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Gender gaps in higher education from the perspective of returns to education: A systematic literature review

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Abstract Persistent gender disparities in higher education remain a global challenge, contributing to unequal returns on educational attainment. Despite substantial progress in women's participation in higher education over the past two decades, their transition to the labour market continues to reveal persistent gender disparities. This study aims to examine gender-based inequities in educational returns between 2000 and 2025, specifically focusing on vertical and horizontal gender gaps in the labour market. A systematic review of 21 relevant papers was conducted following the PRISMA framework. Literature was sourced from multiple academic databases, including Web of Science, Scopus, and ScienceDirect, to investigate gender disparities in higher education and their implications for labour market inequality. Findings reveal that the vertical dimension highlights women's under-representation in senior positions within organisations, reflecting lower status. In contrast, the horizontal dimension underscores disparities in disciplines, resulting in lower returns on academic achievements, reduced employment rates, and diminished wages. Evidence from both dimensions demonstrates that inequality in educational returns is structural, indicating that existing educational interventions alone are insufficient to eliminate gender-based disparities in labour market outcomes. The study underscores the ongoing challenge of bridging the transition from education to employment, despite growing research on gender inequality in higher education. Addressing these inequalities requires integrated social and economic policies that target structural, cultural, and institutional barriers, ensuring that advancements in higher education translate into equitable labour market outcomes for women. By synthesising evidence across diverse contexts, this research provides both theoretical insights and practical recommendations for promoting equity in educational returns.

Keywords: educational outcomes, gender inequality, labour market, social policy

1. Introduction

As the notion of gender equality took hold, most countries created equal opportunities for men and women to attend school. This is reflected in the rapid increase in the proportion of women in American universities, which surpassed that of men in the early 1980s, and in the graduation rate of women, which gradually surpassed that of men (Goldin et al., 2006). This has been referred to as the 'reversal of the college gender gap', 'the reversal of gender inequality in tertiary education', 'the feminisation of education', and 'the feminisation of tertiary education', whereby enrolment, progression rates, educational attainment and the overall educational gap between male and female students are widening year by year (Goldin et al., 2006; Vincent-Lancrin, 2008; Morley, 2010). There has been a shift in the historical numerical dominance of males in universities, and in terms of access, gender equality appears to have been realised with such a shift in gender structure. However, such a phenomenon represents gender equality in access to higher education; access, process, and outcomes are all different aspects of higher education (Jacobs, 1996). From a life course perspective, enrolment, process and outcomes can be viewed as the complete educational trajectory of the transition from the student role to the labour market. Gender inequalities related to enrolment have been studied by many researchers, as factors such as gender roles, stereotypes, academic performance, and teacher and parent attitudes play an important role in determining gender decisions to access higher education (Afzal & Rashid, 2018; Carlana, 2019; Carlana & Corno, 2021; Terrier, 2020). In addition, scholars have extensively analyzed how the gendered dynamics of education reinforce systemic inequities, with research focusing on three key dimensions: the gender segregation between different academic fields and practices, gender frameworks have not been fully integrated into curriculum design and academic research, and the severity of sexual harassment and assault on campus (Heijstra et al., 2017; Husu, 2020; Paoletti et al., 2020).

Before delving into the impact of the gender gap in higher education on returns to education, it is necessary to start with a broader perspective: what is the gender gap in higher education? Current data indicate that women now surpass men in enrolment, completion rates, and overall educational attainment across most countries (Diprete & Buchman, 2013; Bobbitt-Zeher, 2007). However, significant disparities persist in academic fields. While women are over-represented in social sciences—

often perceived as "feminized" disciplines where gender inequality persists—they remain under-represented in Science, Technology, Engineering, and Mathematics (STEM) fields, which continue to be male dominated (Carli et al., 2016). Although women have achieved numerical parity in certain areas of higher education, this advantage has not translated into post-graduation benefits.

