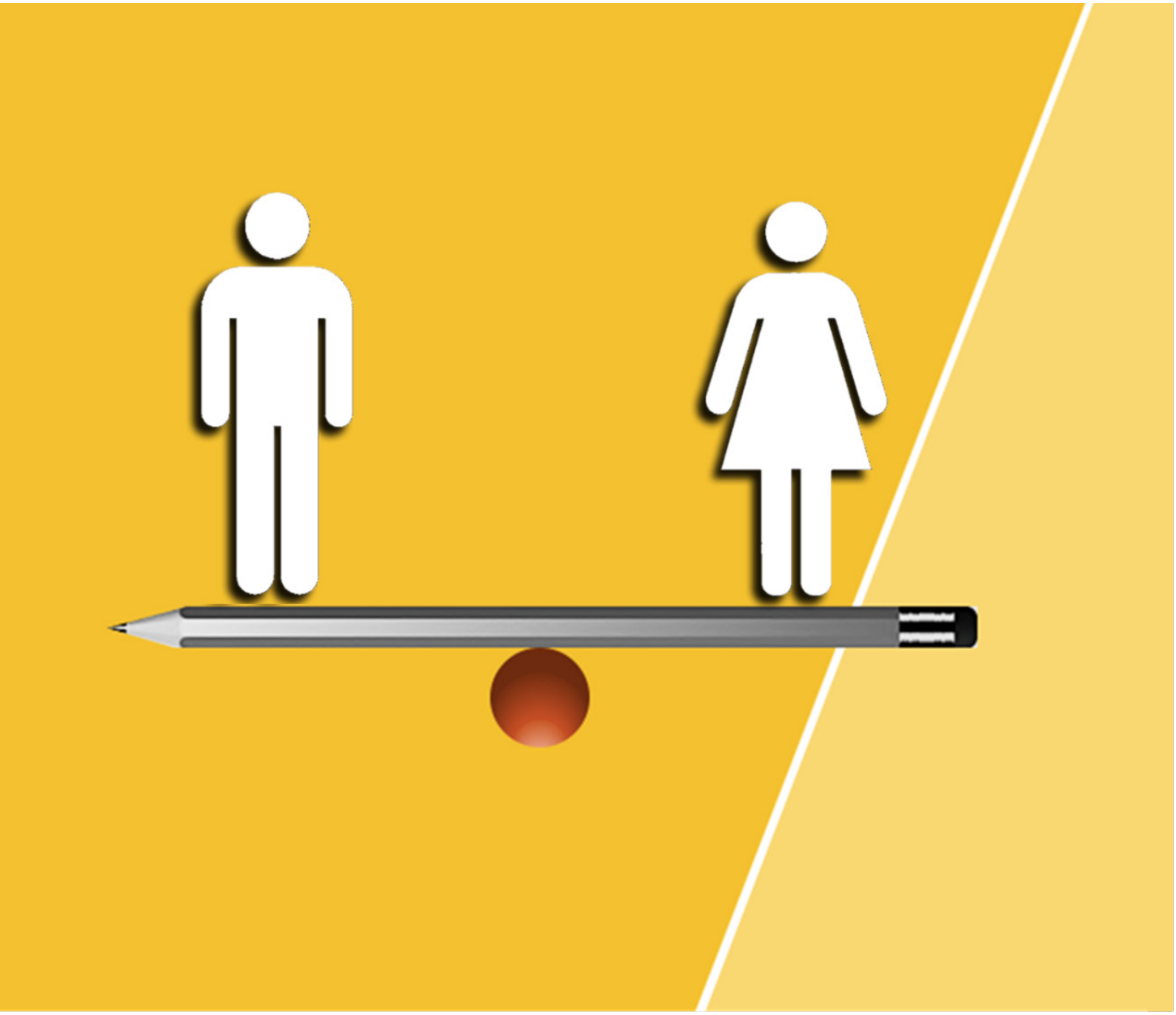
UiT Survey of Working Climate:

Mapping Experiences of Gender-Based Discrimination at UiT The Arctic University of Norway

Lise Gulli Brokjøb & Sarah E. Martiny
Centre for Women's and Gender Research (SKK) & the Department of Psychology (IPS)

Prestige Project: Gender Balance in Research Leadership at UiT
Report 03/2022, https://doi.org/10.7557/7.6855



© The authors. This report is licensed under the Creative Commons Attribution 4.0 International license.

Table of Contents

Preface 3

Summary 6

Section I A brief introduction to current issues of gender inequality 8

Section II Psychological perspectives on gender inequality in STEM and high-status positions 10

Structural barriers 10

Psychological barriers 10

Social Role Theory 11

Social Congruence Theory 12

Psychological internalisation 13

Social Identity Theory and Social Identity Threat 13

Occupational and educational gender equality in Norway 14

Academia as occupational domain 15

Section III Mapping Experiences of Gender-Based Discrimination at UiT 16

Current study 16

Background 16

Method 16

Participants 16

Procedure 18

Study recruitment 18

Survey 19

Measures 19

Results 21

Do female and male employees experience the work climate at UiT differently? 21

Do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees? 22

Is gender-based discrimination particularly evident in fields in which women are underrepresented? 22

Discussion 24

Do female and male employees experience the work climate at UiT differently? 25

Do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees? 25

Is gender-based discrimination particularly evident in fields in which women are underrepresented? ***26***

Conclusion ***27***

Recommendations ***28***

About the authors ***29***

References ***30***

Appendices ***38***

Fact sheet ***42***

Tables

Table 1 - Participant age, type of employment, and academic position by gender. 17

Table 2 - ANOVA statistics and descriptive statistics for all social scales by gender 38

Table 3 - ANOVA statistics and descriptive statistics for the discrimination and stereotype scales by gender 39

Table 4 - Simple Moderation Model coefficients..... 40

Table 5 - Mediated Moderation Model coefficients..... 41

Figures

Figure 1 Faculty distributions by gender in numbers and percentage of total..... 18

Figure 2 Mean scores for all measures used in analysis that had significant effects according to gender 21

Figure 3 Moderated mediation model and coefficients Figure of the moderated mediation model using gender as the predictor, Group Concept Threat scores as the mediator, Sense of Belonging scores as the outcome, and perceived gender distribution in the workplace as the moderator between gender and Group Concept Threat scores. 24

Preface

Acknowledging both the complexity of gender inequality in academia and the need for a multifaceted approach was the basis for the development of *The Prestige Project: Gender Balance in Research Leadership (RCN 281862/2018-2023)*. Started in 2018, the Prestige Project aims to advance knowledge on how gender affects career opportunities and the distribution of power and resources in research at UiT through structural and cultural approaches, and moreover aid in the promotion of research-based organisational changes at UiT in the direction of gender equality. For example, earlier research by the Prestige Project shows that, although UiT had the highest share of women in top academic positions among the comprehensive universities in Norway, at around 40% as of 2020, there were wide variations in gender representation across its faculties, disciplines, and research traditions (Duarte et al., 2020). The results showed particularly disproportionate gender disparities within its STEM-fields[1] where men held 82% of the professorship positions and accounted for 80% of all STEM research group leaders as of 2020. With such varying gender distributions within the university, UiT acknowledged the need for a more in-depth approach and analysis for investigating gender balance and equality at UiT.

One example of an area worth investigating further in relation to gender differences at UiT was the increase in the rate of women in top leadership positions. Although the rates of women in top leadership positions at UiT had gone from 9% in 2000 to 40% in 2020 (Duarte et al., 2020), it is unclear whether this percentage increase was due to an actual reduction of gender inequality or just reflected a decrease in the "prestige" of such academic positions. "Prestige" is understood here as an impression of respect and admiration based on a reputation for high quality, competence, success, and social influence. Men tend to be overrepresented in such jobs and appear to access prestige and status more easily, and a position is perceived to be more prestigious if held by a man rather than a woman (Beyard-Tyler & Haring, 1984; Kandiko et al., 2018). It has also been argued that the function of research group leadership has become more administrative and service-oriented (Fraser & Taylor, 2016), which could have caused the position to lose some of its prestige. This might reflect on the prestige and related gender distribution in educational leadership overall. Alternatively, it could be that the changing nature of research group leadership has led to care-related skills and traits being more valued now than in the past. Women are stereotypically considered to be more caring and empathetic than men (Brescoll, 2016), which could partly explain the increased rates of women in academic leadership.

[1] Faculty of Science and Technology and Faculty of Engineering Science and Technology combined.

Thus, the increase of women in leadership positions at UiT may then not necessarily reflect decreasing gender inequality, but a change in the expression of gender inequality. If this model can be applied to women in academic leadership, more women in administration may even indicate an increase in gender inequality due to the possible trends of devaluation of positions women increasingly hold.

This idea is the foundation of The Prestige Project. To contribute to the fulfilment of its main goal of gaining a more comprehensive understanding of gender disparities at UiT, the current study focuses on gender discrimination and known gender differences in employees' experiences of the social climate at UiT, as well as possible interventions that may increase the gender balance in top positions.

Lise Gulli Brokjøb & Sarah E. Martiny

Tromsø, August 2022

Acknowledgements

The authors want to thank all study participants. Their involvement and willingness to share their opinions and experiences enabled us to gain insight into the work climate at UiT, particularly with regard to important gender issues. Thank you to **Melina Duarte** who has shown full support to the authors from study conception to final report write-up. Thank you also to **Lilli Mittner** for general advice and ideas, as well as guidance concerning the design and graphical representation of data used both in this report and its related presentation. Finally, we would like to thank the **PRESTIGE project group** and other **colleagues at the Centre for Women's and Gender Research** for their continued support, advice, perspectives, and insight.

Report summary

All over the world, notable gaps between men and women in multiple domains of everyday life continue to exist. There are still gender differences in political power, labour, care duties, housework, mental and physical health, and medical access (European Institute for Gender Equality, 2021; United Nations Development Programme, 2020). These domains encompass both material and non-material dimensions. Materially, gender gaps are seen in various levels of access to the labour market and unjustifiable salary gaps. Non-materially, gender gaps stem from perceived differences that are attributed to women and men regarding social roles, expectations, and attitudes (Eagly et al., 2000). Both material and non-material dimensions of gender inequality are realised and sustained by institutions, meaning that institutions can either counteract, maintain, or strengthen these gender gaps. A domain where this is particularly evident is academia, which specifically encompasses academic institutions in higher education. Higher educational institutions are not only essential to gender inequality (Engida, 2021), but are often the first institutions in which non-dimensional gender differences can be measured more easily. This is because students in higher education are free to choose and apply for any programme or course, which is usually not the case with more formative education, which tends to be more standardised for all students. The choice of a higher educational degree (both to peruse a degree and select which one to strive towards) is also greatly predictive of one's later workplace and salary (OECD, 2021). This makes gender differences in higher education incredibly relevant to work- and wage-related gender differences, especially as academic institutions simultaneously function as an employer and educational institution.

To examine these complex and broad dynamics and dimensions of gender inequality, it is essential to include a psychological perspective. A psychological perspective provides frameworks to identify, examine and conceptualise the underlying mechanisms in human behaviour, such as attitudes, group behaviour and social identity, which are highly relevant when examining issues of gender inequality.

