



From education to employment: gendered labour market outcomes across care and non-care fields in Italy and Finland

Nevena Kulic¹ · Irene Prix² · Diana Roxana Galos³

Received: 14 November 2025 / Accepted: 21 June 2026
© The Author(s) 2026

Abstract

A substantial body of research indicates that graduates' field of study is a key predictor of the gender wage gap. While previous studies often compare groups based on women's minority status in a given field, we reframe this by distinguishing between care and non-care fields—defined by their links to stereotypically feminized characteristics and their core care component. Taking the case study of Italy and Finland – representing distinct gender equality contexts, and contrasting welfare state regimes (conservative and Nordic) – we first investigate whether gender gaps in labour market outcomes differ between graduates of care- and non-care related fields of study. Second, adopting a comparative perspective, we further examine whether these gender gaps vary between Italy and Finland. Using administrative data from both countries, which include detailed fields of study classifications, our study supports the gender comparative advantage argument. Women experience smaller gaps in outcomes when graduating from care-oriented fields than from other fields, narrowing disparities particularly in wages and eliminating gender disparities in access to high-service occupations, while field-specific disparities in gender gaps were less pronounced in employment and job authority. Analyses are broadly consistent across Italy and Finland, suggesting limited cross-country variation in gender gaps in outcomes when comparing care and non-care fields.

Keywords Care fields · Gender gap · Labour market · Administrative data · Comparative

✉ Nevena Kulic
nevena.kulic@unipv.it

Irene Prix
irepri@utu.fi

Diana Roxana Galos
drg@soc.ku.dk

¹ Department of Political and Social Sciences, University of Pavia Corso Carlo Alberto, Pavia PV 3, 27100, Italy

² University of Turku, Assistentinkatu 7, Turku 20500, Finland

³ Department of Sociology, University of Copenhagen, Øster Farimagsgade 5, Copenhagen 1353, Denmark

Introduction

Men's and women's systematic sorting into different educational and occupational fields has been shown to be a major factor in explaining the gender pay gap, particularly among higher education graduates (Bobbitt-Zeher, 2007; Blau & Kahn, 2017). Therefore, encouraging more women to study for degrees in high-paying and male-dominated science, technology and engineering (STEM) fields has been suggested as a key policy measure to address persisting gender disparities in labour market returns to education (European Commission, 2024). However, recent research has increasingly highlighted that gender disparities in labour market returns persist even among men and women who graduated from the same fields of study (Galos & Kulic, 2023; Hägglund, 2024; Seehuus & Strømme, 2024), including the natural sciences and engineering (Zajac et al., 2025).

Why and how gender gaps in early-career labour market outcomes vary across fields of study is still an open question. Previous research on field-specific variation in gender gaps on the labour market has often focused on women's disadvantage in male-dominated STEM fields compared to other (gender-typed) broad fields (Konietzka & Wen, 2025; Schwerter & Ilg, 2023; Doris et al. 2025; Zajac et al. 2025). Theoretical arguments in this literature have frequently centred on the role of women's minority status in the field for explaining gender disparities compared to other fields (Shauman, 2006).

In this study, we contribute to the literature on the heterogeneity of field-specific gender gaps in labour market outcomes by reconceptualizing the sources of these gaps, taking as our point of departure the distinction between stereotypically female care-related fields in comparison to other fields of study. Barone (2011) has argued that patterns of gender segregation by field of study are characterized by two strong divides, with the care-technical divide in the orientation of fields of study being one of the most dominant distinctions of degree courses. Care fields are characterized by the developing skills and expertise typically linked to the so-called "helping professions". These occupations involve a high degree of care for others and interpersonal skills, exemplified by professions such as psychologists, teachers, social workers, and nurses. Care work is highly feminized in many countries, which many scholars argue may be linked to its cultural devaluation (England, 1992) and the average pay penalties it incurs relative to non-care work, even when requiring higher education qualifications (England et al. 2002).

From a theoretical perspective, focusing on the distinction between care and non-care fields thus sets this paper apart from much previous research. This focus allows us to approach early career outcomes of graduates mainly from the standpoint of women's majority status, drawing on arguments based on feminized skills, gendered performance expectations, and stereotypes to hypothesize about the direction and magnitude of field-specific gender disparities. Additionally, while previous studies have typically focused on analysing one or two labour market outcomes (Morgan, 2008; Galos & Kulic, 2023; Hägglund, 2024; Schwerter & Ilg, 2023), we are able to compare field-specific gender gaps not only in terms of wages, but also across other important dimensions of work such as employment status, job authority, and access to higher service class occupation five years after graduating. As both job authority and higher service class positions have in previous research been associated with autonomy, job security, and time sovereignty (Mustosmäki et al., 2017; Stier & Yaish, 2014), this paper provides a perspective on how field-specific gender gaps may relate to gender gaps in overall job quality.

Against this background, this paper addresses the following research questions:

1. How do gender gaps in early career outcomes differ between graduates of care-related and other fields of study?
2. How do these gender gaps vary between Italy and Finland?

Importantly, this paper contributes to the existing literature by exploring how cultural and institutional contexts may shape field-specific gender gaps. Comparisons of field-specific gender disparities have been fairly rare (exceptions are Hägglund, 2024; Reimer & Steinmetz, 2009). We examine the gender gaps in two case studies - Italy and Finland – chosen both for contextual and gender equality variation and the availability of high-quality administrative data. Considering the context, Italy is typically classified as a conservative welfare state (Tobio, 2017), whereas Finland—despite ranking high on gender equality—is often considered the most conservative among the Nordic countries (Kangas & Kvist, 2018). At the same time, in both contexts, women are more likely than men to attain tertiary education¹, and employment rates among tertiary-educated women are relatively similar over the period considered². This combination of contextual divergence and structural similarity provides a stringent basis for assessing gender gaps in labour market outcomes among graduates. Regarding the data, the study uses two high-quality administrative datasets: a combination of administrative and survey data in Italy and full-population register data in Finland. Their harmonizable structure and detailed field of study classifications enable cross-national comparisons, including fine-grained identification of care-oriented fields. Focusing on the 2010 cohort and outcomes in 2015, the analysis provides a comprehensive assessment of early labour market trajectories in both countries.

Theoretical background: why should gender gaps vary between care and non-care fields?

Status theory and gendered comparative advantages

Two theoretical approaches are used to derive expectations about the level of gender gap across care and non-care fields of study and in relation to labour market outcomes. The first perspective, known as status theory, highlights gender as a diffuse status characteristic (Correll, 2004). According to this perspective, the primary mechanism behind differences between men and women in the labour market is the development of performance expectations, which tend to be lower for individuals with low-status characteristics, namely, women. Status theory can play out on both supply and demand side processes, influencing women's confidence and their subsequent decisions on the one hand, as well as their labour market evaluation by employers, on the other hand (Gërzhani et al., 2023).

Women and men tend to choose educational and occupational fields in line with gender stereotypes, but they can also face discrimination rooted in these stereotypes. Status theory thus argues that how status-based perceptions play out also depends critically on the con-

¹ https://ec.europa.eu/eurostat/databrowser/view/edat_lfse_03__custom_21306203/default/table.

² https://ec.europa.eu/eurostat/databrowser/view/edat_lfse_24__custom_21306124/default/table.

text-specific salience of cultural stereotypes (Ridgeway & Kricheli-Katz, 2013). Accordingly, it has been argued that women's performance evaluations are expected to be better than men's in occupational areas drawing on feminized abilities (Eagly & Koenig, 2007), leading potentially to a comparative advantage for women over men in feminized fields (Galos & Kulic, 2023). As such, the comparative advantage that women may possess in care-intensive tasks may help offset their lower overall status or even outweigh it entirely.

