

WOMEN IN THE GUTENBERG GALAXY

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Abstract

The aim of this study is to explore the situation of women in the printing industry. It examines the effects of their increasing participation in the industry. It also looks at the extent to which the principles of equal opportunities and equal treatment apply to them. Publications on the subject were identified through a systematic literature search based on Web of Science. The results of the literature review are organized around four themes. Numerous publications have appeared around the extraordinary and successful women who ran printing workshops before the industrial revolution after losing their entrepreneurial husbands or fathers. After the industrial revolution, i.e., the spectacular mechanization of industry, women mainly performed simpler, skilled work as folders and seamstresses, i.e., they were involved in the less prestigious and lower-paid tasks of book production. In addition, the works of art created by women and the innovations in their approach often did not receive the spotlight they deserved at the time. Throughout history, women in several countries have tried to break male dominance by joining forces in various ways. In England, for example, in response to the "threatening" behaviour of trade unions, women formed their own printing organization, the Women's Printing Society. Today, women's movements still exist in the printing industry, mainly in Anglo-Saxon countries. A targeted questionnaire survey of 32% of all employees in the Hungarian printing industry was conducted to assess the proportion of women employed in the printing industry by education and position. The aim and result of the study are twofold: to draw attention to the importance of the issue and to provide international examples to shape attitudes.

Keywords: *Women in Print, Publication about women, Women's movements*

1. INTRODUCTION

For decades, the issue of equal opportunities for women in the workplace has been a major social concern. Around the world, many initiatives are working to help women advance and to reduce the gender pay gap. It is well known that these disparities have not yet been bridged, and although the trend is improving, the pace is quite slow. The aim of this study is to examine the situation of women specifically within the printing industry.

The authors—as executives involved in the printing industry—aim to explore the situation of women in the Hungarian and international printing industries. They examine the extent to which the principles of equal opportunity and equal treatment are upheld. The rationale for the research is demonstrated by, among other things, the results of our own survey conducted among domestic printing companies. In the targeted questionnaire-based data collection, 17 Hungarian printing industry companies participated, thus 32% of all employees in the Hungarian printing industry were surveyed. The data showed that although women account for 43.8% of the total population in question, and the proportion of women with a college degree is also significant at 51.4%, despite these figures, women hold only 32.9% of senior management positions (Table 1).

In the sample examined, in terms of company size, number of employees, and job level, no significant difference can be observed regarding whether we are talking about small and medium-sized enterprises (SMEs) or large enterprises (LEs); the proportion of women shows a similar picture. A more significant difference can only be observed in terms of education: in the case of SMEs, the proportion of women with a higher education degree is lower, while the proportion of those without a degree is higher than in the case of large enterprises. The results of our own research are also reflected in the quarterly surveys conducted by GKI Economic Research Co. in the printing industry, which, based on research results published in December 2024, show that the proportion of women is 43%, while among managers (senior and middle managers) it is only 34% (Udvardi 2024).

Table 1. Proportion of women at each job and qualification level by industry sector

Percentage of women									
Sector	Total employees	Senior managers	Mid-level managers	Team leaders	Subordinates	With higher education	With high school diploma	Skilled worker	No formal education
Printing industry	43,8%	32,9%	34,4%	31,2%	46,4%	51,4%	40,2%	45,3%	43,9%
LEs	43,7%	32,6%	37,1 %	25,0%	46,8%	54,0%	39,1%	46,0%	37,6%
SMEs	44,0%	33,3%	30,2%	35,6%	45,6%	47,5%	41,1%	44,,3%	54,2%

An increasing proportion of women are graduating from higher education programs in the printing industry, and an increasing proportion of female employees with higher education degrees are being hired by printing companies. According to the DPR AAE 2023 database requested from the Education Office, at the end of 2022, 60.4% of employees working in the printing industry who graduated with a higher education degree between 2014/2015 and 2020/21 were women.

If we look not only at the printing industry but at the entire Hungarian population, we can still see the trend observed for decades that women are graduating from higher education in greater proportion than men. In 2023, among the total Hungarian population, 34.7% of women held a higher education degree, while 24.9% of men did (KSH 2023). Furthermore, the average wage gap between men and women is not decreasing, neither among manual nor among white-collar workers. The gap remains significant, ranging between 20% and 30% (KSH 2024). Despite all international efforts and attention, companies still tend to prefer hiring men over women for leadership positions, a trend often driven by ingrained biases and stereotypes that emerge during the selection process (Tatár – Kiss 2021).