This report therefore aimed to contribute a psychological perspective on gender issues/inequality relating to work climate, gender stereotypes, and discrimination in academia. The report is divided into three sections. Section I gives a brief introduction to current issues of gender inequality both worldwide and in Norway. Section II proposes a psychological framework to account for some of these current issues, focusing particularly on uneven gender distributions in certain academic fields by integrating several social psychological theories. Section III applies this framework to the particular context at UiT with three research questions: (1) *Do female and male employees experience the work climate at UiT differently?;* (2) *do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees?;*

and (3*) is gender-based discrimination particularly evident in fields in which women are underrepresented?* These were examined by analysing employees' self-reported experiences of work climate, gender discrimination, and gender stereotypes at UiT. We additionally explored if these factors affected how employees perceived the gender distribution/balance at their workplace. The report concludes by discussing the current findings and their implications for both a Norwegian academic setting, as well as the wider topic of gender inequality in the workplace.

Section I

A brief introduction to current issues of gender inequality

As gender inequality issues have often been linked to gender inequality in economic power (UN Entity for Gender Equality and the Empowerment of Women, 2018), much focus has been on gender inequality in occupation and education. Gender inequality in these domains has not only been critically examined by gender discrepancies in wages both across (the "gender gap") and within occupations, but also in terms of the horizontal and vertical segregation of genders in the workplace, along with their explanatory factors (Employment, Social Affairs and Inclusion [EaSI], 2009). In short, vertical segregation refers to skewed gender distributions and clusters within an occupational hierarchy, typically the tendency for men to be overrepresented in top positions and women to be overrepresented in lower-level positions (EaSI, 2009). Horizontal segregation, on the other hand, refers to skewed gender distribution between different occupations, typically the tendency for women to be overrepresented in care and educational occupations and men to be overrepresented in construction- and industry-related occupations (EaSI, 2009). Both types of gender segregation have been argued to perpetuate other types of gender inequality. For example, vertical gender segregation may perpetuate the wage gap in terms of actual salaries and disproportionate opportunities for advancement, as well as gender stereotypes relating to leadership qualities, suitedness for leadership positions, and disproportionate pressure towards leadership roles (Anker, 2003; Newman et al, 2017). Similarly, horizontal gender segregation has been argued to perpetuate the wage gap since women tend to cluster in what are frequently lower-paid occupations, with men clustering in higher-paid occupations (Anker, 2003; Newman et al, 2017). Horizontal segregation may also uphold gender stereotypes regarding types of skills and social roles (Anker, 1997). The typical caring and nurturing social role, and the expectation that women will fill it, may be linked to their over-representation in caretaking-related occupations, like nursing (McLaughlin et al., 2010), while the stereotype of the strong and studious man may be linked to the overrepresentation of men in higher risk occupations such as the military (Stergiou-Kita et al., 2015). Similarly, the underrepresentation of men in care occupations may be linked to stereotypes about men lacking care- and parenting skills, while the underrepresentation of women in construction occupations may be linked to stereotypes about women lacking the physical and mental strength and grit for 'harder' tasks (Clarke, 2012). Understanding the causes of such gender segregation is therefore essential to understanding and tackling gender inequality in general and particularly in occupational domains.

A crucial factor in gender inequality that affects, and is affected by, the aforementioned issues is gender inequality in higher education. There are several reasons for this. Firstly, this higher education level typically includes a wider and more personal choice of studies than primary and secondary education and is therefore prone to gendered patterns in both choice and level of study. Secondly, the type of higher education is directly tied to career choice and development within both academia and industry. This can reveal gender inequality in not only career choice, but also in career opportunities, career progression, and eventual job positions. Thus, higher education may be examined with a lens similar to that of occupational gender inequality. For example, higher education displays trends of horizontal and vertical gender segregation. In Europe, men are currently underrepresented in the attainment of higher education (35.2% of men compared to 46.0 % of women); nevertheless, they are overrepresented in advanced positions in higher education despite the increasing attainment of higher education by women (Eurostat, 2021). According to recent numbers, although half (48.1%) of all doctoral graduates are women, women accounted for only 42.3% of academic staff and hold only 23.6% of all decision-making positions in academia (Directorate-General for Research and Innovation, European Commission [DG RTD], 2021). Certain academic fields showed especially high gender under- and over representation. For instance, women doctoral graduates were over-represented in education, but under-represented in information technologies (DG RTD, 2021). This is in line with current findings relating to gender representation in Science, Technology, Engineering, and Mathematics (STEM). Worldwide, women are especially underrepresented in these areas (DG RTD, 2021), like informatics (10.4% women) and technology (8.5% women; Makarova et al., 2019). This gender discrepancy in STEM fields has been found in several countries (Salmon, 2015; WISE, 2021) and persists in countries considered to have higher rates of gender equality (Teigen & Skjeie, 2017).

Section II

Psychological perspectives on gender inequality in STEM and high-status positions

Structural barriers

In past research, the proposed reasons for the underrepresentation of women in multiple domains are varied and complex. Sociological research points to the importance of structural barriers, defined as "obstacles that collectively affect a group disproportionately and perpetuate or maintain stark disparities in outcomes" (Sims et al., 2015). Structural barriers can range from enforced public laws and other institutional restrictions to disproportionate access/restrictions to resources. Examples of potential structural barriers relating to gender can be the practice of systematically prioritising one gender for employment inequality and career advancement, disproportionate access to necessities, and disproportionate access to parental leave. However, these types of structural barriers alone do not fully explain the gender inequality in leadership positions and STEM, as such inequality persists in societies where typical gender-based structural barriers are considered relatively minor. For example, in the Nordic countries, often cited for their high material gender equality, there are still horizontal and vertical occupational gender gaps (Teisen & Skjerie, 2017). This highlights the vital need to explore the reasons why the observed gender gap goes beyond structural barrier conditions.

Psychological barriers

Psychological barriers and their interplay with structural barriers have been one of the main explanatory factors for gender inequality. Psychological barriers are constraints that stem from the interactions between the thoughts, feelings, and behaviour of individuals, and the actual, or perceived, social influence of other individuals. They function through social structures and social processes that may significantly influence an individual (House & Mortimer, 1990). Commonly cited psychological barriers in relation to gender inequality include gender-based social roles, social expectations and norms, social exclusion, and gender stereotypes (Saucerman & Vasquez, 2014). Psychological barriers may be expressed and function both implicitly and explicitly. For example, an individual may act on and transfer a conscious gender bias (Witt, 1997), such as "I let my daughter play with "girl toys" because I want her to be a proper and sweet girl". Alternatively, an individual may act on and transfer a subconscious gender bias, such as mainly buying typical "girl toys" for their young daughter because "I know she will like them better" despite having no past evidence of this concerning that child specifically.

Sociopsychological barriers to gender equality have been especially highlighted in societies with few structural barriers. In relation to gender inequality in leadership positions and STEM, promoting specific gender roles, as in the example above, has been cited as one of many sociocultural factors that may collectively contribute to gender inequality (Saucerman & Vasquez, 2014). It is unlikely that a girl will shy away from STEM-related interests and careers just from playing with traditionally feminine toys as a child. However, together with exposure to other gender-based social norms and expectations and already existing skewed gender distributions in STEM-related domains, the probability of her going into a STEM field may decrease (Saucerman & Vasquez, 2014).

To fully understand how such external social and cultural factors end up affecting individuals to such an extent that it results in tangible gender inequality in several domains, it is essential to understand the role of several important psychological processes that have been proposed in different psychological theories. Especially relevant to gender inequality in leadership and STEM positions are the sociopsychological theories Social Role Theory, Role Congruency Theory, and Social Identity Threat Theory, and the vital role of psychological internalisation.

Social Role Theory

One theory that has had a strong influence on our current conceptualisation of gender differences and gender inequality in social psychology is the Social Role Theory proposed by Eagly (1987). This theory conceptualises societal gender inequality as mainly stemming from gender differences in behaviour upheld though social roles and gender beliefs. It argues that gender roles have some biological foundations and that these are maintained and perpetuated by sociopsychological structures. Physical sex differences enable gender-based task-specialisation and thus gender-based divisions of labour. This results in alliances between the genders in the community, as each gender group is specialised in labour where the other is not. Essential to the theory is that gender beliefs, which are essential to upholding gender roles, emerge when individuals come to infer that the current gender differences in behaviour and labour are due to inherent sex-specific dispositions. For example, a community might originally believe that its men specialise in hunting because they tend to have a suited physical advantage. Over time, this belief changes into the belief that hunters have specific skills and social behaviours because they are men, not because they specialise in hunting. This results in gender beliefs, also known as gender stereotypes, which are the collection of beliefs about how men and women typically act, and ought to act (Koeing, 2018). These may then be integrated into current gender roles and maintained by gender role expectations and cultural norms. Central to maintaining these over time is socialisation, especially social reward and punishment, for adhering to or breaking the social role related to one's gender. A current relevant example of a gender stereotype that illustrates this is "men are better leaders." This is a common gender

stereotype, which assumes that men hold more leadership positions due to inherent sex-based qualities that make them better leaders, not because they tend to gravitate towards leadership positions and skills due to sociocultural factors and expectations.

Social Congruence Theory

Building on Social Role Theory, Eagly and colleagues (2000) developed Role Congruence Theory. This theory expands upon the nature, mechanisms, and effects of gender roles and gender stereotypes on women in leadership positions, making it especially relevant to the issue of women's underrepresentation in leadership roles. In short, Role Congruence Theory states that the prejudice that female leaders experience is due to the inconsistencies between the traits associated with leadership and the traits associated with the female stereotype. The larger the discrepancies between the traits of these two social roles, the greater the prejudice the female leader will experience. Relevant to this theory are findings indicating that male leaders are perceived in a more positive manner than female leaders, and that men more often emerge as leaders (Eagly & Karau, 1991; Ritter & Yoder, 2004). Akin to this, women have a disproportionately challenging time achieving and maintaining high status positions in the workplace compared to men (Eagly & Karau, 2002). In relation to women in academia, Whitley & Kite (2016) indicate that the reason women in leadership positions face difficulties in meeting the male-dominated role expectations of their positions is due to such role incongruity. As typical stereotyped female traits like "warmth" and "nurturance" are incongruent with traits associated with leadership roles like "assertive" and "directive," women in leadership positions face more negative evaluations than men in the same positions. As such, women might be socialised away from such positions and career paths (Rogus-Pulia et al., 2018). It should be noted, however, that such negative consequences of Role Congruence Theory are not limited to women. There are several occupations and job positions associated with traits congruent with a stereotypical feminine role, and incongruent with a stereotypical masculine role. For example, men might experience negative consequences in childcare- and other care-related jobs that are associated with qualities like being "warm" and "nurturing" as these are traits more stereotypically congruent with women. (Deaux & Lewis, 1984). Reversely, an individual benefits from being in an occupational role that is socially congruent with one's social gender role. Applying this theory to the current issues, skewed gender distributions in STEM are argued to be, at least in part, due to gender differences in the congruency between a gender role and a STEM-related role and any associated characteristics (Saucerman & Vasquez, 2014). Traits stereotypically associated with men (e.g., logical, clever, interested in technology and science) are more congruent with traits associated with a STEM role than those traits associated with women (e.g., emotional, caretaking, warm). Thus,

men will arguably be socialised and rewarded for perusing and holding a STEM-related role, while women will be socialised not to, and potentially socially punished socially if they do.