In this context, the comparative advantage perspective relies on status beliefs, which suggest that women are considered comparatively more capable for care-oriented fields and professions. Their comparative advantage is linked to stereotypical male and female traits, which are seen as the foundation for distinguishing between more "masculine" and more "feminine" fields of study and occupations (Correll, 2004). This principle of comparative advantage, if applied to field-specific differences in labour market outcomes for higher education graduates, would lead to the expectation that women are more successful in accessing and progressing in care-oriented fields, thereby diminishing the gender gap. Conversely, women might face comparative disadvantages in other than care-related fields, where their ascribed characteristics may deviate from role-specific stereotypes. In other words, women might face an advantage over men with regard to obtaining graduate positions related to care (Eagly & Koenig, 2007). From this perspective, we expect that gender gaps in men's favour in employment and access to professional positions will be smaller for graduates from care-related higher education fields compared to other fields (H1).

However, to what extent women in the care field may have a comparative advantage over men in terms of job authority and pay, is less clear (Ridgeway, 2014). This is because traditional gender norms view women as nurturing and caring, but not necessarily suited for leadership roles required for authority positions. Despite being located in a feminized context, access to leadership positions (which also affect wage trajectories) may therefore increase the salience of masculine stereotypes as detailed below.

Glass escalator expectations

The glass escalator perspective may also contribute to explaining field-specific gender gaps in early-career labour market outcomes. According to this literature, men may benefit from higher status and ascribed competence not only in male-dominated fields, but especially in feminized context, where their minority position gives particular salience to men's favourable gender stereotypes (Williams, 1992; Fløge & Merrill, 1986). Empirical evidence shows that implicit norms and cultural expectations in female-oriented professions such as nursing (Wingfield, 2009) or teaching (Cousins, 2020) tend to help men move toward positions of greater authority and higher pay. Brandford and Brandford-Stevenson (2021) note that men in nursing in the US represent around 10% of labour force but are almost 50% of the group in leadership positions. The glass escalator perspective also operates with status concerns, but leads to different conclusions than the comparative advantage perspective: men, because of their high-status gender, gain a disproportionate advantage in female-dominated fields, including those oriented towards care. This should be particularly evident when there is no heterogeneity among men in terms of ethnic and racial characteristics (Williams, 2013).

Regarding access to authority and high pay, thus, the glass escalator perspective would expect men to benefit from stereotypical ascriptions of leadership skills in female-domi-

nated care fields. Thus, we would expect a larger gender gap in men's favour in terms of authority and pay in care-intensive compared to non-care fields (H2).

While our theoretical considerations reflect on the dynamics at the recruitment stage and within workplaces, it is important to acknowledge that labour market gaps might also reflect other processes, including self-selection in employment (Doris et al., 2025) and discriminatory practices (Galos & Coppock, 2023).

Country context and expectations for the field-specific gender gaps in labour market outcomes

We expect the direction of the gender gaps to hold across contexts, but their magnitude might be amplified or attenuated with institutional and cultural context. To have a better overview of our case studies, below, we highlight key differences between Italy and Finland concerning (i) gender inequality, (ii) gender attitudes, and differences in the (iii) educational systems, and (iv) labour markets.

Finland (74.5) scores higher than Italy (69.2) on the Gender Inequality Index and ranks above the EU average (71) (European Institute for Gender Equality, 2025). Yet survey evidence shows that substantial shares of citizens in both countries perceive gender inequality as ongoing (Kulic et al., 2025; Nousiainen, 2023). Thus, perceived inequality appears more similar across the two countries than index scores alone suggest.

Turning to domain-specific attitudes in the two countries, findings from the European Value Survey (5th wave) suggest that men and women in both countries disagree to a large extent that men are better suited for business executive positions or as political leaders (Fig. 1, lower panel). However, a different picture emerges for attitudes towards working mothers and family-related gender stereotypes (Fig. 1, upper panel). Most Finns reject the idea that children suffer when mother works (92% of women and 88% of men), compared to about half of Italian (51% of women and 53% of men). Similar cross-country differences appear on the idea about women prioritizing home and kids (81% and 70% disagree for Finland compared to 51% and 41% for Italy).

Gender segregation in higher education is often termed “paradoxical,” as more gender-equal countries tend to show larger gaps in fields such as mathematics (Breda et al., 2020). In line with this, Finland is classified as more sex-segregated than Italy across fields of study and occupations (Bettio & Verashchagina, 2009), though such rankings depend on the indices used (Elbers, 2021). Structural factors, particularly Finland's larger public sector and stronger concentration in feminized care-related fields, may help explain this pattern. Considering the educational system, there are significant differences. Finland has a dual structure: polytechnics bachelor's degrees (alternatively translated as universities of applied sciences) and master's degrees from traditional universities, which serve as the primary qualifications for entering the labour market. Of these two, the health and welfare field accounted for 25% of Finnish graduates in 2023, while medicine accounted for only 6%, with most graduates concentrated in nursing and social work (Vipunen Education Statistics Finland, 2025). By contrast, Italy is dominated by research-oriented universities (Kyvik, 2004), with only 15% of Italian graduates in the health and welfare field in 2023, half of whom specialized in medicine (Eurostat, 2025b).

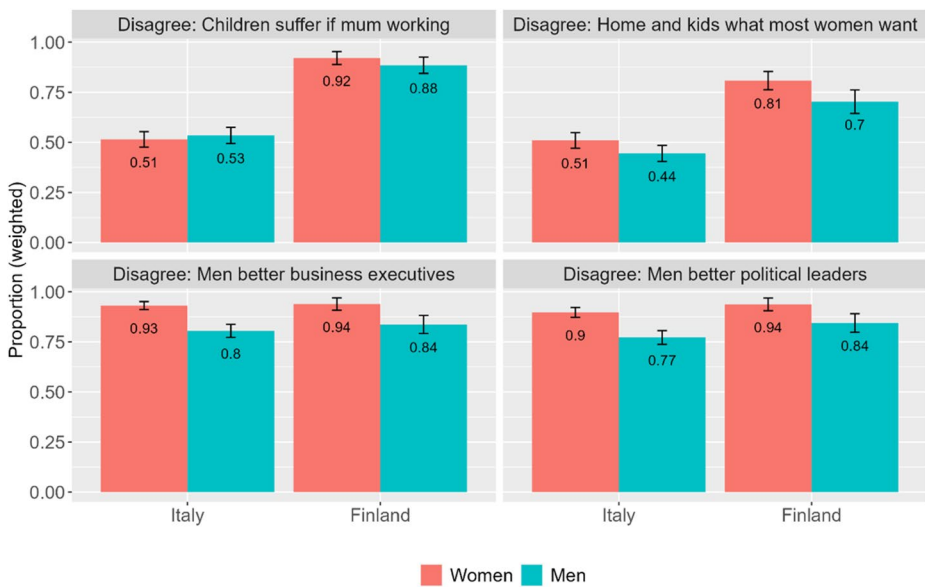


Fig. 1 Proportion of disagreement with selected gender attitudes in Finland and Italy (weighted). Source: European Value Survey (EVS), 5th wave (collected in 2017 in Finland and in 2018 in Italy), own calculations.

Focusing on women's employment patterns, both countries display more similarities than differences: about 80% female higher education graduates aged 35–39 were employed in 2015. With respect to maternal employment rates, a greater share of mothers with children under age 14 is employed in Finland (77%) than Italy (57%), yet, among highly educated women, they are fairly similar (around 84.5% vs. 81.9%, respectively) in both countries (OECD, 2025, fig. LMF1.2.C and LMF1.2.E). Nevertheless, female part-time employment was more prevalent in Italy (34%) than in Finland (14.5%), including among graduates in 2015, despite the similarly low overall incidence of part-time work in the total population (Eurostat, 2022).

