021. Gender Imbalance in Academic Careers. In W. Leal Filho, A. Marisa Azul, L. Brandli, A. Lange Salvia, and T. Wall (eds.), *Gender Equality*. Springer International Publishing. https://doi.org/10.1007/978-3-319-95687-9_57
- For critical perspectives on monitoring gender representations: Liebowitz, D. J., and Zwingel, S. 2014. Gender equality oversimplified: Using CEDAW to counter the measurement obsession. *International Studies Review*, 16(3), 362–389. https://doi.org/10.1111/misr.12139.
- For feminist perspectives: David, M. E. 2009. Social diversity and democracy in higher education in the 21st century: Towards a feminist critique. *Higher Education Policy*, 22(1), 61–79. https://doi.org/10.1057/hep.2008.25.

Notes

- 1 EIGE 2022
- 2 Meulders et al. 2010
- 3 Silander et al. 2013
- 4 Loarne-Lemaire et al. 2021
- 5 Xu 2008; see also Schmidt, this volume
- 6 Barreto et al. 2009
- 7 Meulders et al. 2010
- 8 Bacchi 2009
- 9 Ely and Meyerson 2000; Nielsen 2016
- 10 Connell 2019
- 11 Nordic Council of Ministers 2013
- 12 Kifinfo 2022

- 13 Mittner and Mittner 2022
- 14 See Maxwell, this volume
- 15 The Research Council of Norway 2017
- 16 Prosjektbanken 2022
- 17 Mittner and Mittner 2020
- 18 Duarte et al. 2020; Mittner and Blix 2010
- 19 https://shiny.uit.no/norgeibalanse/
- 20 https://likestilling-frontend.vercel.app/en
- 21 Bradshaw 2021
- 22 Liebowitz and Zwingel 2014; Ahmed 2017, 103
- 23 Mittner et al. 2018
- 24 Mittner et al. 2022

References

Ahmed, S. 2017. Living a Feminist Life. Duke University Press.

- Barreto, M., Ryan, M. K., and Schmitt, M. T. 2009. The Glass Ceiling in the 21st Century: Understanding Barriers to Gender Equality. American Psychological Association.
- Bradshaw, C. 2021. Gender Imbalance in Academic Careers. In W. Leal Filho, A. Marisa Azul, L. Brandli, A. Lange Salvia, and T. Wall (eds.), *Gender Equality*. Springer International Publishing. https://doi.org/10.1007/978-3-319-95687-9_57
- Connell, R. 2019. The Good University: What Universities Actually Do and Why It's Time for Radical Change. Monash University Publishing.
- David, M. E. 2009. Social diversity and democracy in higher education in the 21st century: Towards a feminist critique. *Higher Education Policy*, 22(1), 61–79. https://doi.org/10. 1057/hep.2008.25.
- Duarte, M., A. Kochanska, and T. Nustad. 2020. Gender distribution beyond coarse measurements. Septentrio Reports, 8 (November). https://doi.org/10.7557/7.5687.
- EIGE. 2022. Gender balance. European Institute for Gender Equality. https://eige.europa.eu/thesaurus/terms/1148.
- Ely, R. J., and D. E. Meyerson. 2000. Theories of gender in organizations: A new approach to organizational analysis and change. *Research in Organizational Behavior*, 22: 103–151. https://doi.org/10.1016/S0191-3085(00)22004-2.
- Equality and Diversity Committee at UiT The Arctic University of Norway. 2020. Equality, Diversity and Inclusion: Action Plan for UiT The Arctic University in Norway 2020–2022. https:// uit.no/Content/757345/cache=1638875696000/Likestilling%2C+mangfold+og+inkluder ing_Handlingsplan+for+2020+%E2%80%93+2022_A3+ENG_2_WEB2.pdf.
- European Commission and Directorate-General for Research and Innovation. 2019. She Figures 2018. http://dx.publications.europa.eu/10.2777/936.
- KifInfo. 2022. Committee for Gender Balance and Diversity in Research. https://kifinfo.no/en.
- Laufer, J. 2009. Is diversity the answer to gender equality? *Travail, genre et societes*, 21(1), 29–54. www.cairn-int.info/article-E_TGS_021_0029-is-diversity-the-answer-to-gender-equali.htm.
- Liebowitz, D. J., and Zwingel, S. 2014. Gender equality oversimplified: Using CEDAW to counter the measurement obsession. *International Studies Review*, 16(3), 362–389. https:// doi.org/10.1111/misr.12139.
- Loarne-Lemaire, S. L., Bertrand, G., Razgallah, M., Maalaoui, A., and Kallmuenzer, A. 2021. Women in innovation processes as a solution to climate change: A systematic literature review and an agenda for future research. *Technological Forecasting and Social Change*, 164, 120440. https://doi.org/10.1016/j.techfore.2020.120440.

- Meulders, D., Plasman, R., Rigo, A., and O'Dorchai, S. 2010. Horizontal and Vertical Segregation Meta-Analysis of Gender and Science Research – Topic Report. www.genderportal.eu/ sites/default/files/resource_pool/TR1_Segregation.pdf.
- Mittner, L., and H. S. Blix. 2020. Gender Equality Challenges in Academia from the Perspective of Higher Music Education in Norway. In I. L. Vestad, S. V. Onsrud, and H. S. Blix (eds.), Gender Issues in Scandinavian Music Education: From Stereotypes to Multiple Possibilities. Routledge.

Mittner, L., and M. Mittner. 2020. Balancinator. https://en.uit.no/resources/balancinator.

- Mittner, L., and M. Mittner. 2022. BalanceXplorer. https://shiny.uit.no/norgeibalanse.
- Mittner, L., H. S. Blix, and R. Gürgens Gjrærum. 2018. Balancing Act. Gender Balance in the Arts – A Matter of (E)Quality? https://site.uit.no/balanse-kunstfag/poster/.
- Mittner, L., Blix, H. S., and Gürgens, R. G. 2022. Sustainable Gender Equality: Opening the Black-Box of Quality Assessment in Higher Arts Education. In A. Skjerven and M. Fordham (eds.), *Gender and the Sustainable Development Goals*. Routledge. https://doi.org/ 10.4324/9781003174257-8.
- Nielsen, M. W. 2016. Scandinavian approaches to gender equality in academia: A comparative study. *Scandinavian Journal of Educational Research*. https://doi.org/10.1080/ 00313831.2016.1147066.
- Nordic Council of Ministers. 2013. The Nordic Region A Step Closer to Gender Balance in Research? Joint Nordic Strategies and Measures to Promote Gender Balance among Researchers in Academia. Nordic Council of Ministers.
- Prosjektbanken. 2022. BALANSE-Kjønnsbalanse i toppstillinger og forskningsledelse. https:// prosjektbanken.forskningsradet.no.
- The Research Council of Norway. 2017. Programme on Gender Balance in Senior Positions and Research Management (BALANSE). www.forskningsradet.no/siteassets/sok-om-finansier ing/programplaner/balanse-work-programme.pdf.
- World Economic Forum. 2021. Global Gender Gap Report 2021. www.weforum.org/rep orts/global-gender-gap-report-2021/in-full.
- Xu, Y. J. 2008. Gender disparity in STEM disciplines: A study of faculty attrition and turnover intentions. *Research in Higher Education*, 49(7), 607–624. https://doi.org/10. 1007/s11162-008-9097-4.