Psychological internalisation

Essential to both these theories, their contemporary application, and our current understanding of gender inequality in leadership positions and in STEM is the role of psychological internalisation. Psychological internalisation refers to the nonconscious process whereby the beliefs, values, feelings, and expectations of other individuals or groups become integrated and adopted into the individual (APA, 2021). This process is key to understanding barriers to gender equality because individuals are not just passive reactors to external pressures from their environments, but active reflective agents constantly affecting and being affected by the word. Individuals do not adhere to social gender roles strictly due to explicit pressures from others; rather, these socialised gender roles have gradually been internalised with their own views and behaviour over time (Bussey & Bandura, 1999; Witt, 1997). For example, a young girl may at first adhere to gendered social expectations due to the external pressure and influence of her parents, teachers, peers, and other family members. To avoid the negative consequences of breaking the gender role expectations of those close to her, or reversely achieve the benefits of adhering to them, she may quickly learn to self-police her own behaviour before anyone else does. To do so fully, she must understand and temporarily "borrow" her family's and peer's perspectives, opinions, and beliefs in order to police her behaviour appropriately. Over time, this "borrowed" perspective and following behaviour may become internalised in her, and her gender-role perspectives and subsequent self-policing come to be sustained independently from her family and peers. In addition to adhering to these internalised gender expectations, she may eventually come to externalise them to others in response to their own "gendered behaviour" (Bussey & Bandura, 1999; Martin & Ruble, 2010). If similar internalisation processes of expectations, beliefs, and values about gender will happen frequently in her life across multiple social groups, situations, and contexts over time, it is not unlikely that her and others' career choices and career options will be affected.

Social Identity Theory and Social Identity Threat

A theory highlighting the essential role of internalisation in relation to inequality is the Social Identity Threat Theory by Steele et al. (2002). This theory proposes that an individual is not only affected by stereotypes concerning their social groups due to their external consequences, but also by their own internalisation of these stereotypes. For example, a woman may experience discrimination in the workplace due to her colleagues holding gender stereotypes, but she may also doubt her own abilities to do her work due to her internalised gender stereotypes. The latter would be defined as a type of social identity threat, defined by Steele et al. (2002) as "the concern people experience in

contexts where their group is stereotyped to be inferior." Social identity threat has been proposed as a key factor in explaining the underrepresentation of women in certain fields, and research has shown that inducing social identity threat can lead to a broad variety of negative consequences for the stereotyped individual. This includes reduced performance and a reduced sense of belonging to a domain where the stereotype is relevant, such as a university. In relation to this domain specifically, past research has found that just being aware of stereotypes relating to one's own identity at university, a form of social identity threat, can lead to both lower performance, increased stress (Spencer et al. 1999) and withdrawal from the domain itself (Osborne & Walker, 2006; Steffens et al., 2010). Relevant to the topic of women in STEM fields, Martiny & Nikitin (2019) found that the activation of a stereotype relating to an individual's identity in a specific domain (e.g., "women are bad at math") decreased the individual's motivation for approaching the social situation in that domain (e.g., a woman engaging less with peers and tutors in her math course). In addition, Martiny & Nikitin (2019) found that this relationship was mediated by the individual's sense of belonging to the domain. In other words, social identity threat in certain contexts may make women feel like they belong less in their field, causing them to withdraw from their peers, and even the domain, and thus having fewer opportunities to build work-related social networks.

The beneficial effects of feeling like one belongs in one's relevant social group(s), and the detrimental effects of lacking a sense of belonging, are well-researched in psychology (see Hagerty et al., 1992; Painter, 2013). Especially relevant to the current report is that a keen sense of belonging to one's workplace has been significantly linked to improved wellbeing and performance (Waller, 2021), and high organisational commitment (Dávila & García, 2012). Reversely, a weak sense of belonging to one's workplace has been linked to poor wellbeing and self-confidence (Waller, 2020), lower job satisfaction (Borrott et al., 2016), and turnover rates (DeSmet et al., 2021). Further, a sense of belonging has been found to mediate the relationship between organisational sexism and job satisfaction (Rubin et al., 2019). Gender differences in the sense of belonging to the workplace may therefore be a particularly relevant factor to consider in relation to horizontal and vertical gender differences in the workplace.

Occupational and educational gender equality in Norway

The present empirical study was conducted at a Norwegian university. Although Norway has better gender equality outcomes compared to most countries in Europe (Jones et al., 2015), there are still notable gender discrepancies in several domains where both vertical and horizontal gender segregation is present. For example, according to Barne-, ungdoms- og familiedirektoratet (Bufdir; 2022, 2021) and Statistisk Sentralbyrå (SSB; 2020a), the representation of women in leadership positions in Norway depends on the domain. In total, women are underrepresented in leadership

positions since they hold 36.8% of all leadership positions across all domains. In the political domain, women make up 45% of the Norwegian parliament and 52.63% of Stortinget, the supreme legislature of Norway. In terms of top leadership positions, meaning the head of the business or institution, women hold 25% of all top leadership positions across all domains. The domains with the most equal gender distribution of top leaders are advocacy and interest groups (46.3% women) and public administration (41.7% women). Reversely, women hold only 24% of the top positions in the finance sector, and 21% of top positions in the oil- and gas sector, the main industry in Norway (CORE, 2020). This makes investigating gender inequality in Norway particularly relevant, as there are still notable gender gaps despite being considered a country with high gender equality.

Academia as an occupational domain

Based on the most recent numbers published by the Norwegian Directorate for Higher Education and Skills (2021) and reports by Forskerforbundet (2021), there are varying gender gaps (or a lack thereof) in both occupations and position types in this domain (Forskerforbundet, 2021). Overall, the gender representation of men and women in all academic positions in total (encompassing teaching-, library-, administrative- and research positions) is slightly skewed towards women, as 45.5% of all positions are held by men and 54.5 % by women. Similarly, women hold 53.1% of all leader positions, and 49.3% of all scientific and teaching positions (Forskerforbundet, 2021). However, there is great variation in gender representation across both positions and fields. Despite the almost equal gender representation in leadership positions overall, only 33.3% of all professor positions are held by women, with notable variation between universities. For example, at OsloMet University where most courses are related to health science, teaching, languages and art, women hold 54% of all professor positions. In contrast, at NTNU and NMBU, both of which have a strong STEM focus, women hold only 25% and 27% of all professor positions, respectively. Although these are specific examples, they do reflect the particularly disproportionate gender distribution in STEM in the educational domain when compared to other fields. Women make up 34.7% of all current STEM students (KifInfo, 2022) compared to 60% of all current students in total. Similarly, the relatively high rate of female professors at OsloMet (54%) is reflected in the educational domain of health science, teaching, languages, and art fields (SSB, 2022b). In these fields, women make up 70.64% of all current students. Such patterns and interactions between gender inequality in academia as both an occupational and educational domain further demonstrates the complexity of gender inequality within and across domains. Thus, there is still a great need for knowledge that can help identify and explain gender inequality applicable to both domains.

Section III

Mapping Experiences of Gender-Based Discrimination at UiT

Current study

Background

In the present study we use a psychological perspective to better understand whether employees at UiT perceive discrimination and social identity threat to be relevant for their daily experience at UiT. To do this, we examined the following research questions:

1) Do female and male employees experience the work climate at UiT differently?
2) Do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees?
3) Is gender-based discrimination particularly evident in fields in which women are underrepresented?

Method

To test these hypotheses, the study utilised a cross-sectional online survey with UiT employees. The study was approved by the Norwegian Center for Research Data (NSD) and the board of research ethics at the Department of Psychology (Institutt for Psykologi) at UiT.

Participants

In total, the survey recruited 287 UiT employees. Thirteen of these were excluded due to incorrectly answering one or more items that determined whether the participants were paying appropriate attention to the survey. A small percentage of self-identified trans- and non-binary participants were identified, but due to privacy concerns and the low participant number, only cisgender men and women were included in analysis. We do acknowledge that this binary gender analysis and report-language is limited and does not capture the full employee range at UiT. The resulting sample consisted of 269 UiT employees: 173 women and 96 men. Age was measured using age-groups to ensure anonymity, as the study only involved UiT employees. Further, 192 (70%) of the participants were teaching and/or scientific staff, 60 (22%) admin and/or technical staff, and 23 (8%) reported working as something “other” than research/teaching or admin/technical. In addition, 25% of the participants reported having a migration background, which in this survey was defined as the participant, one or more their parents, or one or more of their grandparents having migrated to Norway from another country. The most common current career level reported by scientific/teaching

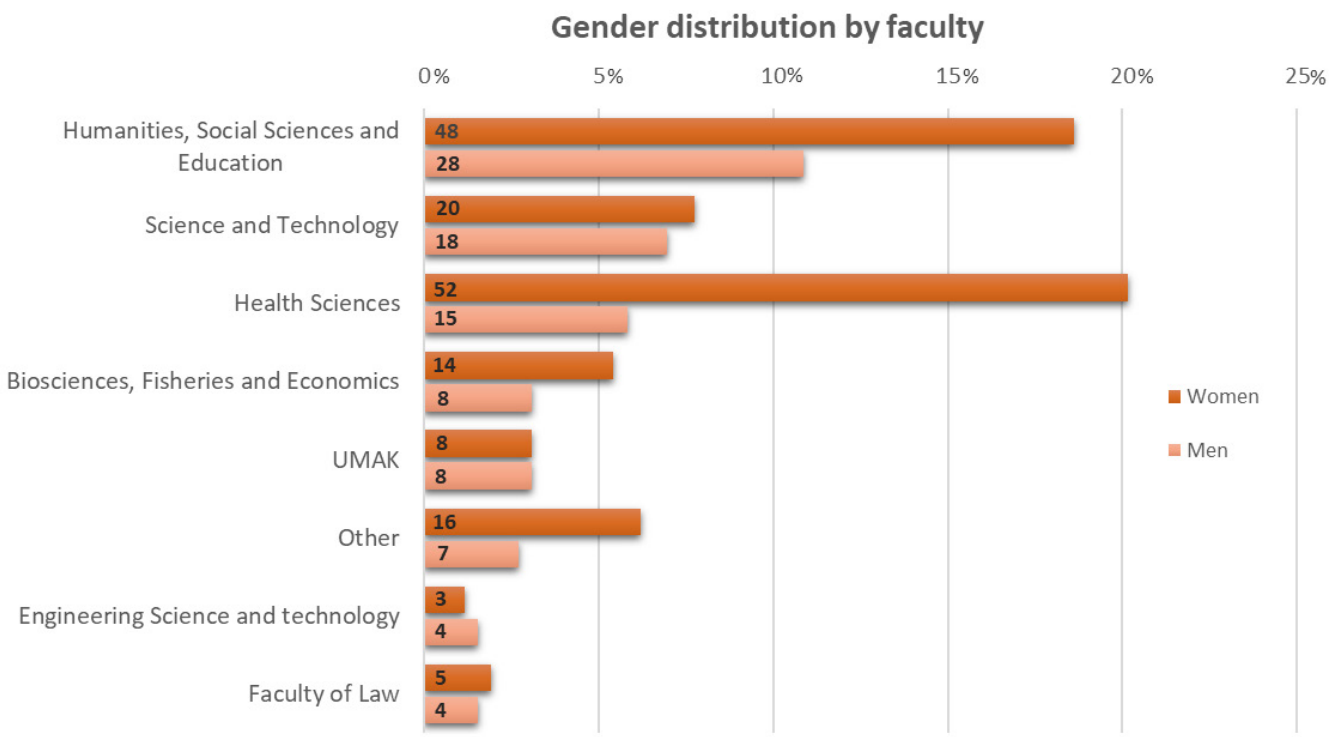
was holding a PhD position, and the most common faculty affiliation reported was health sciences. See Table 1 and Figure 1 for detailed demographical information. Unfortunately, the sample size was too low to conduct any sub-group analyses beyond men and women.