Given the context-specific differences outlined above, due to a weaker welfare state in Italy, compared to Finland, lower levels of gender equality, and more traditional gender attitudes, we expect that the overall level of gender gaps will be higher in Italy than in Finland (H3). While Finland's large public sector may initially offer advantages for women in the care professions, it may also place them at a disadvantage in terms of pay and career progression, as suggested by the 'welfare state paradox' literature (Mandel & Semyonov, 2006). Therefore, we expect larger differences between the gender gaps of the care and non-care fields in Finland compared to Italy (H4).

Data and sample selection

This article relies on two high-quality national administrative datasets: the AlmaLaurea dataset as a combination of administrative and survey data in Italy, and full-population data drawn from administrative registers in Finland. Both data sources enable detailed distinc-

tion between different degrees, focus on the 2010 graduate cohort (of graduates aged 30 or below) and their labour market outcomes in 2015, and contain information on labour market outcomes such as employment as well as authority, access to high level professional positions and wages. The samples are highly comparable overall, but a few slight differences must be acknowledged.

Both data sets represent graduates from the perspective of each country's typical exit qualification, with which graduates enter the labour market. This means that the Italian data consists of graduates with university master's degrees (3+2) or long degrees (5–6 years). The sample excludes students who are not born in Italy, and consists of 56,820 individuals (of which 37,252 were employed in 2015). For the Italian AlmaLaurea survey, all students before their graduation were asked to respond to a general questionnaire consisting of information on their academic careers. The information obtained is kept as national registry. One, three and five years after their graduation, the respondents are contacted again to report on their labour market position. In 2015, the year of the current analyses, the response rate was 72 per cent. Graduates from all available fields of study are included, except for the fields of defense and security. Table 1 shows the descriptive statistics of graduates from both countries.

The Finnish data set comprises both graduates with bachelor-level qualifications from polytechnics (*ammattikorkeakoulututkinto*) as well as master-level graduates from traditional universities (*ylempi korkeakoulututkinto*). Although university studies in Finland progress from a bachelor's to a master's degree, university graduates' typical employment positions require a master's degree. An exception to this rule are bachelor degrees in pharmacy and early childhood education, which have been added to the Finnish data set as the only bachelor-level exit qualifications alongside master's degrees within the Finnish university structure. The data set includes only individuals born in Finland. In total, the Finnish data consists of 21,024 individuals (of whom 18,495 graduates were employed in 2015).

Analytical strategy and measures

Dependent variables

Four different dependent variables are created to examine our hypotheses. These measures are highly harmonized, but also show some differences across country datasets. The main differences in definitions and steps of the harmonization process are detailed in the online appendix (Appendix A.2).

Our first dependent variable records whether graduates are employed five years after receiving their degree. The variable is coded as a binary variable (0–1). Five years after graduating, being employed was clearly the most common outcome for graduates of both genders in both countries, as shown in Table 1 (84.5% among Italian and 88% among Finnish graduates).

Next, we restrict our sample to graduates in employment and examine, as our second dependent variable, their access to the higher service class, using the Erikson-Goldthorpe-Portocarero (EGP) class scheme based on employment relations (Ganzeboom & Treiman, 2003). In a nutshell, this reflects access to professional (e.g., university professors, medical doctors) and high-level managerial positions (e.g., chief executive officers, hospital

Table 1 Descriptive statistics for categorical and continuous variables in the analytical samples, Italy and Finland

A. Categorical variables: frequencies (column %)

Variable	Italy			Finland		
	Men	Women	Total	Men	Women	Total
Care-field	3.1	17.3	11.6	6.0	36.4	24.2
Employed in 2015	89	81.4	84.5	91.3	85.7	88
Higher service class (EGP I) in 2015	50.5	39.3	44	40.6	15.8	26.1
Employs/supervises in 2015	32.5	21.1	25.9	10	4.8	6.9
Marital status in 2015						
single	68.1	54.3	59.9	61	57.7	59
married	31.6	45.1	39.7	39	42.3	41
divorced (Italy only)	0.3	0.6	0.4			
Number of own children in 2015						
no children	91.8	83.9	87.1	60.9	55.5	57.7
ITA: up to two / FI: one child	7.8	15.6	12.5	19	22.1	20.9
ITA: more than two / FI: two or more	0.4	0.5	0.5	20.1	22.3	21.4
Italy: Region of residence in 2015						
North	41.6	38.9	40			
Centro	20	19.4	19.7			
South	37.8	41.2	39.8			
Abroad	0.6	0.5	0.5			
Finland: Region of residence in 2015				38.9	37.1	37.8
Helsinki/Uusimaa				16.3	17.4	16.9
South				25.4	25.2	25.3
West/Ahvenanmaa				19.4	20.4	20
North/East						
Finland: Type of higher education						
Polytechnic				59.4	63.7	62
University				40.6	36.3	38

B. Continuous variables: means (standard deviations)

Variable	Italy			Finland		
	Men	Women	Total	Men	Women	Total
Net monthly earnings (if employed at end of 2015)	1538.5 (602.97)	1206.8 (499.1)	1346.7 (569.4)	3111.3 (1793.8)	2569.2 (1385.1)	2795.3 (1591.1)
GPA (Italy: range 1-100, Finland: 4-10)	82.9 (14.5)	86.2 (14.2)	84.9 (14.4)	8.2 (0.6)	8.6 (0.6)	8.4 (0.6)
Age in 2015	25.9 (2)	25.8 (2.1)	25.8 (2.05)	31.2 (1.6)	30.2 (1.9)	30.6 (1.9)
Number of observations	21,843	34,977	56,820	8,446	12,578	21,024
Number of observations (for those employed in 2015)	15,224	22,028	37,252	7,715	10,780	18,495

administrators, senior managers). Accordingly, we operationalize class position using a binary variable that distinguishes between the higher service class³ and the remaining class positions in the original ten-category classification. Belonging to the higher service class reflects a superior position of employees in the labour market with regard to their average job advancement prospects, job security, and autonomy (Smullenbroek et al., 2024). The scheme is particularly suitable for comparative research as it is standardized across countries. In our data (Table 1), a gender gap in favour of men is discernible in both countries, but particularly so in Finland: 50.5% of male vs. 39.3% of female graduates in Italy belonged to the higher service class at the early career stage, while the same was true for 40.6% of men but only 15.8% of women among Finnish graduates. The discrepancy in the Finnish case partly relates to the dual structure of the higher education system, which leads to differential social stratification outcomes for graduates of the two sectors (Prix, 2009).

Our third dependent variable captures job authority, defined as whether a position includes responsibility for supervising the work of other employees, coded as a dichotomous distinction (yes/no) following other studies (Dämmrich & Blossfeld, 2017; Yaish & Stier, 2009). This measure reflects hierarchical control – i.e., responsibility over subordinates – rather than differences in employment relations or human capital. Although the EGP class-schema incorporates authority, especially in differentiating between managerial and non-managerial classes, this is not a defining feature of higher service-class occupations (e.g., many professional positions may not involve supervising subordinates). Having job authority five years after graduation is more common in Italy than in Finland, although a clear gender gap favouring men is evident in both countries (Table 1).

Finally, we examine employed graduates' net earnings five years after they received their degree as a continuous variable (based on the mid-point of each earnings category in Italy and on earnings minus tax in Finland). Average pay levels in our graduate data are on average higher in Finland than in Italy (Table 1). The gender differences in average pay amount to approximately 330 euros (1206 versus 1568 euro) in Italy and 540 euros in Finland (3111 versus 2569 euros), which corresponds to a gender pay gap of 22% and 18%, respectively (Table 1). For our wage regressions, we log-transformed the earnings variable in both countries, which facilitates interpreting coefficients in terms of percentage changes in net earnings.

Key independent variables: care and non-care fields

We adopt a definition of care fields that represents an intersection of two characteristics: a strong component of care within the degree, as preparation for future care professions, and a strong stereotypical association with women (Galos & Kulic, 2023). Some examples are psychology, social work, and nursing.

