

# Introduction

“In my opinion, gender equality is, honestly, very important to us,” says a male leader at the Faculty of Mathematics and Natural Sciences in the University of Oslo. He is not alone. A large majority of both employees and students at the faculty say they want a gender-equal workplace. How does this look in reality? Is the faculty gender-equal or not? It is easy to see that there is gender imbalance – in which the top academic and research leader positions are dominated by men – but is the faculty gender-equal? If not, why? And in that case, what can be done to increase gender equality?

The project “Female Researchers on Track” (FRONT) was initiated in the autumn of 2015 by the Faculty of Mathematics and Natural Sciences in the University of Oslo to analyze to what extent a lack of gender equality may be the cause of gender imbalance at the faculty and, if so, what would need to change in order to increase gender equality. The three-year project was funded by the Research Council of Norway as part of the programme “Gender Balance in Senior Positions and Research Management” (BALANSE).<sup>1</sup> The programme’s primary objective is to improve gender balance on the senior level of Norwegian research through new knowledge, learning, and innovative measures. The call for proposals that FRONT was awarded placed great emphasis on a *combination* of measures and knowledge/research. This involved projects with applied utility, which also would constitute important research.

Many studies show that academia is not gender-equal. However, these are normally investigations of an academic organization from a specific perspective, or as a limited process. In this book, we present results from a broader perspective. The FRONT project studied the entire organization – not just focusing on a particular segment – and also implemented measures. Moreover, we have analyzed the effects of the measures, implemented for increased gender equality, through action

research. The material contains two questionnaire surveys, one for students and one for employees, as well as individual interviews, and action research linked to the measures. Altogether, this provides a broad and varied set of data. Therefore, these studies constitute a rich source of new knowledge, which is also important because it reveals the situation in a Nordic country, where gender equality has progressed further than, for example, in other parts of Europe and the U.S.

The surveys expand the gender-equality research area especially in terms of careers, work environment, and academic culture. Most existing studies are limited to a few topics (such as career or harassment), with relatively few variables. The questionnaires used in the FRONT surveys included many topics and variables, which in turn were developed and investigated further in interviews. Yet the project did not stop there. Within the same organization, we have also implemented a series of measures and initiatives aiming to change the organizational culture towards increased gender equality. These included a leadership development programme for the faculty management, a seminar for PhD supervisors, the establishment of a network for top female researchers, and a career development programme for women in temporary positions. The effects of these initiatives have also been analyzed. What has worked well and what has not worked?

An important dimension of the project's strategy was that the two parts – research and measures – should work together. This means that research results, in the form of new knowledge, have been used both in designing and implementing the project's measures. In turn, experiences from the various initiatives have been used in the development of surveys and interviews. This combination of methods has been essential, both in terms of identifying “robust” results, meaning patterns and tendencies emerging across methods, and being able to interpret different data sources in light of each other. The research has taken place in collaboration with the Faculty of Mathematics and Natural Sciences and the Centre for Gender Research (STK), both in the University of Oslo.

As mentioned, the book is based on three types of material: questionnaire surveys, interviews and action research.

The surveys consisted of one detailed questionnaire form (18 pages, 190 variables) for all employees at the faculty, and one less extensive form distributed to a sample of master students. The employee form was answered by 843 employees (485 men and 358 women), with a total response rate of 40–45 per cent among different groups of staff members (permanent employees), and a somewhat lower percentage among PhD students. The response rate among the master students was very high, 95 per cent, but the survey was smaller, had fewer questions, and a smaller sample of 213 students. The interviews included 78 staff members, lasted one to two hours, and were recorded and transcribed. The interviewees were mostly women, with a slightly smaller sample of men. The action research consisted of data collection and field notes from 23 seminars and workshops at the faculty, mostly mixed in terms of gender, and some with women only. The samples and methods are described in more detail in the appendix “Method”.

In this book, we present the results of the project. The authors of the chapters have all followed and worked with the FRONT project in different ways. Some have been involved in all parts of the project, whereas others have participated in the action research or the analyses of the quantitative material. The book is largely a result of collaboration. The two editors have contributed equally to editing the book. At the same time, there has been a certain distribution of responsibility and work with the different chapters. For each chapter, the main author is mentioned first, and then co-authors are mentioned in order, based on the extent of their contribution to the chapter.

The book consists of three parts that may be read separately, but the whole is important, since the parts build upon and develop each other. In the first part, we describe the actual status of gender equality in the faculty. In the second, we present three theoretical models developed to provide a better understanding and insight into the situation, based on the project’s empirical data. In the last part, we analyze the effects of three important initiatives implemented by the project. Each part is prefaced with an introduction. These are written by Holter and Snickare (part one and two) and by Snickare and Holter (part three).

The first part of the book contains six chapters based primarily on the surveys and interviews. In chapter one, “Gender-Equal Imbalance?”,

we describe how students and employees at the faculty view gender balance and gender equality. The results show a gap between desired gender equality and gender balance on the one hand, and actual conditions at the faculty on the other. The imbalance is both horizontal between different disciplines, and vertical between position levels.