Table 1

Participant age, type of employment, and academic position by gender.

Demographic variable	Specification	Women (%)	Men (%)	Total (%)
Participants		173 (100%)	94 (100%)	267 (100%)
Age	**18 - 24 years**	2 (1.16%)	1 (1.06%)	3 (1.12%)
	25 – 34 years	57 (32.95%)	30 (31.91%)	87 (32.58%)
	35 - 44 years	38 (21.97%)	24 (25.53%)	62 (23.22%)
	45 - 54 years	44 (25.43%)	25 (26.60%)	69 (25.84%)
	55 - 64 years	29 (16.76%)	9 (9.57%)	38 (14.23%)
	65 - 74 years	3 (1.73%)	5 (5.32%)	8 (3.00%)
Type of employment	**Scientific/Teaching***	114 (65.90%)	72 (75.00%)	186 (69.15%)
	Admin/Technical	42 (24.28%)	19 (19.79%)	61 (22.68%)
	Other	17 (9.83%)	5 (5.21%)	22 (8.18%)
Academic position	**PhD**	32 (33.33%)	23 (35.94%)	55 (34.38%)
	PostDoc	12 (12.50%)	3 (4.69%)	15 (9.38%)
	Researcher	8 (8.33%)	5 (7.81%)	13 (8.13%)
	Associate Professor	21 (21.88%)	18 (28.13%)	39 (24.38%)
	Full Professor	23 (23.96%)	15 (23.44%)	38 (23.75%)

Figure 1
Faculty distributions by gender in numbers and percentage of total.



Procedure

Study recruitment

Participants were recruited from UiT using email lists, info boards, and online and physical flyers. As the study was conducted as part of the larger Prestige Project, both students and employees were recruited simultaneously and given a similar survey tailored to either work experience or study experience at UiT. As the current report aimed to examine work experience at UiT, only employees were included in this analysis. As the aim was to recruit as many UiT employees as possible to get the best and most dynamic understanding of the gender climate at UiT, additional measures were used to recruit and retain participants. The title and leading information disseminated during study recruitment did not explicitly highlight gender- or gender equality issues. For example, the title of the survey was “The everyday life of (students and) employees at UiT.” Participants were informed up-front that the aim of the study was to gauge the state and well-being of employees, but we deliberately avoided using politicised language and talking points. In addition, questions relating to gender and gender discrimination were presented at the end of the survey. This was to recruit participants that may not otherwise be interested in, or sympathetic to, gender related issues, and to avoid biased answers, as language relating to such discussions has been considered incredibly politicised (Purnell, 2007). To maintain the ethical integrity of such an approach, participants were asked for their consent to study participation twice: Once in the beginning of the survey, and a

second time at the end of the study where they had been informed of the full aim of the study. Recruitment took place January 2021.

Survey

If choosing to visit the survey website, prospective participants were presented with information about the study, as well as their data protection and general rights as a participant. This page also contained the consent form. If consenting to study participation, participants were presented with all measures in a fixed order, which ended with demographic questions. At the end, participants were debriefed and again asked for consent to use their data for the study. Both consenting and non-consenting participants were then presented with the opportunity to join a lottery to win 1 of 3 gift cards with a value of 700 NOK each. The survey took 15-20 minutes to complete. All data from participants who withdrew their consent at the end of the survey were deleted before any analyses were conducted.

Measures

To explore the aims of the current study, we used validated measures relating to stereotype worries, social approach motivation, intentions to withdraw from UiT, and sense of belonging at UiT. An experimental measure created by The Prestige Team relating to perceived gender discrimination was also used to capture several types of perceived workplace discrimination at UiT. All items presented in all measures were phrased as statements of which participants indicated agreement on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. All measures are listed here in the order of which they appeared in the survey. For all items and their translations see https://osf.io/pj57a/.

Sense of belonging

Sense of belonging to UiT as a workplace was measured using eight items adapted from both the *Sense of belonging to university scale* (Good et al., 2012) as well as the *Measure of sense of belonging* (Hagerty & Patusky, 1995). These items all assessed how much participants felt like they belonged at UiT as a workplace in terms of community with their colleagues. All items were phrased as statements to which participants indicated agreement on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Examples of items include “I feel like I belong with the people working at my department” and “At work I feel accepted.”

Social approach motivation

Social approach and avoidance motivation was measured using 8 items adapted from work by Martiny and Nikitin (2019). The items measured participants’ motivations for approaching colleagues. Example items are as follows: “I try to share many fun and meaningful experiences with colleagues”, and “I approach colleagues because I don't want to be alone.”

Perceived social identity threat

Perceived social identity threat was measured using 4 items adapted from the stereotype threat scale (Shapiro, 2012), which were adapted to gender-related social identity threat in a work setting. For example, "I worry that I will confirm negative stereotypes about my gender group's abilities at work" was one of the items. This measure was presented to participants alongside two attention-check items ("This is an attention check. Please choose option 3").

Perceived gender discrimination

Perceived gender discrimination was measured using 20 experimental items generated for the current study to measure several types of perceived experienced gender discrimination at work. Statistical analyses clustered these items into three subscales: (1) *Interpersonal Discrimination*, which included five items measuring the perceived experience of interpersonal presence and ramifications of gender stereotypes. (Example item: "Because of my gender, I feel that I sometimes have been treated unfairly"); (2) *Career-Related Discrimination*, which included 7 items measuring career-related ramifications and the presence of gender stereotypes (example item: "Because of my gender, I feel like I face more obstacles to my career than other employees"); and (3) *Gender-Related* Expectation, which consisted of 4 items measuring perceived gender-related expectations (Example item: "Because of my gender I feel that others expect me to behave in a certain way more than they do other employees").

Demographical Information

In addition to information about gender, age-group, faculty, career level, years spent in current position and total years spent working at UiT were also included. This section contained items surveying whether the participant was a project leader, was a research group leader, had applied for external funding, had taken parental leave, or had a migrant background. This section also contained an item measuring what participants perceived as the current gender distribution at work[2]. This item was presented with a slider where the left corner was labelled *only men*, the middle *50/50 men and women* and the right corner *only women*. The position of the slider translated into percentages where *only men* = 0%, 50/50 *men and women* = 50%, and *only women* = 100%.

[2] As the gender distribution in one's workplace is fairly easy to estimate, it was assumed that the employees' self-reported gender distributions were fairly accurate. This method was also chosen in favor of using UiT's numbers, as these would not necessarily reflect the gender distribution of the employees present in a workplace on a day-to-day basis.

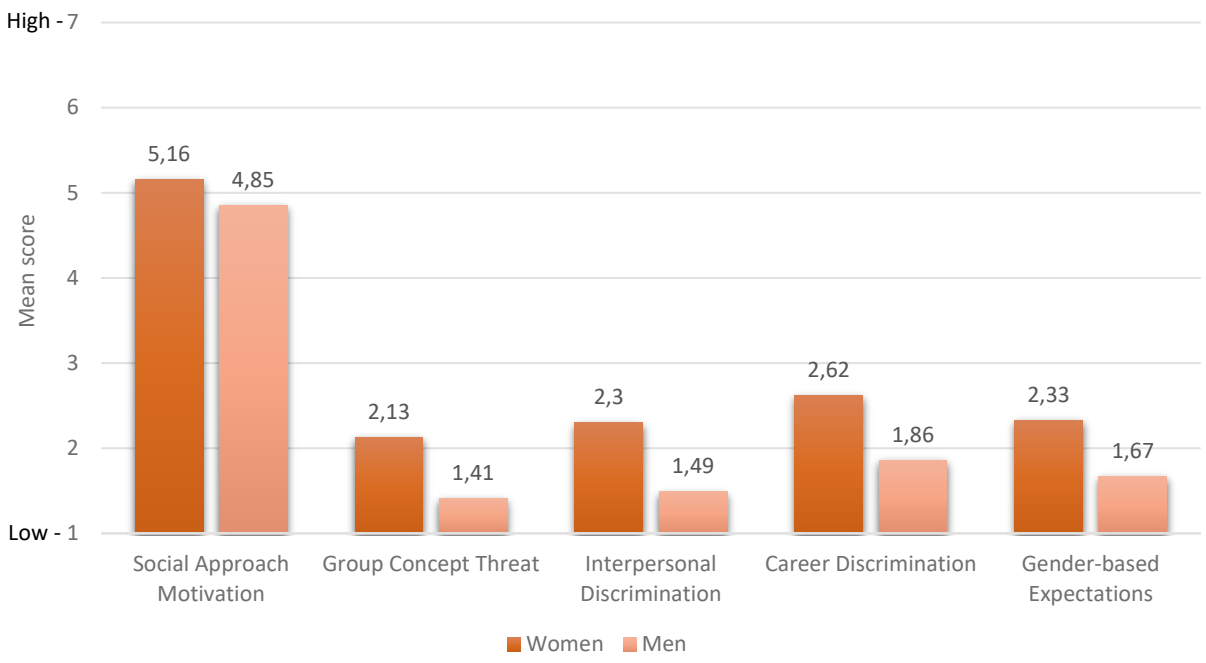
Results

Do female and male employees experience the work climate at UiT differently?

To examine if female and male employees experience the work climate at UiT differently, Analysis of Variance (ANOVA) was used to examine the effect of gender on each separate measure relating to workplace experience. These measures included the Sense of Belonging scale and Social Approach Motivation scale. The ANOVAs revealed that gender had a statistically significant effect on participants' mean scores in the Social Approach Motivation, with women having a higher mean score (*M* = 5.16, *SD* = 1.40) than men (*M* = 4.85, *SD* = 1.23; See Appendix A 2 & Figure 2). Gender had no statistically significant effect on participants' mean scores in the Sense of Belonging, however, which indicates that there were no significant differences between men and women's sense of belonging to UiT.

Figure 2

Mean scores for all measures used in analysis that had significant effects according to gender



Thus, the findings indicate that female employees at UiT experience a slightly higher motivation to approach social situations with colleagues than do male employees, although not by much.

Do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees?

To examine if female employees at UiT face more negative stereotypes and feel more discriminated against because of their gender compared to male employees, a past validated measure, together with an original scale specific to this study, was utilised. This original measure was based on items made in cooperation with the Center for Gender and Women's Research and contained the remaining items after empirical testing in the current sample. The validated measure used was the Social Identity Threat scale. The original measure used, named the Gender Discrimination Scale, included the subscales Interpersonal Discrimination, Career Discrimination, and Gender Expectations. To explore potential gender differences in these subscales, one-way ANOVAs were run to see if gender had a significant impact on mean scores in any of the measures. These analyses indicated that there were statistically significant gender differences in all the subscales of both the validated and new measure, with women having higher mean scores than men by .43 to .81 scale points. The biggest gender difference was on the Interpersonal Discrimination scale where women had a mean score of 2.30 (*SD* = 1.64) and men a mean score of 1.49 (*SD* = .93). For all mean scores and detailed statistics, see Appendix B**. These findings indicate that, on average, female employees at UiT faced significantly more gender-based discrimination and stereotype concerns than male employees.** This discrimination included direct gender discrimination from co-workers (interpersonal discrimination), gender discrimination relating to career advancements and choices, and expectations to do certain tasks in the workplace because one's gender. Gender stereotype concerns included concerns about confirming stereotypes about one's gender and being impacted by co-workers' gender stereotypes. **However, these gender differences were relatively small as the overall mean scores on all scales were low for both gender groups.** This indicated an overall low presence of both gender-based discrimination and gender-stereotype worries at UiT for both gender groups.