In both countries, our classification of care fields includes psychology, social work, cognitive sciences, pedagogy, adult education, nursing and midwifery sciences, rehabilitation care, health care science, preventive health care, primary education and planning and management of educational services. Within this classification, medicine is considered a field

³ The other levels are: II Lower Managerial and Professional Workers, IIIa Routine Clerical Work, IIIb Routine Service and Sales Work, IVa Small Self-Employed with Employees, IVb Small Self-Employed without Employees, IVc Self-Employed Farmers, V Manual Supervisors, VI Skilled Manual Workers, VIIa Semi- and Unskilled Manual Workers, VIIb Agricultural Labour (Ganzeboom and Treiman 2003).

with a strong care component, but it is not necessarily associated with female stereotypes, unlike nursing. Medicine, as argued by Barone (2011), preserves a “symbolic affinity with care jobs,” without being stereotypically associated with women. The classification does not include secondary education either, as there is no specific degree that leads directly to teaching at the secondary level. In addition, several subjects provide access to secondary teaching (including many technical degrees), but they are not necessarily classified as care-focused, considering their content. While harmonizing this classification across countries was generally successful, social workers with university degrees could not be distinguished from social science university graduates in the Finnish data. As a consequence, the care-field in Finland includes only the (larger group of) social work graduates from the polytechnics, but not the universities. A complete list of care-related courses is provided in the online appendix (Appendix A.1). Based on this distinction, only 3.1% of all Italian men interviewed in our data gained a degree in a field of study that is oriented towards care, in contrast to 17.3% of women. This contrast is even starker in the Finnish case, where 6% of men and 36.4% of women graduated with care-related higher education degrees.

Control variables

All models incorporate the following control variables, measured in 2015: age, marital status (single or married), number of children, and four broad national areas of residence. Additionally, we control for school achievement to account for pre-university academic achievement and abilities. In Italy, the high school graduation score is used, whereas in Finland, only the grade point average from the final year of lower secondary education was available, which was transformed into percentile ranks when included in the models (Table 1).

Both Italy and Finland are characterized by predominantly full-time employment among graduates, yet with some gender differences, as reported in the previous section. Although information on working hours is not included in the main manuscript, as a robustness check, the models for Italy and Finland were re-estimated including working hours and are reported in the section ‘Additional analyses’ and in the online appendix (Table A3 and A5, Figures A3–A6). Due to the dual nature of the Finnish higher education system with known differential labour market outcomes, the Finnish models control for the type of higher education degree obtained (university or polytechnic). While our main analyses focus on the Finnish higher education sector as a whole, controlling for (but not differentiating) the dual structure, we provide and discuss separate models for graduates of the Finnish polytechnics and those of universities in the online appendix (Appendix B).

Methods

We use logit models when modelling our binary dependent variables of employment status, job authority, and access to the higher service class. For graduates’ net monthly earnings, we use ordinary least squares regression to model log-transformed earnings.

The models are specified as follows:

$$\log(P(y_i = 1)/1 - P(y_i = 1)) = \beta_0 + \beta_1 G + \beta_2 F + \beta_3 (G \times F) + \beta_4 X \quad (1)$$

$$z = \beta_0 + \beta_1 G + \beta_2 F + \beta_3 (GxF) + \beta_4 X + \epsilon \quad (2)$$

where y represents each of the three binary labor market outcomes, z is log-transformed earnings, G is gender, F is field of studies, X refers to a set of control variables and ϵ is unobserved error term.

In all analyses, our main focus is on comparing gender gaps between care fields and non-care fields. We start our discussion of results by examining our main effects models, before introducing an interaction between gender and the character of the field of study to each model. We present and interpret our results as average marginal effects of gender (e.g., gender gap as a difference between men and women), comparing these gender gaps between care and non-care fields of study in each country.

Results

Care fields and gender in Italy and Finland

Starting with our main effects models, we first examine how average gender gaps as well as differences between fields of study play out at the early career stage among graduates in Italy and Finland. The models, including only the main coefficients for gender and field of study (care-oriented vs. non-care-oriented), along with control variables, are presented in Table 2. The results indicate that men have a clear advantage in labour market outcomes at the early career stage, with statistically significant gender gaps arising in both countries. In Italy, men are on average 8% points more likely than women to be employed, a gender gap of similar size to that observed in Finland (7.4% points). While male graduates in Italy have an 11-percentage points advantage over their female peers in accessing the higher service class, this gender gap is even larger in Finland (amounting to an 18.5% points gap in favour of men). When it comes to job authority and earnings, however, average gender gaps are slightly larger in Italy than in Finland. Men who graduated in Italy are 10% points more likely to hold supervisory positions five years after completing their degree, whereas Finnish men's advantage in this regard is only 3% points. Whereas male graduates in Italy earn monthly wages that are almost 25%⁴ higher than women's, the gender pay gap among Finnish graduates is at 21%, only slightly lower than that observed in Italy (Table 2, based on regression coefficients 0.22 and 0.19).

Regarding field-specific differences in labour market outcomes, care-related fields are clearly associated with differential labour market outcomes, which in their direction play out remarkably similarly in both Italy and Finland (Table 2). Net of gender and other sociodemographic characteristics, graduates from care-oriented fields fare better than others in terms of securing employment five years after graduating. In Italy, they are 3% points more likely to be employed ($p < 0.01$) compared to their peers from non-care fields, while the gap is 5% points in their favour in Finland. Among employed graduates, however, graduates in care fields face a disadvantage in accessing the higher service class (by 6% points in Italy, but an even starker 23% points in Finland), and are less likely to have supervisory roles (by on average 9% points in Italy and 6% points in Finland). Care-fields also come with a wage

⁴ Regression coefficients (b) from OLS models of log-transformed earnings are converted to percentage changes by first exponentiating the regression coefficient: $(\exp(b)-1)*100$.

penalty, which is, however, larger in Italy than in Finland: while Italian graduates with care specialization earn, on average, 12% less than their peers from other fields, the average field-specific penalty in Finland is only 3% (based on regression coefficients 0.11 and 0.029, Table 2). Note however that in the Finnish case, the dual structure of higher education is a very substantial factor in stratifying graduates' early career outcomes, with graduates from the polytechnics (where care-related programmes play a significant role) being about 20% point less likely to access the higher service class and facing a 18% wage penalty compared to university graduates (Table 2, right panel).

Is there a care premium for women and a penalty for men in Italy and Finland?

To test our hypotheses that male premiums in employment and access to the higher service class would be smaller in care-oriented fields, whereas male premiums in authority and pay would be larger, we next examine the interactions between gender and care fields, net of controls. For this reason, we included in our models an interaction between gender and the care-orientation of graduates' fields of study. The results of our interaction models are

Table 2 Main effects model for different graduate outcomes. Average marginal effects (standard errors) based on binary logit models (employment, higher service class position (EGP I), job authority), and ordinary least squares coefficients for the earnings model

	Italy				Finland			
	Employed	Higher service class	Job authority	Earnings	Em- ployed	Higher service class	Job authority	Earnings
Men (ref. Women)	0.08***	0.11***	0.10***	0.22***	0.074***	0.185***	0.029***	0.190***
	(0.00)	(0.00)	(0.03)	(0.00)	(0.005)	(0.007)	(0.004)	(0.006)
Care field (ref. Non-care)	0.03***	-0.06***	-0.09***	-0.11***	0.051***	-0.229***	-0.060***	-0.029***
	(0.00)	(0.01)	(0.00)	(0.01)	(0.005)	(0.006)	(0.003)	(0.007)
Uni- versity degree (ref. poly-technic)					0.033***	0.202***	-0.037***	0.167***
					(0.005)	(0.008)	(0.005)	(0.007)
Controls included	yes	yes	yes	yes	yes	yes	yes	yes
Observations	56,820	37,252	37,252	37,252	21,024	18,495	18,495	18,495
Pseudo- Adj. R ²	0.054	0.016	0.019	0.107	0.029	0.192	0.048	0.142