Scholars have recognized that unequal gender conditions can be described as both vertical and horizontal. Vertical because women are found at the lower levels of the occupational hierarchy, while men are found at the higher levels, this is often referred to as the 'vertical' dimension of inequality. Conversely, differences between levels of education, such as among bachelor's degree holders, are also an important source of stratification, often referred to as the 'horizontal' dimension of inequality (Gerber & Cheung, 2008). Field of study is one of the most important causes of inequality among bachelor's degree holders. A large and growing body of research suggests that students in different fields earn significantly different incomes when they enter the labour market and throughout their life course (Roksa & Levey, 2010; Rumberger & Thomas, 1993). In addition, gender also has an integral impact on the returns to education. In general, men are over-represented in high-paying fields such as engineering, while women are over-represented in low-paying fields such as liberal arts and humanities (England & Li, 2006; Mann & DiPrete, 2013; Riegle-Crumb et al., 2012). The disparity in male and female participation is posited as a significant contributor to social inequity (Saadat et al., 2022). This gender gap within higher education not only influences educational outcomes internally but also extends to disparities beyond the educational sphere. Therefore, there is a pressing necessity to comprehensively investigate the repercussions of this gender gap on post-collegiate educational achievements.

Given the enduring impact of gender differences in higher education on gender inequality in the returns to education, in this study, we explore the manifestation of gender inequality in one of the main dimensions of the returns to education-the labour market-in both the 'vertical' and 'horizontal' dimensions. latitudinal' and "horizontal" dimensions of gender inequality in one of the main dimensions of returns to education-the labour market. This study examines the manifestations of gender-related inequalities in post-graduation educational returns for women within a specified latitudinal range. While prior research has predominantly explored gender disparities in academia and other professional sectors independently, this paper integrates academia as a subset of the broader professional landscape in its analysis of gender-based educational disparities. By combing current research findings, this paper aims to provide theoretical support and empirical evidence for future policy development and academic research, as well as useful insights for promoting gender equality and social justice in higher education.

2. Materials and Methods

2.1. Research methodology

This study employed a systematic literature review approach, characterized by a methodical and structured examination of relevant literature. This method involves meticulous search techniques and strategies to identify and evaluate pertinent literature on based predetermined criteria or research enquiries. By doing so, it ensures a precise representation of the current research landscape and developmental trajectories pertaining to the research subject (Rudnicka & Owen, 2012). The systematic literature review method is esteemed for its meticulousness and transparency, encompassing well-defined research queries, exhaustive search methodologies, explicit literature selection criteria, robust evaluation techniques, thorough data analysis, and dependable outcomes. These attributes effectively mitigate the inherent subjectivity and biases associated with conventional research methodologies.

2.2. Literature search strategy

In order to effectively access the empirical research literature on gender structure in higher education, this study used the string ('higher education' OR 'tertiary education') AND ('gender inequality' OR 'feminisation' OR 'college gender gap' OR 'gender structure') in the titles, abstracts and keywords of the following three academic databases: Web of Science, Scopus, and ScienceDirect, with the data range set to "2000--2025" and the language set to 'English', and the results were 374 (Web of Science), 620 (Scopus), and 53 (ScienceDirect), respectively. The abstracts were subsequently reviewed to ensure their accuracy and scientific quality. Non-relevant papers in the search results underwent manual screening.

2.3. Literature screening criteria

To guarantee the precision and dependability of the literature analysis results in alignment with the research enquiries, this investigation established specific inclusion/exclusion criteria for the initial set of 1047 papers retrieved, detailed in Table 1 (Indriasari et al., 2020). Screening criteria 1-6, typical in systematic literature reviews, were employed to uphold the accuracy and credibility of the research sample. Criterion 7 was designed to narrow the focus of the literature review to studies pertaining to returns to education, excluding those not directly related to this topic.