Is gender-based discrimination particularly evident in fields in which women are underrepresented?

To answer the question of whether under- or overrepresentation of one's gender group at work influenced exposure to gender-based discrimination, a multi-step approach was used. Firstly, we explored if there was a significant relationship between gender and social identity threat, and if the perceived gender distribution in the workplace moderated this relationship. To do this, a simple moderation model (PROCESS Model 1) using 10 0000 bootstrap samples was run using participant gender as the predictor (*woman* = 1*, man* = 0), perceived gender distribution in the workplace as the

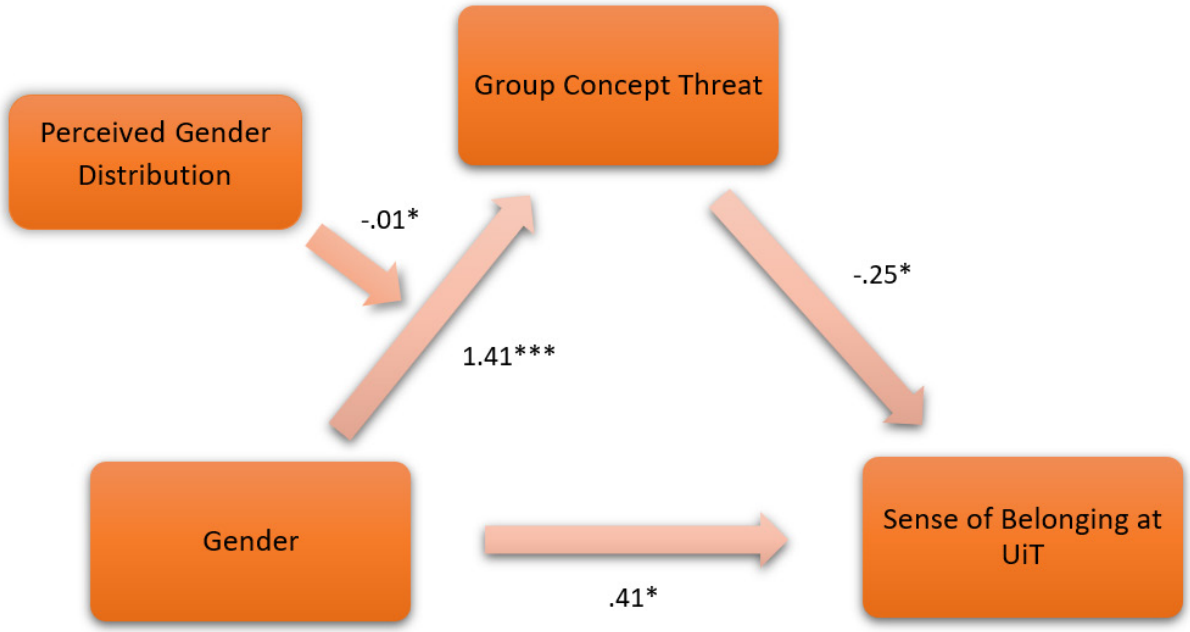
moderator (*0% women* to *100% women*), and the Group Concept Threat scale as the outcome variable. The model showed a significant positive relationship between participant gender and Group Concept Threat scores. No interactions were found between perceived gender distribution in the workplace and participant gender or Group Concept Threat scores. Moreover, there was no significant interaction effect overall (p = .097), but there were significant conditional moderation effects at several levels of perceived gender distribution. Specifically, a Johnson-Neyman procedure indicated that perceived gender distribution in the workplace positively moderated the relationship between gender and Group Concept Threat. Further, the procedure indicated that the higher the percentage of perceived women in the workplace, the smaller was the moderated positive effect on Group Concept Threat scores (see Appendix C). **This indicated that the more women present at a workplace, the less female employees worry about being perceived negatively and stereotyped because of their gender.**

Secondly, we explored if a similar extended model (moderated mediation - PROCESS Model 7) could further predict sense of belonging at UiT. This model used gender as the predictor, Group Concept Threat scores as the mediator, Sense of Belonging scores as the outcome, and perceived gender distribution as the moderator modifying the relationship between gender and Group Concept Threat. As this model encompassed the prior simple moderation model, the effects between gender, perceived gender distribution in the workplace, and Group Concept Threat were the same, i.e., no interactions were found between perceived gender distribution in the workplace and participant gender, nor between gender distribution and Group Concept Threat scores (see Appendix D). There was moreover no interaction between gender and perceived gender distribution on Group Concept scores overall (p = .097), although there were significant conditional moderation effects. This model additionally found a direct positive relationship between gender and Sense of Belonging scores, as well as a direct negative relationship between Group Concept Threat scores and Sense of Belonging scores. However, there was no overall indirect effect of gender on Sense of Belonging scores through Group Concept Threat scores (p = .854), but the model indicated there may be a conditional indirect effect depending on the percentage of perceived women in the workplace (see Appendix D). Specifically, this suggests that the higher the perceived percentage of women in the workplace, the weaker the effect gender has on Sense of Belonging through Group Concept threat scores. **This indicates that, overall, women tend to feel a slightly higher sense of belonging in their workplace at UiT compared to men, but that women, on average, reported more concern about gender stereotypes in the workplace. Further, the tentative findings suggest that the higher rates of stereotype concern in women, as well its negative effect on sense of belonging at UiT, decreased as the perceived percentage of women in the workplace increased.**

Figure 3

Moderated mediation model and coefficients

Figure of the moderated mediation model using gender as the predictor, Group Concept Threat scores as the mediator, Sense of Belonging scores as the outcome, and perceived gender distribution in the workplace as the moderator between gender and Group Concept Threat scores.



Note. Statistically significant at level .05*, .01**, .001***. Statistical significance is used to quantify the likelihood of findings not being due to chance. Simply put, a lower significance value indicates a lower likelihood of the current findings being due to chance.

Discussion

The current study used a psychological framework to examine current issues of uneven gender distributions in certain occupational fields in academia by integrating several social psychological models. To do this, we applied and tested this framework at UiT The Arctic University of Norway by proposing and examining three research questions: (1) *Do female and male employees experience the work climate at UiT differently;* (2) *do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees; and* (3*) is gender-based discrimination particularly evident in fields in which women are underrepresented?* These were examined by disseminating and analysing UiT employee surveys about work climate, gender discrimination, and gender stereotypes. Additionally, we explored if survey responses were influenced by how employees perceive the gender distribution at their workplace.

Do female and male employees experience the work climate at UiT differently?

To measure UiT employees experience of their work climate, the current study surveyed women's and men's sense of belonging at UiT as a workplace and their reported motivation to approach their co-workers for social interactions from expecting a positive experience/outcome. It was found that both male and female UiT employees reported high mean rates of sense of belonging at UiT and a high motivation to approach co-workers. Statistical analyses found that female employees reported a slightly higher social approach motivation towards co-workers than male employees. In contrast, analyses indicated that the gender difference in sense of belonging at UiT was not statistically significant.

It is notable that male employees report a slightly lower motivation to socially approach co-workers; yet, on average, they report the same rates of sense of belonging as female employees. As our current data provide no clear indication for this slight gender difference, future research may benefit from a more in-depth exploration of male and female employees' social life at work.

Do female employees at UiT face more negative stereotypes and feel discriminated against because of their gender compared to male employees?

To measure UiT employees experience of gender discrimination and gender stereotypes, the current study surveyed participants' reported gender stereotype concerns, perception of interpersonal gender discrimination by co-workers, experience of gender discrimination relating to their career, and gender-based expectations regarding the performance of certain job tasks. It was found that both male and female UiT employees reported low rates of gender stereotype concerns, interpersonal gender discrimination, gender discrimination relating to their career, and gender-based expectations about performing certain job tasks. **Further, there was found a small gender difference; female employees reported having experienced significantly more gender discrimination and stereotyping** on all these scales. Of these, the largest gender difference found was in reported interpersonal discrimination. Although it should be emphasised that these gender differences were small and that both gender groups reported low rates of gender discrimination and gender stereotypes, it is still a notable finding in line with past research on these topics. The findings support a wide array of past research indicating that women tend to be more effected by gender-based work expectations (Proudfoot & Kay, 2022), and interpersonal-, and career-related-, gender discrimination (Heilman & Caleo, 2018). However, compared to international research, the rates of gender discrimination and stereotypes reported were low, with relatively small gender differences.

Is gender-based discrimination particularly evident in fields in which women are underrepresented?

To answer this research question, the current study measured, in multiple steps, how employees[3] perceive the gender distribution at their workplace, and how this influenced their workplace experience, gender stereotypes, and gender discrimination. There were no direct links between gender distribution in the workplace, employee gender and worrying about stereotypes overall, but analyses suggested possible conditional effects between all three factors for female employees. Specifically, **the greater the percentage of women at a workplace, the less female employees worried about being perceived negatively and stereotyped because of their gender. This tentative effect was not found in male employees.** When examining the role of sense of belonging, analyses revealed that female employees, on average, reported higher concerns about gender stereotypes in the workplace than male employees. Further, worrying about gender stereotypes was linked to a decreased sense of belonging to UiT in female employees. Tentative findings also suggested that this link was similarly weakened the greater the percentage of women present in the workplace.

Although these findings are tentative, they have several implications that are particularly relevant for university administrations as this effect was only significantly present in female employees. High stereotype concerns and a low sense of belonging to one's workplace has been linked to decreased wellbeing (Inzlicht, 2012), increased stress levels (Townsend et al., 2011) decreased work motivation (Veldman et al., 2021), and burnout (Hall et al., 2015). This is highly relevant to multiple fields where women tend to be a gender group minority, like in STEM, as the possible decrease in sense of belonging and increase in stereotype concerns in relation to being a gender minority may contribute to women withdrawing from that field. While it should be highlighted that the effects found in this study were relatively low, the pattern is notable. As Norway and Norwegian universities are considered to have high levels of gender equality overall, it could be that this is reflected in the small effects found in the current study. Thus, **there may be great utility in investigating this area in other societies with different levels of gender equality to see if the positive effect other women have on female employees' sense of belonging in the workplace is associated with the level of gender equality in that society/institution**. For example, it could be that in societies with lower gender equality the presence of other women in the workplace would have a

[3] Originally, the survey aimed to examine this in STEM vs. non-STEM employees, but this was not done in the final analyses due to several reasons. Firstly, we could not accurately categorize employees as working in STEM due to privacy concerns as detailed information of employee's specific workplace/department could not be collected, only faculty. Secondly, a field being considered a STEM field does not necessarily mean that it would have a heavily skewed gender distribution at UiT. Thirdly, there were not enough study participants to reliably conduct such sub-group analyses.

stronger effect on female employees' sense of belonging. This is because lower gender equality in an institution might make the difference between working with men and working with other women more prominent for a female employee.

Further, even if the effect of perceived gender distribution alone is small in Norwegian universities, it could contribute to accumulated workplace stress from stressors such as high rates of sick leave among colleagues and a high or unstable workload. Such stress may also derive from other stressors that affect men and women differently, like family care-taking duties, which could collectively have notable effects on workplace gender equality overall.