Note. All models include control variables for region of residence, marital status, grade point average, number of children (please refer to Online appendix Table A. 1 for full models). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

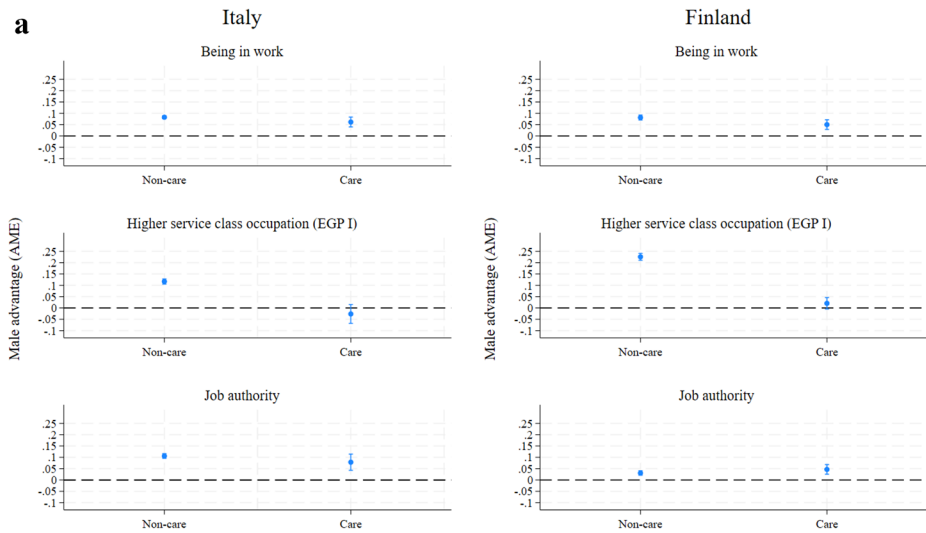


Fig. 2a Average marginal effects of gender in relation to care-non-care divide in Italy and Finland (being in work, access to EGP and access to job authority)

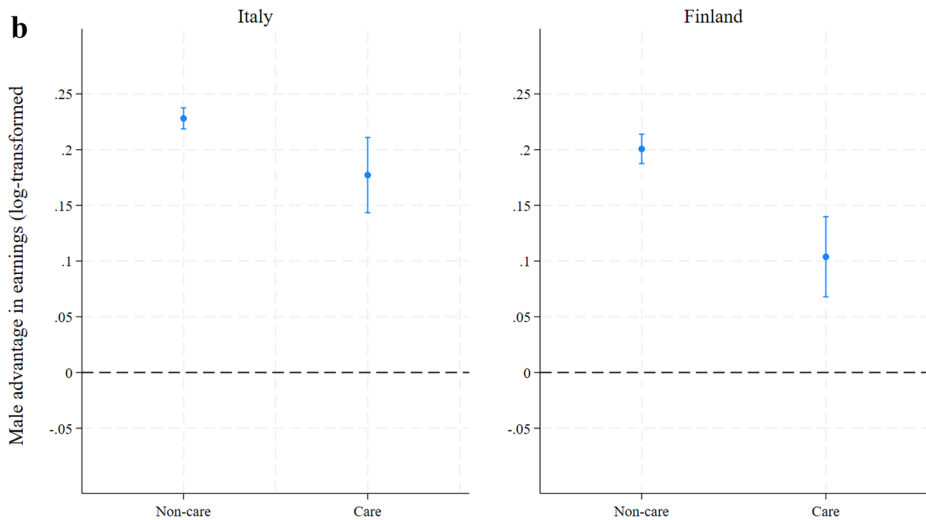


Fig. 2b Gender gaps in (log-transformed) earnings across the care-non-care divide in Italy and Finland (logged earnings), based on the ordinary least squares interaction models

shown in Fig. 2a and b, while the interaction models are presented in Table A.2 of the online appendix.

Figure 2a shows average marginal effects of gender (men versus women) in relation to the care-non-care divide in Italy and Finland for employment status, access to the higher service class and job authority. Figure 2b refers to earnings. In both countries, the gender gap in access to the higher service class as well as earnings is statistically significantly lower

in care rather than non-care fields (Table A.2, online appendix). Employment chances five years after graduation differ less markedly between men and women in care rather than non-care fields, but only in Finland is this field-specific variation in gender gaps statistically significant. Job authority gender gaps, on the other hand, cannot be statistically significantly distinguished between care and non-care fields in either country. It is also notable that the estimated size of the gender gap, or more specifically, of male advantage, differs across outcomes, but less so across countries.

More specifically, in both Italy and Finland, there are strikingly similar gender gaps in employment chances in both care and non-care (a male premium of 8% points for non-care fields in comparison to 5–6% point difference in care fields), although these differences between fields can only be statistically significantly discerned in Finland. To put this in context, men and women in both countries display very high predicted probability of being in employment (around 90%), and the care-non-care divide is very small (see Appendix Figure A.1a).

Similarly, graduates' access to the higher service class in Italy is more strongly gendered in non-care fields, where the gender gap is around 12% points in favour of men. This is in sharp contrast to the 2% point premium that we observe for women in care fields (this female advantage is not statistically significant). In other words, the relative difference in the gender gap between care and non-care fields with regard to higher service class positions amounts to almost 14% points. In Finland, no statistically significant gender differences with regard to attaining a higher service class position were observed among graduates in care-related fields, whereas the male premium in non-care fields amounted to 20% points. Thus, gender gaps in higher service class access appear to vary more substantially between care and non-care fields in Finland rather than Italy (Fig. 2a and Appendix Table A.2). In both countries, access to the service class is limited, but Italy starts from a higher baseline in both care and non-care fields, compared to Finland (Appendix Figure A.1a).

Concerning job authority, we do not find statistically significant variation in the observed male graduates' advantage between care and non-care fields in either country. Within our data, gender gaps vary in a similar direction as for other outcomes, with slightly lower gaps observed in care fields, and more pronounced field-specific differences in these gaps in Italy (Fig. 2a and Appendix Table A.2). Note that overall, access to authority positions is higher in Italy than in Finland (Appendix Figure A.1a).

Finally, the deepest gender gap, independently of the type of field, concerns net monthly wages (Fig. 2b and Table A.2), and is tilted in favour of men. In Italy, the gap is somewhat larger for non-care-oriented fields (28%, derived from $b=0.25$) than care fields (18.5% based on a coefficient of 0.17). In Finland, on the other hand, we observe a clearer difference between field-specific gender gaps, with a male premium of 22% (based on regression coefficient $b=0.2$) in non-care fields, contrasting with a substantially reduced male advantage of 10.5% (regression coefficient $b=0.1$) in care-oriented fields. Considering the big picture, both Finnish men and women have higher baseline salaries, compared to Italians, yet the gender gap in care-non-care fields is fairly similar (Appendix Figure A.1b).

To sum up, women in care fields in Italy face, on average, comparatively lower penalties than female graduates in other fields, and this is particularly pronounced in the access to higher service occupations and pay gap. Except for authority, where gender differences were similarly low in both fields, the overall pattern of these results was also confirmed for Finland.

As such, these results for both Italy and Finland conform broadly to our comparative advantage hypotheses and contradict the glass escalator perspective. This is the case particularly with regard to graduates' access to employment and a higher service class position, for which our empirical results align with the expected reduced gender gap in care-related fields that we derived from the status theory and comparative advantage literature (H1). With regard to job authority, however, the field-specific differences in gender gaps were small and statistically insignificant in Finland, and larger in non-care than in care fields in Italy, contrary to our expectations derived from the glass escalator literature (contradicting H2). Moreover, our results indicate a smaller gender pay gap in care-related fields than in non-care fields, also contrary to H2. Regarding the cross-country differences, the gender gaps we observed were not systematically larger in Italy: gender gaps in employment across fields were overall fairly similar in both countries. Pay gaps were slightly lower in Finland, whereas Italy performed worse than Finland in terms of gender gaps in supervisory positions. By contrast, access to the higher service class proved to be more strongly gendered in Finland than in Italy. As such, our expectations regarding clearly smaller gender gaps in Finland than in Italy across all outcomes were only partially supported (against H3). Except for job authority, differences between care and non-care gender gaps were indeed larger in Finland, thus for the most part supporting our expectation (H4).