2.4. Literature screening process

Figure 1 depicts the literature review process. The initial search yielded 1047 articles, leaving 807 publications after removing duplicates using Zotero software. In addition, 426 articles were excluded (279 not research articles, 139 articles

without full text, and 8 not in English). Subsequently, the 381 collected papers were re-screened after reading to ensure the accuracy and scientific quality of the literature. Papers that were not relevant to the topic in the search results needed to be manually screened. The same set of publications were further analysed and studied by reading and examining the full text, and those that met the eligibility criteria were selected. A total of 21 articles were eventually included in the review.

The following data were extracted from the selected publications: citations (author/year), country of origin, study objectives, methodology and scientific impact (Table 2). The distribution of studies around the world was as follows: 5 in the United States, 2 in China, 2 in Germany, 2 in Poland, 2 in Spain, 1 in Sweden, 1 in Brazil, 1 in Finland, 1 in Italy, 1 in Jordan, 1 in Russia, 1 in Turkey, 1 in the U.K.

The research objectives vary and focus on the following areas: exploring gender-related longitudinal latitudes in academia, such as hierarchical structures at the organisational level (Lörz & Mühleck, 2019; Lindberg et al., 2011; Hawatmeh et al., 2024; Wieczorek-Szymańska, 2020; Baccarini et al., 2019), exploring gender-related longitudinal latitude in other occupational fields (Wu et al., 2020; Rudenko et al., 2022), explore gender-related cross-sectional latitudes in academia, such as wage gaps in different fields (Peterson, 2016; Ünal & Binay, 2017); and gender-related cross-sectional latitudes in other occupational fields, such as employment gap (Galos & Kulic, 2023; Guo et al., 2010), pay gaps (Alon & Gelbgiser, 2011; Ochsenfeld, 2014; Hägglund, 2024; Zając et al., 2025) and gender gap (Iannelli et al., 2018; Morgan, 2008; Pastor et al., 2016; Quadlin et al., 2021; Quadlin et al., 2023; VanHeuvelen & Quadlin, 2021).

In terms of research methodology, the study included 16 quantitative studies, 3 qualitative studies, 2 mixed.

Table 1 Inclusion and exclusion criteria.

Inclusion and exclusion criteria	
Type of publication	Inclusion: Journal Articles
	Exclusion: Book chapters, conference proceedings, dissertations, blog posts, presentations
Language	Inclusion：English only
Dates of publications	Inclusion： Between 2000 and 2025
	Exclusion: Before 2000
Access	Inclusion：Full text available, online
	Exclusion：full text not available, print
Research methods	Inclusion：All methods: qualitative, quantitative, mixed, literature review
Type of study	Inclusion：Research that includes empirical studies, theory and conceptual review papers
Exposure of interest	Inclusion：
	Any research related to returns to education, with special attention:
	- Relevant gaps in women's positions in academia
	- Gaps in other relevant occupations
	Exclusion: Any study not related to returns to education.

Source: Indriasari et al. (2020).

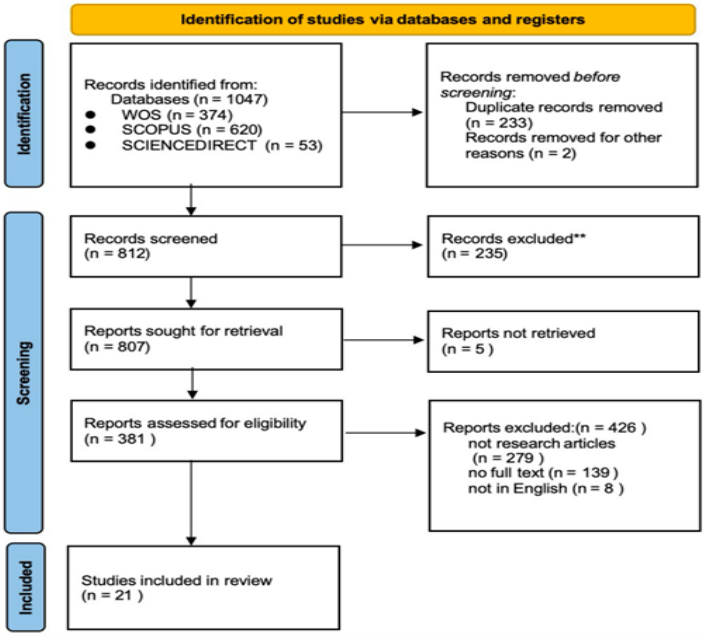

Figure 1 PRISMA flow diagram of the study selection process. *Source:* Rethlefsen et al. (2021).