In the second chapter “Men, Masculinities and Professional Hierarchies”, we analyze the implications of male dominance at the faculty – for both women and men. The empirical material in this chapter reveals a clear tendency, that men experience fewer problems with the work environment than women. We also see signs of informal comradeship among men, of a majority position inadequately examined, and the idea that an academic career is incompatible with family and care responsibilities – not just for women but also for men – as well as a persistent connection between men, masculinity and professional hierarchies.

In the third chapter “Sexual Harassment: Not an Isolated Problem”, we discuss the extent of sexual harassment at the faculty, and show how sexual harassment is connected with other work environment and culture-related issues. Unwanted sexual attention is the most common type of sexual harassment, while other and more serious types (unwanted physical contact, coercion, stalking, physical assault) are rarer. However, most of those who have experienced more serious types of sexual harassment have also experienced unwanted sexual attention. Moreover, there is a strong connection between unwanted sexual harassment and various types of professional devaluation.

In the fourth chapter “Who Is Publishing What? How Gender Influences Publication”, we explore scientific publications at the faculty from a gender perspective. Two models are presented based on two types of statistical analysis. Both show that gender is of little significance when position level, the portion of time for research, and to a weaker degree, total weekly working hours are taken into account.

In chapter five “Experiences in Academia: A New Survey Study”, empirical differences and similarities between women’s and men’s careers are summarized. Where previous chapters have described gender differences in specific areas, such as harassment or publishing, we now examine differences and similarities comprehensively as a whole. We present a

systematic overview of the results from the FRONT project with regard to gender and gender equality on various levels in the organization.

In the sixth and last chapter of part one, “Ethnicity, Racism and Intersectionality”, we examine how life in academia is shaped and affected by ethnicity, that is by ethnic group affiliation. For example, are conditions in the work environment and academic culture, previously examined in relation to gender, also influenced by ethnic background? We also discuss the social class dimension, and how gender, ethnicity and class interact.

The second part of the book builds upon the main findings presented in the first part. In the three chapters in part two, we discuss how the findings may be interpreted, through outlining theories and interpretative frameworks. In chapter seven “The Bøygen Model: The Hypothesis of Accumulated Disadvantage”, the metaphor *Bøygen* (or ‘the Boyg’) from Ibsen’s play *Peer Gynt* is used. Although women and men seem equal on a number of parameters, a broad pattern emerges, in which women face more obstacles than men overall. Individually, the factors may seem moderate in effect, and the pattern can be difficult to see – just like Bøygen. Overall, the effect can still be great, directly, as well as in terms of reduced self-confidence and belief in one’s own abilities. In this chapter, this is linked to international research on barriers to women in academia.

In chapter eight “The Janus Model: Why Women Experience Disadvantage”, we use the metaphor *Janus*. Janus was a Roman god with two faces – one could appear friendly, the other stern. In the model, the friendly face represents differentiation based on gender that appears open and legitimate – women and men are “different but equal”. Stratification in relation to gender is a more hidden process, but through ranking, certain positions in academia become more valuable than others, and women are often underrepresented where there is most to gain.

In chapter nine “The Triview Model: Three Views of a Problem”, we interpret discursive practices, and how actors in the academic system understand and formulate questions relating to gender, gender balance, and gender equality. Here, we use three one-eyed cyclopes (from Greek mythology) as a metaphor for the pattern of different perceptions. The model describes three typical views that become clearly visible in the

FRONT material. The lack of gender balance can be seen as a non-problem, a women's problem, and a systemic problem. Different understanding of the problem can lead to different types of change strategies, as well as resistance to change.

In the book's third part, we describe and analyze the FRONT project's initiatives. The three chapters discuss the implementation of initiatives involving leaders, PhD supervisors, and top female researchers. Chapter ten "From Biology to Strategy: The Development of a Management Team", deals with the work in the faculty's management team. In the analysis, we examine the role of the management team – what the team can do specifically – in order to develop sustainable gender equality work in the organization, as well as what the team needs in order to succeed with this.

In chapter eleven "From Resistance to Change? Processes for Change Within an Organization", we take a closer look at whether the management team's work for increased gender equality had any effects within the organization. Did opposition to gender equality work increase or decrease? Possible future changes will be examined through an initiative for PhD supervisors at the faculty.

The book's twelfth chapter "From Exception to Norm: The Development of Resilience in a Network", is an analysis of a network for top female researchers. By combining gender theory and research on resilience, we analyze how resilience can be created on an individual level in an academic organization.

We hope the book will inspire further research, as well as initiatives to increase gender equality.

Øystein Gullvåg Holter and Lotta Snickare

## Note

- 1 BALANSE received a grant from the Ministry of Education and Research in 2013. The programme lasts until 2022, and has a total budget of approximately NOK130 million. See more at the Research Council of Norway: <https://www.forskningradet.no/sok-om-finansiering/midler-fra-forskningradet/balanse/>