Additional analyses

Care fields are initially compared with a heterogeneous group of non-care fields that differ in both gender composition and area of study. While gender composition is not the primary focus of this article, and is not considered, we do analyse further the heterogeneity of non-care related fields, and their implications for gender gaps (Appendix Table A.4 and Appendix Figures A.2-A.6). We further classify these fields into three categories: medicine and dentistry (which include some care-related components), technical subjects with a strong technical orientation (all forms of architecture, engineering, and IT), and other fields. The latter two categories follow the classification proposed by Barone (2011). While the broad picture of our results persists, the analyses in both countries show a heterogeneous pattern within non care –related fields with large male premiums in technical fields regarding employment, higher class occupations and income, but not authority. The smallest male premiums within non-care-related fields are found in medicine and dentistry across all four outcomes in Italy, and are often similar to those observed in care fields. In Finland, graduates from care fields face lower gender gaps in employment compared to other fields, as well as lower gender gaps in terms of higher service class access and earnings compared to all three other fields, while no clear differences between the four fields emerged with regard to gender gaps in job authority. Due to the smaller size of disaggregated non-care fields, not all of these contrasts reached statistical significance (see Appendix Table A.4). Further heterogeneity between the Finnish university and polytechnic sector with regard to these outcomes is presented and discussed in Appendix B.

Note that our original analyses do not control for weekly working hours. As a second robustness check, the analysis is extended to incorporate graduates' weekly working hours (Appendix Table A.5 and Appendix Figures A.2-A.6). The results show a reduction in all gender gaps, but no substantive deviation from the main results regarding both the direction of difference between care-related and non-care related fields, and country differences.

Discussion and conclusion

Despite high levels of education, men and women continue to differ, on average, in their labour market outcomes at the early career stage. This study contributes to the literature by examining whether feminized, and often devalued, care fields would reproduce or reduce women's disadvantage vis-à-vis men in labour market outcomes five years after graduation. In doing so, we extend existing research on field-specific heterogeneity of gender disparities by moving beyond women's numerical dominance within a field and instead focusing on fields whose substantive orientation closely aligns with stereotypically feminized characteristics. Two groups of questions guided our inquiry: first, are gender gaps reproduced to the same extent among graduates from these fields, where gender stereotypes may give women a comparative advantage? Do men experience advantages in certain outcomes as a result of the "glass escalator"? Second, does a country like Finland, with comparatively high levels of gender equality, equalize outcomes for female and male graduates across different fields more effectively than Italy, where, despite substantial progress, traditional gender attitudes may still retain a stronger societal foothold?

Overall, care graduates experience greater gender equality than other graduates in both countries, with eliminated disparities in access to higher service-class positions and narrower gender gaps in pay. In both countries, graduates faced similar gender gaps in employment chances five years after graduation, but their variation across fields was statistically significant only in Finland. With regard to job authority, our models found fairly small gender gaps that were statistically indistinguishable between care and other fields in either country.

From a theoretical perspective, our findings regarding graduates' employment and access to higher service-class positions broadly support expectations derived from status characteristics theory. The smaller gender gaps in care-related fields suggest that women face less disadvantage in contexts where skills culturally associated with femininity are more highly valued. The effects of gender-status beliefs are not uniform across fields, highlighting that gender inequality across fields cannot be explained by gender composition alone but depends, in part, on how a field's valued skill profile aligns with gendered expectations.

By contrast, our expectation of a larger gender gap in men's favour in terms of authority and pay in care-intensive fields compared to non-care ones is not supported. The gender gap in job authority is similar to that of other outcomes in Italy and is smaller overall in Finland. This pattern is consistent with our earlier descriptive results from the European Values Study 2017–2018 (Fig. 1), showing that a large share of respondents in both countries reject the view that men are better suited for leadership roles. Taken together, our findings challenge the idea that men may ride a "glass escalator", and perhaps instead suggest a more limited interpretation of this theory, particularly in settings stereotypically associated with feminized characteristics related to care. Rather than a universal prediction, the glass escalator argument is better understood as a conditional mechanism that operates only in some settings. This interpretation is consistent with Williams' (2013) reassessment of the thesis and with broader literature, which provides mixed support for the theory. For example, quantitative studies have not consistently found that men enjoy systematic advantages in female-dominated occupations (e.g., Snyder & Green, 2008; Budig 2002), while qualitative research shows that men may also face stigmatization or suspicion that can limit such advantages (Lupton, 2000; Simpson, 2004). Further, if employers increasingly value skills

associated with women, this may reduce the systematic privileging of perceived masculine competence and leadership (Li, 2024). More broadly, our results suggest that gender-inequality processes may operate differently across stereotypically feminized contexts. This matters, because much of the glass escalator literature is broadly based on single occupations or a set of female-dominated professions, whereas our analysis covers an aggregate view of a broader range of care-related fields independently of gender composition. Further research should therefore examine the glass escalator across a broader range of fields and national contexts.

At the same time, none of our outcomes indicate a clear female advantage over men. With the partial exception of access to higher service-class positions, men retain an advantage, albeit a small one, even in care-oriented fields. This differs from audit studies on hiring discrimination, which have found female advantages in terms of callback (Galos & Coppock, 2023; Birkelund et al., 2022), likely because such studies capture initial employer responses rather than realized labour-market outcomes.

Thus, while women's overrepresentation in care fields may bring some benefits, such as smaller gender penalties in pay and access to higher status jobs (similar to what Reimer and Steinmetz (2009) observe for typically female fields of study), and highly regulated character of care-professions might limit the possibility of high gender gap (DiPrete & Chae, 2023), disadvantages remain even in these fields. Although graduates with care specializations benefit in terms of employment chances, likely reflecting the well-documented labour shortages in the care fields, their financial returns continue to lag behind those in other fields, net of gender, similar to the patterns observed for female dominated fields (Häggglund, 2024). Since the care field remains highly feminized, these lower average returns continue to disproportionately disadvantage women.

Furthermore, our additional analyses of non-care fields provide a glimpse into the heterogeneity of non-care fields, but do not substantially alter our initial findings. The two fields that are closest to care related fields (medicine and dentistry) show indeed the most similarity to them, whereas the largest male premiums are most often found in technical fields of study, which are stereotypically associated with men. The inclusion of hours of work likewise does not change the direction of the findings despite reducing the initial gaps.

Remarkably, our study shows no systematically larger gender gaps in Italy than Finland, despite our initial expectation that Finland's higher overall gender equality would lead to a reduction of gender disparities among graduates in the early career stage. One possible explanation is that care-related specializations related to nursing, teaching, and social work, are likely to have a comparatively stronger link with public sector employment in both countries than other fields. The presumably greater pressure to adhere to bureaucratic rules in public sector organizations may help limit gender inequality in hiring and promotion, thereby reducing women's disadvantage in the care fields in both countries. Another explanation concerns school-to-work linkages. In Italy, educational qualifications tend to be fairly loosely connected to specific labour market positions, whereas in Finland they are more tightly linked to a narrower variety of occupations (DiPrete & Chao, 2023). This might benefit women in care-related fields in Finland, where such degrees have strong labour market links (Häggglund, 2024). However, as DiPrete and Chae (2023) have shown, the flip-side of contexts with overall stronger school-to-work linkages consists of more pronounced relative disadvantages for graduates with weakly linked qualifications. For graduates in non-care fields with weaker labour market links, the Finnish context may therefore increase

gender gaps in outcomes more strongly than in Italy, particularly if men and women also differ in employment preferences and job search strategies (Cortés et al., 2023).