Table 2 Characteristics of the studies analysed.

Citation (Author/Year)	Country of Origin	Study Objective	Methodology	Scientific Impact
Lörz & Mühleck (2019)	Germany	To study on German higher education covers gender differences from the very start of higher education to post-doc positions or professorship.	Quantitative study	Google Scholar: 78 citations WOS: 29 citations SCOPUS: 31 citations
Lindberg et al. (2011)	Sweden	1. To explain and understand the unequal gender structure of higher positions on gender equality in Swedish higher education. 2.To present a grid for categorizing and discussing theoretical explanations of persisting unequal gender balance and in that way identify under-researched questions about gender equality in higher education.	Qualitative study	Google Scholar: 42 citations WOS: 18 citations SCOPUS: 22 citations
Hawatmeh et al. (2024)	Jordan	To illuminate the gendered organizational structure of higher education in Jordan to pinpoint inequalities in specific levels and fields.	Quantitative study	Google Scholar: 1 citation SCOPUS: 1 citation
Wieczorek-Szymańska (2020)	Poland, Spanish	To analyze the issue of gender diversity in the academic sector and to evaluate the organizational maturity of particular universities in gender diversity management.	Qualitative study	Google Scholar: 31 citations SCOPUS: 14 citations
Baccarini et al. (2019)	Brazilian	To discussing gender inequality, discrimination, and harassment in academia.	Mixed	Google Scholar: 10 citations WOS: 2 citations
Wu et al. (2020)	China	To investigate the relationship between higher education expansion and inequalities in educational opportunities in the context of China; To analyze the difference in the influence of this expansion between elite and non-elite higher education.	Quantitative study	Google Scholar: 105 citations WOS: 52 citations SCOPUS: 57 citations
Rudenko et al. (2022)	Russian	To explores gender dynamics in engineering by analyzing data from a Russian social network called “VKontakte”.	Qualitative study	Google Scholar: 6 citations WOS: 3 citations SCOPUS: 6 citations
Pastor et al. (2016)	Spanish	To offer empirical evidence of the importance of university education as a factor reducing the inequalities between men and women in the labour market.	Quantitative study	Google Scholar: 12 citations WOS: 6 citations SCOPUS: 5 citations

Ünal & Binay (2017)	Turkey	To identifies the direction of the gender-based changes in these programs over the last 20 years.	Mixed	Google Scholar: 5 citations WOS: 2 citations SCOPUS: 3 citations
Quadlin et al. (2021)	USA	To assess gender differences in the relation ships between fields of study, college selectivity, and earnings, given that gender is a consistent predictor of both majors and earnings.	Quantitative study	Google Scholar: 25 citations WOS: 17 citations SCOPUS: 13 citations
Galos & Kulic (2023)	Italy	To investigates whether men and women receive similar returns on employment and earnings when choosing the same field of study.	Quantitative study	Google Scholar: 3 citations WOS: 2 citations SCOPUS: 3 citations
Guo et al. (2010)	China	To analysis gender disparities in science and engineering majors in China's higher education institutions.	Quantitative study	Google Scholar: 62 citations WOS: 29 citations SCOPUS: 30 citations
Zając et al. (2025)	Poland	To study the relationship between fields of study and gender pay disparities.	Quantitative study	Google Scholar: 10 citations WOS: 4 citations
Hägglund (2024)	Finland, Germany	To explores whether fields of study shape the gender wage gap differently in Germany than in Finland.	Quantitative study	Google Scholar: 2 citations
Ochsenfeld (2014)	Germany	To examine the competing accounts for the link between wages and sex composition in college fields of study.	Quantitative study	Google Scholar: 143 citations SCOPUS: 62 citations
Alon & Gelbgiser (2011)	USA	To understand the selection of students into female- or male-dominated majors.	Quantitative study	Google Scholar: 116 citations WOS: 57 citations SCOPUS: 43 citations
VanHeuvelen & Quadlin (2021)	USA	To track the evolution of gender inequalities in STEM employment and earnings inequality among STEM work at the onset of labor market entry.	Quantitative study	Google Scholar: 17 citations SCOPUS: 10 citations