Conclusion

The current report investigated the work climate at UiT and potential gender differences in UiT employees' experience. Data from 269 employees, 173 men and 96 women, were collected using an online anonymous survey. The study indicated that, on average:

1. Both male and female employees have a strong sense of belonging at UiT and are motivated to approach positive interactions and relationships with other employees.
2. The rates of gender discrimination and stereotype concerns were low in both male and female employees, but female employees report slightly higher rates than male employees.
3. The more women in the workplace, (a) the less female employees worried about gender stereotypes, and (b) the less their sense of belonging at UiT was negatively affected by gender stereotype concerns.

In other words, it was found that small gender differences are present even in a higher educational institution in Norway, which considered one of the most gender-equal countries in the world.

Recommendations

Based on the current findings, our recommendations for academic leaders and/or institutions are as follows:

- Acknowledge the continued presence of notable gender gaps in Norwegian institutions. Although great progress has been shown in several metrics of gender equality, which should indeed be celebrated, it is essential that leaders remain aware and vigilant of remaining factors that can perpetuate gender inequality at the workplace.
- Consider psychological barriers in addition to sociological barriers when aiming to examine/increase gender equality in public institutions.
- Acknowledge that gender inequality at work may be perpetuated and maintained by other factors than explicit gender discrimination, harassment, and prejudice at the workplace. While we highlight that the current study indicated that gender discrimination is still concerningly present at UiT, interventions aimed to improve workplace equality need to go beyond overt workplace discrimination. Although interlinked with experiencing gender discrimination at work, such stereotype concerns need not be a direct result of workplace discrimination.
- When considering employee welfare and related workplace interventions, a leader should be particularly mindful of employees that are a (gender) minority in their workplace and/or field of study, as these employees may be particularly vulnerable.
- Encourage sense of belonging at the workplace to improve employee well-being, but not only in women and/or marginalised groups, as a high sense of belonging has been found to be associated with multiple positive outcomes in all employees and the workplace overall. This includes high employee wellbeing and performance, high organisational commitment, and job satisfaction. Examples of empirically supported interventions that increase sense of belonging include encouraging employee-led communities; formal support; leaders checking in on employee's welfare and fostering a culture of doing so in the workplace; establishing formal forums for employee feedback and input directed towards the leadership.
- Create and/or strengthen network and mentorship programmes in the workplace specific for those employees whose gender is a gender minority in their field.
- Finally, we recommend that leaders share their relevant insight and reflections from this report with employees, especially employees in leadership positions.

About the authors

Lise Gulli Brokjøb is psychology student (cand. psychol.) and a Student Research Program ("Forskerlinjen") candidate at the Department of Psychology , UiT The Artic University of Norway. Her research centres around the impact of internalised societal stressors on psychological health; embodiment and interoception in marginalised groups; body image; and eating disorders. Read more on ResearchGate.

Sarah E. Martiny is a professor in social and community psychology at the Department of Psychology, UiT The Artic University of Norway. Sarah conducts research in social and cultural psychology and educational psychology. She is interested in the consequences of discrimination, social inequality, life-long learning, and intergroup relations. Read more on ResearchGate.

References

Abrahamsen Bente. (2020). Færre menn enn kvinner fullfører kvinnedominerte profesjonsutdanninger. *Tidsskrift for Samfunnsforskning*, 61(3), 241–254. https://doi.org/10.18261/issn.1504-291X-2020-03-03

Anker, R. (1997). Theories of occupational segregation by sex: An overview*. International Labour Review*, 136(3), 315-339. Retrieved from https://www.proquest.com/scholarly-journals/theories-occupational-segregation-sex-overview/docview/224011388/se-2?accountid=17260

Anker, R., Melkas, H., & Korten, A. (2003). Gender-based Occupational Segregation in the 1990s. Genève*: International Labour Office*. ISBN: 9789221151388

Barne-, ungdoms- og familiedirektoratet (2021). Arbeidsliv og kjønn. *Barne-, ungdoms- og familiedirektoratet.* Retrieved from https://www.bufdir.no/Statistikk_og_analyse/kjonnslikestilling/Arbeidsliv_og_kjonn/.

Barne-, ungdoms- og familiedirektoratet (2022a). Ledelse og kjønn. *Barne-, ungdoms- og familiedirektoratet*. Retrieved from https://www.bufdir.no/Statistikk_og_analyse/Kjonnslikestilling/Arbeidsliv_og_kjonn/Ledelse/

Barne-, ungdoms- og familiedirektoratet (2022b). Utdanningsvalg og kjønn. *Barne-, ungdoms- og familiedirektoratet.* Retrieved from https://www.bufdir.no/Statistikk_og_analyse/Kjonnslikestilling/Utdanning_og_kjonn/Utdanningsvalg/#heading23638.

Beyard-Tyler, K., & Haring, M. J. (1984). Gender-related aspects of occupational prestige*. Journal of Vocational Behavior*, 24(2), 194-203. https://doi.org/10.1016/0001-8791(84)90006-X.

Borrott, N., Day, G. E., Sedgwick, M., & Levett-Jones, T. (2016). Nursing students' belongingness and workplace satisfaction: Quantitative findings of a mixed methods study. *Nurse education today*, 45, 29-34. https://doi.org/10.1016/j.nedt.2016.06.005.

Boyatzis, R.E. (1973), Affiliation motivation: a review and a new perspective, inMcClelland, D.C. and Steele, R.S. (Eds), Human Motivation: A Book of Readings, *General Learning Press*, Morristown, NJ, pp. 252-78.

Brescoll, V. L. (2016). Leading with their hearts? How gender stereotypes of emotion lead to biased evaluations of female leaders. *The Leadership Quarterly*, 27(3), 415-428.

Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological review*, 106(4), 676.

Carli, L. L. (2001). Gender and social influence. *Journal of Social issues*, 57(4), 725-741. https://doi.org/10.1111/0022-4537.00106

Clarke, H.M. (2020). Gender Stereotypes and Gender-Typed Work. In: Zimmermann, K. (eds) Handbook of Labor, Human Resources and Population Economics. *Springer*, Cham. https://doi.org/10.1007/978-3-319-57365-6_21-1

CORE - Senter for likestillingsforskning (2020, 11. August). *Institutt for Samfunnsforskning*. Retrieved from https://www.samfunnsforskning.no/core/publikasjoner/core-indikator-status/core-topplederbarometer/core-topplederbarometer-2020/core-topplederbarometer-2020.html 7. February 2022.

Dávila, M., & García, G. (2012). Organizational Identification and Commitment: Correlates of Sense of Belonging and Affective Commitment. *The Spanish Journal of Psychology*, 15(1), 244-255. https//doi.org/10.5209/rev_SJOP.2012.v15.n1.37316.

Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology*, 46(5), 991–1004. https://doi.org/10.1037/0022-3514.46.5.991

De Smet, A., Dowling, B., Mugayar-Baldocchi, M., & Schaninger, B. (2021). 'Great attrition' or 'great attraction'? The choice is yours. *The McKinsey Quarterly*.

Diekman, A. B., Weisgram, E. S., & Belanger, A. L. (2015). New routes to recruiting and retaining women in STEM: Policy implications of a communal goal congruity perspective. *Social Issues and Policy Review*, 9(1), 52-88.

Directorate-General for Research and Innovation. (2021). She figures 2021, *EU publications*. https://doi.org/10.2777/06090

Duarte, M., Kochanska, A., & Nustad, T. (2020). Gender distribution beyond coarse measurements: Balancing gender distribution in professor positions at UiT from 2020 onwards. *Septentrio Reports*, (8).

Eagly, A. H. (1987). Sex differences in social behaviour: A social-role analysis. *Hillsdale*, NJ: Lawrence Erlbaum.

Eagly, A.H., & Karau, S. J. (1991) Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology*, 60, 685–710. http://dx.doi.org/10.1037/0022-3514.60.5.685

Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), The developmental social psychology of gender (pp. 123–174). *Lawrence Erlbaum Associates Publishers*.

Eagly, A. H. (2009). The his and hers of prosocial behaviour: an examination of the social psychology of gender. *American psychologist,* 64(8), 644.

Ellemers, N. (2018). Gender stereotypes. *Annual review of psychology*, 69, 275-298.

Engida, Y. M. (2021). The three dimensional role of education for women empowerment. *Journal of Social Sciences,* 17(1), 32-38.

European Union, Directorate-General for Employment, Social Affairs and Inclusion (European Commission). (2009). Gender segregation in the labour market: Root causes, implications and policy responses in the EU. *EU publications.* https://10.2767/1063

European Institute for Gender Equality. (2021). Gender Equality Index 2021: Health*, European Institute for Gender Equality*. https://doi.org/10.2839/035225

Eurostat (2021). Educational attainment statistics. *Eurostat*. Retrieved 2021-11-30. ISSN 2443-8219. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Educational_attainment_statistics#Level_of_educational_attainment_by_sex

Felson, R. B. (2014). Back to basics: Gender and the social psychology of aggression. In R. Gartner & B. McCarthy (Eds.), The Oxford handbook of gender, sex, and crime (pp. 77–98). *Oxford University Press.*

Forskerforbundet (2021). Vitenskapelige stillinger ved statlige universiteter og høyskoler Kvinneandel (%) (2002–2021). *Forskerforbundet*. Retrieved from https://www.forskerforbundet.no/Documents/statistikk/UH/4_Kvinneandel-UH_2002-2021.pdf?epslanguage=no.

Fraser, H., and N. Taylor. (2016). Neoliberalization, Universities and the Public Intellectual: Species, Gender and the Production of Knowledge. London: Macmillan.

Gable, S. L., & Berkman, E. T. (2008). Making connections and avoiding loneliness: Approach and avoidance social motives and goals. In A. J. Elliot (Ed.), Handbook of approach and avoidance motivation (pp. 203–216). *Psychology Press.*

Gable, P. A., & Dreisbach, G. (2021). Approach motivation and positive affect. *Current Opinion in Behavioral Sciences,* 39, 203-208. https://doi.org/10.1016/j.cobeha.2021.03.030.

Global Education Monitoring Report Team (2020). Global Education Monitoring Report 2022: Gender Report, Deepening the Debate on Those Still Left behind. *UNESCO Publishing*. ISBN: 9789231004117. http://hdl.handle.net/20.500.12389/22910.

Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of psychiatric nursing*, 6(3), 172-177. https://doi.org/10.1016/0883-9417(92)90028-H

Hall, W. M., Schmader, T., & Croft, E. (2015). Engineering exchanges: Daily social identity threat predicts burnout among female engineers. *Social Psychological and Personality Science*, 6(5), 528-534. https://doi.org/10.1177%2F1948550615572637.

Heilman, M. E. (2012) Gender stereotypes and workplace bias*. Research in Organizational Behavior* 21: 113–135. https://doi.org/10.1016/j.riob.2012.11.003.

Heilman, M. E., & Caleo, S. (2018). Gender discrimination in the workplace. In A. J. Colella & E. B. King (Eds.), The Oxford handbook of workplace discrimination (pp. 73–88). *Oxford University Press.*

Hicks-Clarke, D., & Iles, P. (2000). Climate for diversity and its effects on career and organizational attitudes and perceptions. *Personnel review.* ISSN: 0048-3486.

Hyde, J. S. (2014). Gender similarities and differences*. Annual review of psychology*, 65, 373-398.

House, J. S., & Mortimer, J. (1990). Social structure and the individual: Emerging themes and new directions. Social Psychology Quarterly, 71-80. Kaplan, R. M., Anderson, J. P., & Wingard, D. L.