Taken together, our study's main emphasis and strength lie in documenting field-specific gender disparities in graduates' early career outcomes beyond the pay gap, as well as contributing to a cross-country comparison. There are several potential practical implications of our findings. While care-related fields are associated with smaller gender gaps, they do not eliminate gender inequality. This suggests that policymakers should focus on reducing gender segregation in fields of study and improving pay and career prospects in care-related fields (there are already ongoing EU initiatives on this, i.e., European Commission, 2026). From a demand-side perspective, employers should ensure transparent recruitment, payment, and promotion procedures so that small but persistent gender advantages do not accumulate over time.

The breadth of our analysis comes at a cost, as our study remained limited in its ability to explain the observed gender gaps (or their absence). Furthermore, it is important to keep in mind that the care fields are compared to non-care fields while not considering their gender composition. Somewhat different and opposing results were found when care and non-care fields are compared only within female-dominant fields (Galos & Kulic, 2023). Additionally, cross-country analyses inevitably involve challenges of harmonization. In our case, we present an "average" picture of Finnish graduates' outcomes, aggregating over (but controlling in our models for) different branches of higher education to ensure comparability with Italy, where one type of higher education dominates. Future research should replicate these analyses across different European countries with higher (e.g., Sweden or Denmark, which rank highest) or lower (e.g., Bulgaria or Romania, which rank among the lowest) levels of gender equality to probe the generalizability of these findings.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s10734-026-01717-y>.

Acknowledgements Irene Prix' contribution was partially supported by the INVEST Research Flagship Centre and funded by the Research Council of Finland (decision number: 345546). Nevena Kulić's contribution was partially supported by an individual fellowship from the Cluster "Politics of Inequality, University of Konstanz.

Authors' contribution N.K. conceptualized the study, designed the methodology, conducted the analysis for Italy, and led the overall writing of the manuscript in all its parts. I.P. was responsible for the data analysis for Finland and the macro-level analysis of EVS, authored the empirical results for Finland and the conclusions, and contributed to drafting the country context. D.R.G. contributed to the methodological design, data preparation, and the drafting of the results and country context. All authors participated in revising and editing the manuscript in all its parts and approved the final version.

Funding Open access funding provided by Università degli Studi di Pavia within the CRUI-CARE Agreement.

Declarations

Competing interests The authors have no conflict of interest to declare.

Ethics approval and consent to participate This study uses observational and administrative data that were collected without any intervention or interaction with individuals. All data were analyzed in aggregated or de-identified form, and no ethical approval was required according to applicable guidelines. The Italian

AlmaLaurea data and the Finnish register datasets used in this study are accessible solely upon obtaining a personal user licence and agreeing to the respective terms of use.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Barone, C. (2011). Some things never change: Gender segregation in higher education across eight nations and three decades. *Sociology of Education*, 84(2), 157–176. <https://doi.org/10.1177/0038040711402099>
- Bettio, F., & Verashchagina, A. (2009). *Gender segregation in the labour market: Root causes, implications and policy responses in the EU*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2767/1063>
- Birkelund, G. E., Lancee, B., Larsen, E. N., Polavieja, J. G., Radl, J., & Yemane, R. (2022). Gender discrimination in hiring: Evidence from a cross-national harmonized field experiment. *European Sociological Review*, 38(3), 337–354. <https://doi.org/10.1093/esr/jcab043>
- Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3), 789–865. <https://doi.org/10.1257/jel.20160995>
- Bobbitt-Zeher, D. (2007). The gender income gap and the role of education. *Sociology of Education*, 80(1), 1–22. <https://doi.org/10.1177/003804070708000101>
- Brandford, A., & Brandford-Stevenson, A. (2021). Going up! Exploring the phenomenon of the glass escalator in nursing. *Nursing Administration Quarterly*, 45(4), 295. <https://doi.org/10.1097/NAQ.0000000000000489>
- Breda, T., Jouini, E., Napp, C., & Thebault, G. (2020). Gender stereotypes can explain the gender-equality paradox. *Proceedings of the National Academy of Sciences*, 117(49), 31063–31069. <https://doi.org/10.1073/pnas.2008704117>
- Correll, S. J. (2004). Constraints into preferences: Gender, status, and emerging career aspirations. *American Sociological Review*, 69(1), 93–113. <https://doi.org/10.1177/000312240406900106>
- Cortés, P., Pan, J., Pilossoph, L., Reuben, E., & Zafar, B. (2023). Gender differences in job search and the earnings gap: Evidence from the field and lab. *The Quarterly Journal of Economics*, 138(4), 2069–2126. <https://doi.org/10.1093/qje/qjad017>
- Cousins, T. A. (2020). Collegiality vs role models: gendered discourses and the "glass escalator" in English primary schools. *Early Years*, 40(1), 37–51. <https://doi.org/10.1080/09575146.2019.1619671>
- Dämmrich, J., & Blossfeld, H. P. (2017). Women's disadvantage in holding supervisory positions: Variations among European countries and the role of horizontal gender segregation. *Acta Sociologica*, 60(3), 262–282. <https://doi.org/10.1177/0001699316675022>
- DiPrete, T. A., & Chae, J. (2023). Coordinated markets, school-to-work linkages, and labor market outcomes in Europe. *Research in Social Stratification and Mobility*, 87(October), 100840. <https://doi.org/10.1016/j.rssm.2023.100840>
- Doris, A., O'Neill, D., & Sweetman, O. (2025). Why do the earnings of male and female graduates diverge? The roles of field of study, motherhood, and job dynamics. *Oxford Economic Papers*, 77(4), 970–989. <https://doi.org/10.1093/oepp/gpaf009>
- Eagly, A. H., and Koenig, A. M. (2007). Gender prejudice: On the risks of occupying incongruent roles. In E. Borgida & S. Fiske (Eds.), *Beyond Common Sense: Psychological Science in the Courtroom* (pp. 63–81). Blackwell.
- Elbers, B. (2023). A method for studying differences in segregation across time and space. *Sociological Methods & Research*, 52(1), 5–42. <https://doi.org/10.1177/0049124121986204>
- England, P. (1992). *Comparable worth: Theories and evidence*. Aldine de Gruyter.
- England, P., Budig, M., & Folbre, N. (2002). Wages of virtue: The relative pay of care work. *Social Problems*, 49(4), 455–473. <https://doi.org/10.1525/sp.2002.49.4.455>