Morgan (2008)	USA	To address the overarching question of the extent to which gender pay differentials among college graduates are a matter of differences in the distribution of men and women on college majors as opposed to gender pay inequality within college majors.	Quantitative study	Google Scholar: 64 citations WOS: 28 citations SCOPUS: 20 citations
Pastor et al. (2016)	Spanish	To offer empirical evidence of the importance of university education as a factor reducing the inequalities between men and women in the labour market.	Quantitative study	Google Scholar: 12 citations WOS: 6 SCOPUS: 5 citations
Iannelli et al. (2018)	Scottish	To examine the extent to which returns to fields of study and institutional sectors serve as dimensions of stratification in higher education.	Quantitative study	Google Scholar: 52 citations WOS: 23 citations SCOPUS: 24 citations
Quadlin et al. (2023)	USA	To assess the contribution of higher education mechanisms to top-end gender inequality.	Quantitative study	Google Scholar: 52 citations WOS: 20 citations SCOPUS: 25 citations

3. Results

The following results are drawn from this paper: on the one hand, the horizontal latitude related to gender is discussed, and on the other hand, the vertical latitude related to gender is discussed.

3.1. Vertical latitude

To address the objectives and research questions, the following synthesis is based on the most relevant findings and conclusions. To identify the manifestations of gender inequality in the longitudinal latitude related to returns to education. Table 3 reflects the main aspects of the relevant literature studies. For the first research question, recent studies have highlighted that inequality is manifested in the hierarchical structure at the organisational level, which in academia is manifested in low female participation rates, low female transition rates to doctoral degrees, under-representation in the highest positions such as full professors, and inequality in leadership positions (Baccarini et al., 2019; Lörz & Mühleck, 2019; Lindberg et al., 2011; Wieczorek-Szymańska, 2020; Hawatmeh et al., 2024). In other professions, this is reflected in fewer job opportunities than for men and a concentration in secondary positions (Wu et al., 2020; Rudenko et al., 2022).

Table 3 Vertical latitude and related manifestations of gender inequality.

Author and Year	Relevant part and Main Characteristics
Lörz & Mühleck (2019)	Representation: low female participation in doctoral research and post-doctoral positions.
Lindberg et al. (2011)	Low transition rates for doctoral degrees: Women typically have few opportunities for doctoral research and lower transition rates than men.
Hawatmeh et al. (2024)	Leadership positions: men are nearly 10:1 compared to women in leadership positions at universities.
Wieczorek-Szymańska (2020)	Representation: under-representation of women in top positions such as full professors.
Baccarini et al. (2019)	Participation rate: In international relations and related sectors, the participation rate of men is almost double that of women.
Wu et al. (2020)	Job opportunities: companies prefer to hire men rather than women in the labor market.
Rudenko et al. (2022)	Position Gap: Positions constructed as inferior, secondary and unskilled are predominantly allocated to women.