(1991). Gender differences in health-related quality of life. *Health Psychology*, 10(2), 86. https://doi.org/10.1037//0278-6133.10.2.86

Institutt for Samfunnsforskning (2019). Kjønnsdelte utdannings- og yrkesvalg: En kunnskapsoppsummering. (Rapport 2019:6). *Institutt for Samfunnsforskning*.

Inzlicht, M., Tullett, A. M., & Gutsell, J. N. (2012). Stereotype threat spill-over: The short- and long-term effects of coping with threats to social identity. In M. Inzlicht & T. Schmader (Eds.), Stereotype threat: Theory, process, and application (pp. 107–123). *Oxford University Press.*

Jones, N., Tvedten, I., Arbulú, A., Pereznieto, P., Lindström, J., & Norbakk, M. (2015). Evaluation of Norway's Support to Women's Rights and Gender Equality in Development Cooperation. *Norad Evaluation Report.*

Kandiko Howson, C. B., Coate, K., & de St Croix, T. (2018). Mid-career academic women and the prestige economy. *Higher Education Research & Development*, 37(3), 533-548. https://doi.org/10.1080/07294360.2017.1411337.

Kapur, Radhika. (2020). Understanding Socio-Psychological Barriers within the Course of Communication.

KifInfo (2022). Statistikk om kjønnsbalanse og mangfold. *Kif-komiteen*. Retrieved from https://kifinfo.no/nb/content/statistikk-0.

Kite, M. E., & Whitley Jr, B. E. (2016). Psychology of prejudice and discrimination. *Routledge*. ISBN: 9781138947528.

Koenig, A. M. (2018). Comparing prescriptive and descriptive gender stereotypes about children, adults, and the elderly. *Frontiers in psychology*, 1086. https://doi.org/10.3389/fpsyg.2018.01086

Kring, A. M., & Gordon, A. H. (1998). Sex differences in emotion: expression, experience, and physiology. *Journal of personality and social psychology,* 74(3), 686. https://doi.org/10.1037/0022-3514.74.3.686

Liu, C., Spector, P. E., & Shi, L. (2008). Use of both qualitative and quantitative approaches to study job stress in different gender and occupational groups. *Journal of Occupational Health Psychology*, 13(4), 357. https://psycnet.apa.org/doi/10.1037/1076-8998.13.4.357.

Madden, L., Mathias, B. D., & Madden, T. M. (2015). In good company: The impact of perceived organizational support and positive relationships at work on turnover intentions. *Management Research Review*. ISSN: 2040-8269.

Makarova, E., Aeschlimann, B., & Herzog, W. (2019). The gender gap in STEM fields: The impact of the gender stereotype of math and science on secondary students' career aspirations. In *Frontiers in Education* (Vol. 4, p. 60). *Frontiers*. https://doi.org/10.3389/feduc.2019.00060

Martin, C. L., & Ruble, D. N. (2010). Patterns of gender development. *Annual review of psychology*, 61, 353. https://doi.org/10.1146%2Fannurev.psych.093008.100511.

Martiny, S. E., & Nikitin, J. (2019). Social identity threat in interpersonal relationships: Activating negative stereotypes decreases social approach motivation. *Journal of Experimental Psychology: Applied*, 25(1), 117. https://psycnet.apa.org/doi/10.1037/xap0000198.

McLaughlin, K., Muldoon, O. T., & Moutray, M. (2010). Gender, gender roles and completion of nursing education: A longitudinal study. *Nurse education today*, 30(4), 303-307. https://doi.org/10.1016/j.nedt.2009.08.005

Mehrabian, S. K. A. (1974). A Theory of Affiliation. *Lexington Books*.

Meisenbach, R. J. (2010) The female breadwinner: Phenomenological experience and gendered identity in work/family spaces. *Gender Roles* 62: 2–19. https://doi.org/10.1007/s11199-009-9714-5.

Meyer, J., & Strauß, S. (2019). The influence of gender composition in a field of study on students' drop-out of higher education. *European Journal of Education*, 54(3), 443-456. https://doi.org/10.1111/ejed.12357.

Newman, C., Chama, P. K., Mugisha, M., Matsiko, C. W., & Oketcho, V. (2017). Reasons behind current gender imbalances in senior global health roles and the practice and policy changes that can catalyze organizational change. *Global health, epidemiology and genomics*, 2. https://doi.org/10.1017/gheg.2017.11

Nikitin, J., Schoch, S., & Freund, A. M. (2014). The role of age and motivation for the experience of social acceptance and rejection. *Developmental Psychology*, 50(7), 1943–1950. https://doi.org/10.1037/a0036979.

Nikitin, J., & Freund, A. M. (2017). Social motives predict loneliness during a developmental transition. *Swiss Journal of Psychology*, 76(4), 145–153. https://doi.org/10.1024/1421-0185/a000201.

Nikitin, J., & Schoch, S. (2021). Social approach and avoidance motivations. In R. J. Coplan, J. C. Bowker, & L. J. Nelson (Eds.), The handbook of solitude: Psychological perspectives on social isolation, social withdrawal, and being alone (pp. 193–208). *Wiley Blackwell.* https://doi.org/10.1002/9781119576457.ch14

Norsk Forskningsråd (2020). Indikatorrapporten 2020. Norsk Forskningsråd. ISBN 978-82-12-03903-2.

Norwegian Directorate for Higher Education and Skills (2021). Kjønnsstatistikk. *Norwegian Directorate for Higher Education and Skills.* Retrieved from https://dbh.hkdir.no/tall-og-statistikk/statistikk-meny/kjonn.

Nygård (2021) 35 prosent har høyere utdanning. *Statistisk Sentralbyrå*. Retrieved from https://www.ssb.no/utdanning/utdanningsniva/statistikk/befolkningens-utdanningsniva/artikler/35-prosent-har-hoyere-utdanning.

OECD (2021), Education at a Glance 2021: OECD Indicators, *OECD Publishing*, https://doi.org/10.1787/b35a14e5-en.

Osborne, J. W., & Walker, C. (2006). Stereotype threat, identification with academics, and withdrawal from school: Why the most successful students of colour might be most likely to withdraw. *Educational psychology*, 26(4), 563-577. https://doi.org/10.1080/01443410500342518

Painter, C. V. (2013). Sense of belonging: Literature review. Ottawa*: Citizenship and Immigration Canada*.

Perry, D. G., Pauletti, R. E., & Cooper, P. J. (2019). Gender identity in childhood: A review of the literature. *International Journal of Behavioral Development,* 43(4), 289-304.

Proudfoot, D., & Kay, A. C. (2022). Communal expectations conflict with autonomy motives: The western drive for autonomy shapes women's negative responses to positive gender stereotypes. *Journal of Personality and Social Psychology.* Advance online publication. https://doi.org/10.1037/pspa0000311.

Purnell, L. M. (2007). I think I am a feminist: A study of feminist identity development of undergraduate college women (Doctoral dissertation) *Indiana University*.

Ritter, B.A., & Yoder, J.D. (2004). Gender differences in leader emergence persist even for dominant women: An updated confirmation of Role Congruity Theory. *Psychology of Women Quarterly*, 28, 187-193. https://doi.org/10.1111%2Fj.1471-6402.2004.00135.x

Rogus-Pulia, N., Humbert, I., Kolehmainen, C., & Carnes, M. (2018). How gender stereotypes may limit female faculty advancement in communication sciences and disorders*. American journal of speech-language pathology,* 27(4), 1598-1611. https://doi.org/10.1044/2018_ajslp-17-0140.

Rubin, M., Paolini, S., Subašić, E., & Giacomini, A. (2019). A confirmatory study of the relations between workplace sexism, sense of belonging, mental health, and job satisfaction among women in male-dominated industries. *Journal of Applied Social Psychology*, 49(5), 267-282. https://doi.org/10.1111/jasp.12577.

Salmon, A. (2015). A Complex Formula: Girls and Women in Science, Technology, Engineering and Mathematics in Asia. *UNESCO Bangkok*. ISBN: 9789292235031.

Saucerman, J., & Vasquez, K. (2014). Psychological barriers to STEM participation for women over the course of development*. Adultspan Journal*, 13(1), 46-64. https://doi.org/10.1002/j.2161-0029.2014.00025.x

Seehuus, S. & Reisel L. (2017). Betydningen av sosial bakgrunn for kjønnsdeling i høyere utdanning. *Tidsskrift for Samfunnsforskning, 58*(3), 284–310. https://doi.org/10.18261/issn.1504-291X-2017-03-02

Simms, M. C., McDaniel, M., Fyffe, S. D., & Lowenstein, C. (2015). Structural Barriers to Racial Equity in Pittsburgh.

Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology,* 35, 4–28. https://doi.org/10.1006/JESP.1998.1373.

Stamarski, C. S., & Son Hing, L. S. (2015). Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism. *Frontiers in psychology,* 6, 1400. https://doi.org/10.3389%2Ffpsyg.2015.01400.

Statistisk Sentralbyrå (2020a). *Kjønn, alder og deltakelse i organisasjoner siste 12 mnd. for personer 16 år og over (prosent) 2011 – 2020* [Data set 09130].

Statistisk Sentralbyrå (2022a). *Utdanningsnivå, etter fylke, alder og kjønn 1980 – 2020* [Data set 08921].

Statistisk Sentralbyrå (2022b). *Studenter i høyere utdanning i Norge og i utlandet, etter kjønn, fagfelt, statistikkvariabel og år.* Statistisk Sentralbyrå. [Dataset 08823].

Stott, A. (2004). Issues in the socialization process of the male student nurse: Implications for retention in undergraduate nursing course. *Nurse Education Today*, 24, 91–97. https://doi.org/10.1016/j.nedt.2003.09.005

Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In Advances in experimental social psychology (Vol. 34, pp. 379-440). *Academic Press*. https://doi.org/10.1016/S0065-2601(02)80009-0.

Steffens, M. C., Jelenec, P., & Noack, P. (2010). On the leaky math pipeline: Comparing implicit math-gender stereotypes and math withdrawal in female and male children and adolescents. *Journal of Educational Psychology,* 102(4), 947. https://psycnet.apa.org/doi/10.1037/a0019920

Stergiou-Kita, M., Mansfield, E., Bezo, R., Colantonio, A., Garritano, E., Lafrance, M., & Travers, K. (2015). Danger zone: Men, masculinity and occupational health and safety in high-risk occupations*. Safety science*, 80, 213-220. https://doi.org/10.1016/j.ssci.2015.07.029.

Taylor, C. J. (2010) Occupational sex composition and the gendered availability of workplace support. *Gender and Society* 24: 189–212. https://doi.org/10.1177%2F0891243209359912.

Teigen, M., & Skjeie, H. (2017). The Nordic gender equality model. The Nordic models in political science. Challenged, but still viable?. ISBN: 9788245021752.

Townsend, S. S., Major, B., Gangi, C. E., & Mendes, W. B. (2011). From "in the air" to "under the skin": Cortisol responses to social identity threat. *Personality and Social Psychology Bulletin,* 37(2), 151-164. https://doi.org/10.1177/0146167210392384.

United Nations Development Programme "Human Development Report 2020 - Table 5: Gender Inequality Index". United Nations Development Programme. 2020. *UN Publisher.*

UN Entity for Gender Equality and the Empowerment of Women (UNWOMEN), 2018. Facts and Figures: Economic Empowerment.