- European Institute for Gender Equality (2025). *Gender equality index*. <https://eige.europa.eu/gender-equality-index/2024>
- European Commission (2026). Gender Equality Strategy 2026–2030. Brussels: European Commission. Available at: https://commission.europa.eu/document/download/1f5fa936-9fba-4435-93f5-32fa220ba82_en?filename=JUST_template_comingsoon_standard.pdf
- Eurostat (2022). *Full-time and part-time employment by sex, age and educational attainment level*. https://doi.org/10.2908/LFSA_EPGAED
- Eurostat (2025b). *Graduates by education level, programme orientation, sex and field of education*. https://doi.org/10.2908/EDUC_UOE_GRAD02
- Eurostat (2025a). *Government Employment*. June 24. https://ec.europa.eu/eurostat/cache/digpub/european_economy/bloc-4d.html?lang=en
- Flöge, L., & Merrill, D. M. (1986). Tokenism reconsidered: Male nurses and female physicians in a hospital setting. *Social Forces*, 64(4), 925–947. <https://doi.org/10.2307/2578787>
- Galos, D. R., & Kulic, N. (2023). Variations of gender gaps in the labour market outcomes of graduates across fields of study: A (combined) test of two theories. *Sociology*, 57(4), 882–903. <https://doi.org/10.1177/00380385221122400>
- Galos, D. R., & Coppock, A. (2023). Gender composition predicts gender bias: A meta-reanalysis of hiring discrimination audit experiments. *Science Advances*, 9(18), eade7979.
- Ganzeboom, H. B., & Treiman, D. J. (2003). Three internationally standardised measures for comparative research on occupational status. In J. H. P. Hoffmeyer-Zlotnik & C. Wolf (Eds.), *Advances in cross-national comparison: A European working book for demographic and socio-economic variables* (pp. 159–193). Springer US. https://doi.org/10.1007/978-1-4419-9186-7_9
- Görxhani, K., Brandts, J., & Schram, A. (2023). Competition and gender inequality: A comprehensive analysis of effects and mechanisms. *American Journal of Sociology*, 129(3), 715–752. <https://doi.org/10.1086/727822>
- Häggglund, A. E. (2024). Same degrees, different outcomes? Fields of study choices and gender wage inequality in Finland and Germany. *Social Science Research*, 122, 103029. <https://doi.org/10.1016/j.ssresearch.2024.103029>
- Kangas, O., & Kvist, J. (2018). Nordic welfare states. In B. Greve (Ed.), *Routledge handbook of the welfare state* (pp. 124–136). Routledge.
- Konietzka, D., & Wen, S. (2024). Can women bridge the gender class gap by choosing a gender-atypical field of study? A study based on the German micro-census 1996–2016. *Journal of Education and Work*, 37(7–8), 550–567. <https://doi.org/10.1080/13639080.2025.2487421>
- Kulic, N., Griaznova, O., Clerici, E., Bellani, D., Mantovani, D., Vergolini, L., & Scervini, F. (2025). A comprehensive overview of a large-scale survey on inequality perceptions (IneqPer) in Italy. *Frontiers in sociology*, 10, 1620096. <https://doi.org/10.3389/fsoc.2025.1620096>
- Kyvik, S. (2004). Structural changes in higher education systems in Western Europe. *Higher Education in Europe*, 29(3), 393–409. <https://doi.org/10.1080/0379772042000331679>
- Li, M. (2024). Devaluation for whom? Feminization and wages in an economically polarized labor market, 2003–2019. *Social Forces*, 103(2), 495–519. <https://doi.org/10.1093/sf/soae107>
- Lupton, B. (2000). Maintaining masculinity: men who do ‘women’s work’. *British Journal of Management*, 11, 33–48. <https://doi.org/10.1111/1467-8551.11.s1.4>
- Mandel, H., & Semyonov, M. (2006). A welfare state paradox: State interventions and women’s employment opportunities in 22 countries. *American Journal of Sociology*, 111(6), 1910–1949. <https://doi.org/10.1086/499912>
- Morgan, L. A. (2008). Major matters: A comparison of the within-major gender pay gap across college majors for early-career graduates. *Industrial Relations: A Journal of Economy and Society*, 47(4), 625–650. <https://doi.org/10.1111/j.1468-232X.2008.00538.x>
- Mustosmäki, A., Oinas, T., & Anttila, T. (2017). Abating inequalities? Job quality at the intersection of class and gender in Finland 1977–2013. *Acta Sociologica*, 60(3), 228–245. <https://doi.org/10.1177/0001699316657580>
- Nousiainen, K. (2023). Paradoxes in Finnish gender equality law and policies. In Hellum, A., Ikdhall, I., Blaker Strand, V., & Svensson, E. M. (Eds.), *Nordic equality and anti-discrimination laws in the throes of change: Legal developments in Sweden, Finland, Norway, and Iceland* (pp. 70–129). Routledge.
- Organisation for Economic Co-operation and Development (2025). *OECD family database*. <https://www.oecd.org/en/data/datasets/oecd-family-database.html>
- Prix, I. (2009). Gender and recent graduates’ occupational stratification: the interactive role of the educational and employment sectors in four countries. *Comparative Education*, 45(4), 545–568. <https://doi.org/10.1080/03050060903391602>

- Reimer, D., & Steinmetz, S. (2009). Highly educated but in the wrong field? Educational specialisation and labour market risks of men and women in Spain and Germany. *European Societies*, 11(5), 723–746. <https://doi.org/10.1080/14616690802326400>
- Ridgeway, C. L. (2014). Why Status Matters for Inequality. *American Sociological Review*, 79(1), 1–16. <https://doi.org/10.1177/0003122413515997>
- Ridgeway, C. L., & Kricheli-Katz, T. (2013). Intersecting cultural beliefs in social relations: Gender, race, and class binds and freedoms. *Gender & Society*, 27(3), 294–318. <https://doi.org/10.1177/0891243213479445>
- Schwerter, J., & Ilg, L. (2023). Gender differences in the labour market entry of STEM graduates. *European Journal of Higher Education*, 13(3), 308–326. <https://doi.org/10.1080/21568235.2021.2010226>
- Seehuus, S., & Strømme, T. B. (2025). Gendered returns to education: The association between educational attainment, gender composition in field of study and income. *Sociology*, 59(3), 503–523. <https://doi.org/10.1177/00380385241303448>
- Shuman, K. A. (2006). Occupational sex segregation and the earnings of occupations: What causes the link among college-educated workers? *Social Science Research*, 35(3), 577–619. <https://doi.org/10.1016/j.ssresearch.2004.12.001>
- Simpson, R. (2004). Masculinity at work: The experiences of men in female dominated occupations. *Work, Employment and Society*, 18(2), 349–368. <https://doi.org/10.1177/09500172004042773>
- Smallenbroek, O., Hertel, F. R., & Barone, C. (2024). Measuring class hierarchies in postindustrial societies: A criterion and construct validation of EGP and ESEC across 31 countries. *Sociological Methods & Research*, 53(3), 1412–1452. <https://doi.org/10.1177/00491241221134522>
- Snyder, K. A., & Green, A. I. (2008). Revisiting the glass escalator: The case of gender segregation in a female dominated occupation. *Social Problems*, 55(2), 271–299. <https://doi.org/10.1525/sp.2008.55.2.271>
- Stier, H., & Yaish, M. (2014). Occupational segregation and gender inequality in job quality: a multi-level approach. *Work, Employment and Society*, 28(2), 225–246. <https://doi.org/10.1177/0950017013510758>
- Tobío, C. (2017). Uneven paths: women and welfare in Italy and Spain. *Journal of Gender Studies*, 26(2), 115–132. <https://doi.org/10.1080/09589236.2015.1090304>
- Vipunen Education Statistics Finland (2025). *Students and qualifications and degrees*. <https://vipunen.fi/en-gb/combined/Pages/Opiskelijat-ja-tutkinnot.aspx>
- Williams, C. L. (1992). The glass escalator: Hidden advantages for men in the “female” professions. *Social Problems*, 39(3), 253–267. <https://doi.org/10.1525/sp.1992.39.3.03x0034h>
- Williams, C. L. (2013). The glass escalator, revisited: Gender inequality in neoliberal times, SWS feminist lecturer. *Gender & Society*, 27(5), 609–629. <https://doi.org/10.1177/0891243213490232>
- Wingfield, A. H. (2009). Racializing the glass escalator: Reconsidering men's experiences with women's work. *Gender & Society*, 23(1), 5–26. <https://doi.org/10.1177/0891243208323054>
- Yaish, M., & Stier, H. (2009). Gender inequality in job authority: A cross-national comparison of 26 countries. *Work and Occupations*. *Work and Occupations*, 36(4), 343–366. <https://doi.org/10.1177/0730888409349751>
- Zajac, T., Magda, I., Bożykowski, M., Chłoń-Domińczak, A., & Jasiński, M. (2025). Gender pay gaps across STEM fields of study. *Studies in Higher Education* 50(1), 126–139. <https://doi.org/10.1080/03075079.2024.2330667>