3.2. Horizontal latitude

Table 4 illustrates the main aspects of gender inequality in the horizontal dimension of returns to education, which is characterized by gender disparities in different disciplines. Within academia, this is evidenced by Table 4, illustrates the main aspects of gender inequality in the horizontal dimension of returns to education, which is characterized by gender disparities in different disciplines. In academia, this is reflected in the tendency of women to enter marginalised occupations and the fact that feminised disciplines reduce the prestige and income of the discipline (Peterson, 2016; Ünal & Binay, 2017). In other professions, this is reflected in the employment gap (Galos & Kulic, 2023), the starting salary gap (Guo et al., 2010; Zając et al., 2025), the wage gap (Alon & Gelbgiser, 2011; Ochsenfeld, 2014; Hägglund, 2024), the gender pay gap (Iannelli et al., 2018; Morgan, 2008; Pastor et al., 2016; Quadlin et al., 2023; VanHeuvelen & Quadlin, 2021) and the returns to outcomes gap (Quadlin et al., 2021).

Table 4 Horizontal latitude and related manifestations of gender inequality.

Author and Year	Relevant part and Main Characteristics
Peterson (2016)	Marginalization of positions: Women are given executive, undervalued, low-status, senior management positions with fewer links to men.
Ünal & Binay (2017)	Reduced disciplinary prestige and income: Men are more likely to drop out, potentially leading to a wider gender imbalance or gap in the field.
Quadlin et al. (2021)	Reward to Success Gap: Men who excel in STEM fields (e.g., men who graduate from elite colleges with STEM degrees) experience greater reward to success than women.
Galos & Kulic (2023)	Employment gap: The gender gap in female-intensive fields of training closes faster when the proportion of women increases.
Guo et al. (2010)	Employment rate gap and starting salary gap: Males are characterized by very high employment rates and higher starting salaries in initial employment; female graduates have a slightly higher unemployment rate than males. A higher percentage of female graduates go on to further education than males.
Zając et al. (2025)	Pay Gap: The average original pay gap for women is lower than for men, and the pay gap increases over time.
Hägglund (2024)	Pay Gap: Graduates in female-dominated fields are more likely to enter lower-paid (female-dominated) occupations and jobs.
Ochsenfeld (2014)	Pay gap: Significantly lower in female-dominated fields.
Alon & Gelbgiser (2011)	The pay gap: Women's career choices leads to occupations that are, on average, less well paid.
VanHeuvelen & Quadlin (2021)	Gender Pay Gap: Women in STEM fields tend to have lower career pay and are gender segregated.
Morgan (2008)	Gender Pay Gap: Regardless of field of study, women are generally disadvantaged compared to men in terms of pay.
Pastor et al. (2016)	Gender pay gap: Men's incomes are systematically higher than women's. Women appear to face a salary-income curve.
Iannelli et al. (2018)	Gender gap: Men are over-represented and women are under-represented in areas with high labor market returns.
Quadlin et al. (2023)	Gender Wage Gap: Women's access to “different” education (through fields of study) or “more” education (through advanced degrees) does little to close the gender wage gap.

4. Discussion

This systematic review examines the gender as a reflection of gender inequality across various aspects of the labour market. Consistent with prior studies, the under-representation of women in higher education forms a narrowed gender pyramid, indicating their limited presence in the labour market. This results in restricted job opportunities for women, who are often concentrated in secondary rather than primary positions (Baccarini et al., 2019; Lörz & Mühleck, 2019; Lindberg et al., 2011; Wieczorek-Szymańska, 2020; Hawatmeh et al., 2024; Wu et al., 2020; Rudenko et al., 2022).

Because men and women are present to different degrees in different fields of higher education and the phenomenon involved in the horizontal latitude is more complex, a comparison of gender gaps in different disciplines has been added to illustrate the gender differences between different fields of study. There exists a reciprocal relationship between a discipline's societal standing and its gender distribution. Graduates from female-dominated fields limit women's career choices, resulting in women being more likely to choose occupations that are, on average, less well-paid (Alon & Gelbgiser, 2011), more likely to enter lower-paying (female-dominated) occupations and jobs (Hägglund, 2024), and female-dominated fields are significantly less well paid (Ochsenfeld, 2014). The gender gap in female-intensive fields of training narrows when the proportion of females increases. The gap between men and women in fields of study where the proportion of women is higher than 90% is about 3

percentage points. The gap increases in fields of study where female graduates are 40-70% (Galos & Kulic, 2023). It can be argued that higher values for women indicate that they do not necessarily lead to better outcomes, a claim verified by Zając et al. (2025), where an increase in the share of women in certain pathways may lead to poorer labour market outcomes for these groups.