Veldman, J., Van Laar, C., Meeussen, L., & Lo Bue, S. (2021). Daily coping with social identity threat in outgroup-dominated contexts: Self-group distancing among female soldiers. *Personality and Social Psychology Bulletin*, 47(1), 118-130. https://doi.org/10.1177/0146167220921054.

Vermeulen, M., & Mustard, C. (2000). Gender differences in job strain, social support at work, and psychological distress. *Journal of occupational health psychology,* 5(4), 428.

Waller, L. (2020). Fostering a sense of belonging in the workplace: Enhancing well-being and a positive and coherent sense of self. *The Palgrave handbook of workplace well-being*, 1-27.

Waller, L. (2021). A Sense of Belonging at Work: A Guide to Improving Well-being and Performance. *Routledge*. https://doi.org/10.4324/9781003108849.

Williams, C. L. (1995) Still a man' world: Men who do "women's work.", Berkeley, CA: *University of California Press*. SBN: 9780520087873.

Winslow, S., & Davis, S. N. (2016). Gender inequality across the academic life course. *Sociology Compass*, 10(5), 404-416.

WISE (2021), WISE Annual Report 2020-2021. *WISE campaign,* https://www.wisecampaign.org.uk/end/

Witt, S. D. (1997). Parental influence on children's socialization to gender roles. *Adolescence*, 32(126), 253-9. Retrieved from https://www.proquest.com/scholarly-journals/parental-influence-on-childrens-socialization/docview/195928943/se-2?accountid=17260

World Economic Forum (2021). Global Gender Gap Report 2021. *World Economic Forum*. ISBN: 978-2-940631-07-0. Retrieved from http://reports.weforum.org/globalgender-gap-report-2021/dataexplorer.

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.

Appendices

Appendix A

Table 2 – *ANOVA- and descriptive statistics for all social scales by gender*

The table includes the sum of squares (ss), degrees of freedom (df), and mean sum of squares (MS) for between-group (between) and within-group (within) differences, F-ratios (F), significance values (p), score ranges, mean scores (Mscore) with standard deviations (SD) and confidence intervals ([LL, UL]),

Predictor	Group analysis	SS	DF	MS	F	*p*	Gender group	Score range	Mscore (SD) [LL, UL]	Mgender difference
Sense of Belonging	**Within**	656.68	1	2.46	-	-	**Women**	1.38 - 7.00	5.37 (1.47) [5.15, 5.59]	.23
	Between	3.46	267	3.46	1.41	.237	**Men**	1.00 - 7.00	5.14 (1.73) [4.78, 5.49]	
Social Approach Motivation	**Within**	366.44	1	1.37	-	-	**Women**	1.80 - 7.00	5.16 (1.40) [4.99, 5.33]	**.31**
	Between	5.73	267	5.73	4.17	.042	**Men**	1.40 - 7.00	4.85 (1.23) [4.60, 5.10]	

Note. Measures with mean differences in bold text showed significant gender differences at level .05.

Appendix B

Table 3 – ANOVA- and descriptive statistics for the discrimination and stereotype scales by gender

Table includes the sum of squares (ss), degrees of freedom (df), and mean sum of squares (MS) for between-group (between) and within-group (within) differences, F-ratios (F), significance values (p), score ranges, mean scores (Mscore) with standard deviations (SD) and confidence intervals ([LL, UL]).

Predictor	Group analysis	SS	DF	MS	F	*p*	Gender group	Score range	Mscore (*SD*) [LL, UL]	Mgender difference
Group Concept Threat	**Within**	388.44	1	1.46	-	-	**Women**	1.00 - 6.80	2.13 (1.42) [1.92, 2.35]	**.72**
	Between	31.86	267	31.86	21.90	<.001	**Men**	1.00 - 4.60	1.41 (.67) [1.28, 1.55]	
Interpersonal Discrimination	**Within**	546.48	1	2.08	-	-	**Women**	1.00 - 7.00	2.30 (1.64) [2.05, 2.54]	**.81**
	Between	40.27	267	40.27	19.67	<.001	**Men**	1.00 - 4.60	1.49 (.93) [1.30, 1.68]	
Career Discrimination	**Within**	423.95	1	1.59	-	-	**Women**	1.00 - 7.00	2.62 (1.35) [2.42, 2.83]	**.76**
	Between	35.21	267	35.21	22.17	<.001	**Men**	1.00 - 5.33	1.86 (1.08) [1.64, 2.08]	
Gendered Expectations	**Within**	380.90	1	1.43	-	-	**Women**	1.00 - 5.75	2.33 (1.33) [2.13, 2.53]	**.70**
	Between	30.04	267	30.04	21.96	<.001	**Men**	1.00 - 4.75	1.63 (.89) [1.45, 1.81]	

Note. Significant at level .05*, .01**, .001***

Appendix C

Table 4 - *Simple Moderation Model coefficients*

Simple moderation model using participant gender as predictor, perceived gender distribution in the workplace (Perceived % women) as moderator, and Group Concept Threat as outcome.

	Model 1 Group Concept Threat			
Effect	**B**	**SE**	**95% CI**	***p***
Gender	1.41	.41	[0.60, 2.23]	<.001
% Perceived women	-.001	.01	[-0.01, 0.01]	.812
Gender x % Perceived women	-.01	.01	[-0.03, 0.002]	.097
Total	.34	1.40	-	<.001
Conditional effects of gender at different % of perceived women:				
• **32% women**	1.03	.22	[0.60, 1.56]	<.001
• **56% women**	.75	.15	[0.45, 1.05]	<.001
• **80% women**	.46	.24	[-0.01, 0.94]	.057

Appendix D

Table 5 - *Mediated Moderation Model coefficients*

Mediated Moderation Model using participant gender as predictor, Group Concept Threat as mediator, Sense of Belonging scores as outcome, and perceived gender distribution as moderator.

	Moderated Mediation Model Sense of Belonging				
Path	**Effect**	***B***	***SE***	**95% CI**	***p***
Direct	Gender → % Women	6.03	2.83	[0.47, 11.60]	.034
	Gender → Group Concept Threat	1.41	.41	[0.60, 2.23]	<.001
	Women % → Group Concept Threat	-.001	.01	[-0.01, 0.01]	.812
	Gender - > Sense of Belonging	.41	.21	[0.004, 0.81]	.048
	Group Concept Threat → Sense of Belonging	-.25	.08	[-0.41, -0.97]	.002
Interaction	Gender x % Women	-.01	.01	[-0.03, 0.002]	.097
Mediation	Gender → Group Concept Threat → Sense of Belonging	-	-	-	.854
Moderated Mediation	Gender*Perceived gender dist. → Group Concept Threat → Sense of Belonging	-	-	-	
Total effect	Gender → Group Concept Threat	.34	1.40	-	<.001
	Gender → Sense of Belonging	.21	2.38	-	.004
Conditional indirect effects of gender on belonging at given % of women in workplace	32% women	-.26	.10	[-0.48, -0.09]	-
	56% women	-.19	.07	[-0.33, -0.07]	-
	80% women	-.12	.06	[-0.25, -0.02]	-

Fact sheet

Prestige project

Project number..

UiT Workplace Climate Survey

Fact sheet 05/2022

Mapping experiences of gender-based discrimination at UiT

Background

- Several fields are still dominated by one gender group, like STEM-fields, even in countries with high gender equality.
- Gender differences in workplace experience could be relevant to this, as research suggests that workplace experience is linked to workplace withdrawal.
- Employee's sense of belonging to their workplace and social motivation to approach co-workers have shown important to workplace experience.
- Gender discrimination and worrying about gender stereotypes negatively impact both of these factors.
- Gender differences in workplace discrimination and stereotypes may lead to gender differences in workplace experience.
- This could be linked to workplace gender distribution, indicating how skewed gender distributions are maintained at work.

Current study

- Our psychological study aimed to investigate gender differences in UiT-employees workplace experience and the impact of gender discrimination and stereotype worry.
- To do this, data from **269 UiT-employees**, **96 men** and **173 women** was collected using an anonymous online survey about workplace climate and experiences.
- This employee data collected included:
  - Experienced with different gender discrimination: Interpersonal, career-related, and gender-based work expectations.
  - Worry about gender-based stereotypes.
  - Social motivation to approach co-workers.
  - Sense of belonging to UiT (Not included in figure below).
  - Employees' estimated gender distribution in their current workplace.

Do female and male employees experience the work climate at UiT differently?

Yes. But not by much. High reported rates of sense of belonging and social approach motivation by both gender groups.

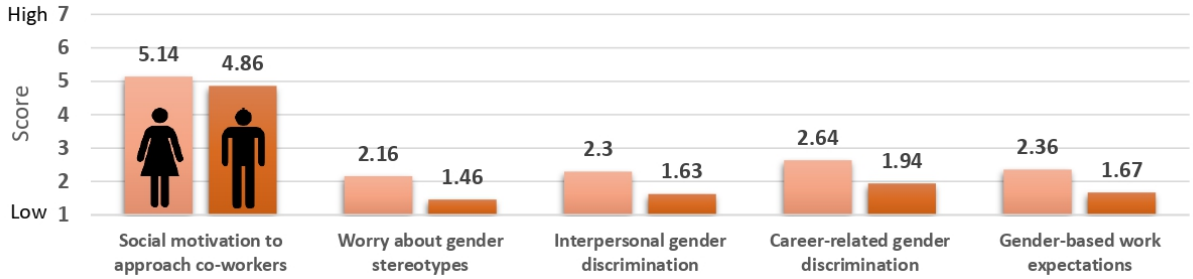
- On average, female employees reported slightly more social approach motivation than men (see figure).
- Both male and female employees reported, on average, high social motivation to approach co-workers.
- Female- and male employees did not differ in sense of belonging to UiT.
- Both male and female employees reported a high mean sense of belonging to UiT.

Do female employees face more gender discrimination & stereotypes than male employees?

Yes. But not by much. Low reported rates of discrimination and gender stereotypes by both gender groups.

- Though the gender differences were small, female employees reported significantly more stereotype worry, interpersonal gender discrimination, career-related gender discrimination, and gender-based work expectations than male employees. (See figure)

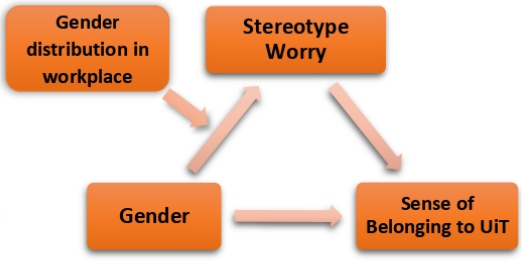
Reported gender discrimination and stereotype worry were, on average, very low for all employees.



Are the effects of gender-based discrimination particularly evident where women are underrepresented?

Possibly. Gender distribution in the workplace may have a small effect on female employees, but not on male employees.

- Tentative conditional findings suggests that the more women were perceived to be at a workplace, the less female employees worried about gender stereotypes.
- Worrying about gender stereotypes was linked to a decreased sense of belonging to UiT in all employees. This link was weakened the more women were perceived to be in the workplace.
- Workplace gender distribution had no significant effect on male employees.



Please cite as: Brokjøb, L. G., & Martiny, S. E. (Forthcoming). *Mapping experiences of gender-based discrimination at UiT.* Report 05/2022. (Prestige project – xxx)

Norges arktiske universitet UiT

SKK Since 1996