While male-dominated disciplines attract more women, over-representation of men and under-representation of women in fields with higher labour market returns (Iannelli et al., 2018), are prone to larger gender pay gaps and more frequent female exits from these fields (Zając et al., 2025). In STEM fields, top-performing men are rewarded with greater success than women (Quadlin et al., 2021), and women tend to have lower career pay and gender segregation (VanHeuvelen & Quadlin, 2021). In science and engineering, men have higher employment rates and starting wages, while women have higher unemployment rates than men (Guo et al., 2010). If women's low employment rates are due to the fact that science and engineering have always been male-dominated fields, the raw pay gap shows that women earn less than men on average in the first year of graduation at similar employment rates, and this gap continues to grow over time (Zając et al., 2025).

By combing through the gender gap in female-dominated and male-dominated fields, we find a paradox in that men earn systematically more than women (Pastor et al., 2016), and it seems that women, regardless of field of study, generally have lower salaries, poorer returns to education, and are more disadvantaged (Morgan, 2008). Quadlin et al. (2023) make the same point: women's access to “different” education (through fields of study) or “more” education (through advanced degrees) does little to close the gender wage gap.

Furthermore, in the academia, we similarly find that women entering academia are more likely to be placed in administrative, undervalued, low-status, and less male-connected senior management positions, and that despite the apparent appearance of an increased position, their status is not actually elevated (Peterson, 2016). It is reassuring that the pay gap is not significant in public universities and is only for academic staff in private institutions (Baccarini et al., 2019). However, some fields of study may reduce the prestige or income of a particular field as the proportion of women increases, and male withdrawal is more common. In turn, women may hesitate to choose the field as a career, potentially leading to a wider gender imbalance or gap in the field (Ünal & Binay, 2017).

5. Final Considerations

The scientific literature on the returns to education gap reveals the impact of the gender gap in the wider labour market. In recent studies, we have found that the discussion on inequality in academia focuses on vertical structures, and there are fewer studies on the horizontal, but this could also be related to the research techniques used in this paper. There are more cross-sectional than longitudinal studies on graduates in other occupations, but the employment gap and pay gap have always been outstanding and important issues, especially the gender differences in different disciplinary career fields. Past research has focused on women's participation in male-dominated fields and has made good progress, but we find that regardless of how much or how little women are represented in careers, they still generally have lower returns to education than men. In addition, we are particularly concerned about one issue: the higher percentage of female graduates who go on to further education than males seem to be caused by the employment rate, with the choice of higher qualifications to avoid unemployment increasing the competitiveness of future employment. We cannot help but question whether higher degrees can solve the employment problem. In the short term, it seems that it cannot, at least not in terms of solving the fundamental problem. As mentioned earlier, women's different fields of study or higher levels of education have little impact on narrowing the gender wage gap. Instead, it goes into a cycle where more women participate in higher education, and the proportion of women in higher education continues to increase. It may seem as if there is a reverse cycle of moving from education outcomes to enrolment, but looking back at education outcomes again, there is still an unequal gender gap in the labour market.

Policy approaches to address gender inequality in higher education should not be limited to supporting women's entry into male-dominated fields of study but also need to be expanded in the transition to the labour market. Gender disparities cannot be addressed simply by considering the choice of field of study and increasing educational attainment, but further research is needed to better understand the transition from school to work for both men and women. Future research should explore more aspects of the school-to-work process to ensure that education enhances the workforce rather than restricts it. This literature review included academics in a broad career analysis that considered the breadth of returns to education, and there were limitations of depth. Future research could focus on a particular occupation or field in a cross-sectional or longitudinal analysis.

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Ethical Considerations

Not applicable.

Conflict of Interest

The authors declare no conflicts of interest.

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