The relevance of this topic and the fact that it affects many people is demonstrated by the existence of women's movements in the printing industry that mobilize many individuals and seek to support women's opportunities for advancement. These are primarily found in Anglo-Saxon Western cultures. For example, the Women in Print Alliance, founded in the U.S., is dedicated to advocating for women's interests through community building, communication. To increase recognition of women in the industry and raise awareness of discrimination against them (Women in Print Alliance 2024). Girls Who Print (GWP), an online movement that also originated in the U.S., is now represented in Africa and Europe as well. It started as a circle of friends with women in the printing industry who face similar challenges but has since grown into a community of 10,000 members. It now includes numerous female leaders who set an example for their younger female peers and help them advance (Girls Who Print2024). One of the main goals of the Australian Women in Print movement is to build a community of women within the industry, which is intended not only to facilitate the sharing of information but also to enable network members to support one another in their career development.

From the perspective of this topic, it is important to define the concept of feminism. In many cases, successful women themselves deny being feminists because numerous negative prejudices and ideas are attached to this concept, while many actually do not know what the concept means (Hoskin et al. 2017). We will highlight two widely recognized definitions available in the literature. Bell Hooks (2014) views feminism as a struggle against the ideology of domination, with the aim of ensuring that human self-development takes precedence over economic power interests. In Mies (1991)'s approach, feminism

seeks to study and combat the oppression and exploitation of women. The first approach addresses broader, more general human rights.

2. RESEARCH METHODOLOGY

Publications concerning women in the printing industry were identified through a systematic literature review. As part of this process, the publications identified via a Web of Science search were analysed using the PRISMA method (Liberati et al. 2009). For the search, we used the following keywords: “wom* AND print*”. The selection of keywords involved a multi-step process. Whenever we expanded the search terms or made them more specific, the number of results narrowed to such an extent that it rendered the search meaningless. Therefore, we stuck with the two most characteristic concepts of the topic: women and printing/ print.

With these search terms, we obtained 355 results (Figure 1). They were first validated based on the abstract, thereby excluding 332 studies. In the case of the majority of publications excluded from the study, the term “print” referred to the print media, and dealt with women appearing in the print media, and the manner of their appearance. In the case of the publications filtered as relevant, “print” appeared in the printing industry sense. Each of the remaining 23 publications was analyzed individually for relevance. This left 19 relevant publications, which specifically deal with women working in the printing industry, and most of them originate from English-speaking countries. For the relevant publications, we conducted further literature research by reviewing the publications cited in the given publication. This allowed us to include an additional 19 publications in our analysis, which the Web of Science search did not yield, but which are nevertheless relevant to the topic.

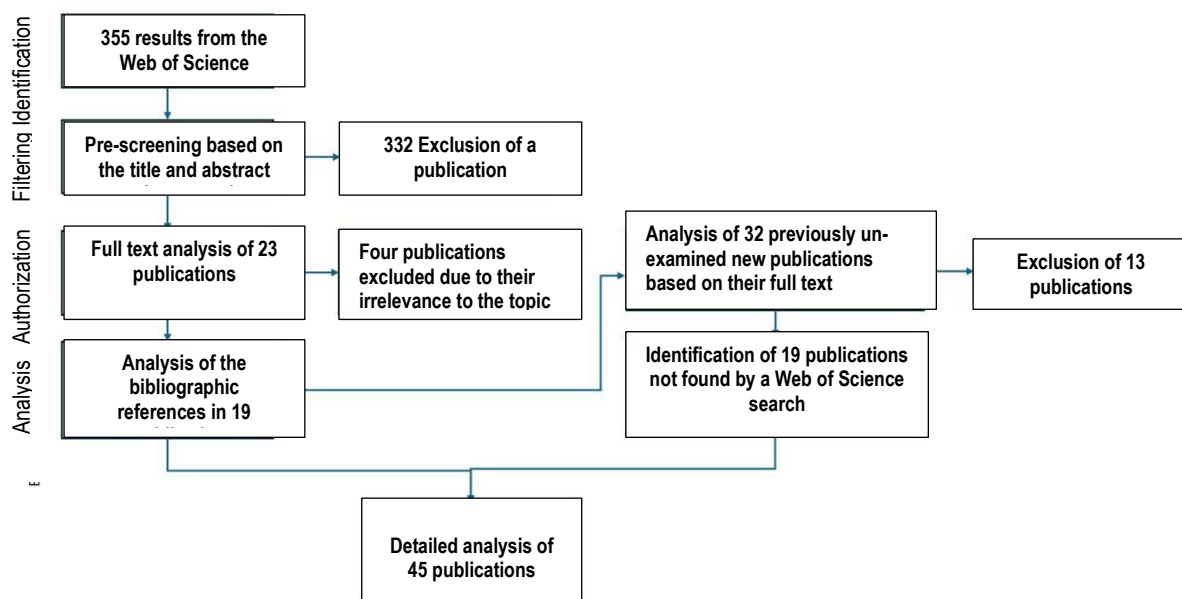


Figure 1. PRISMA flow chart for systematic literature search

Source: compiled by the author (2024)

The first publications on this topic appeared as early as the late 1970s and early 1980s (Figure 2). In recent years, interest in the topic has increased somewhat, but overall, it cannot be said that a significant number of publications have appeared.

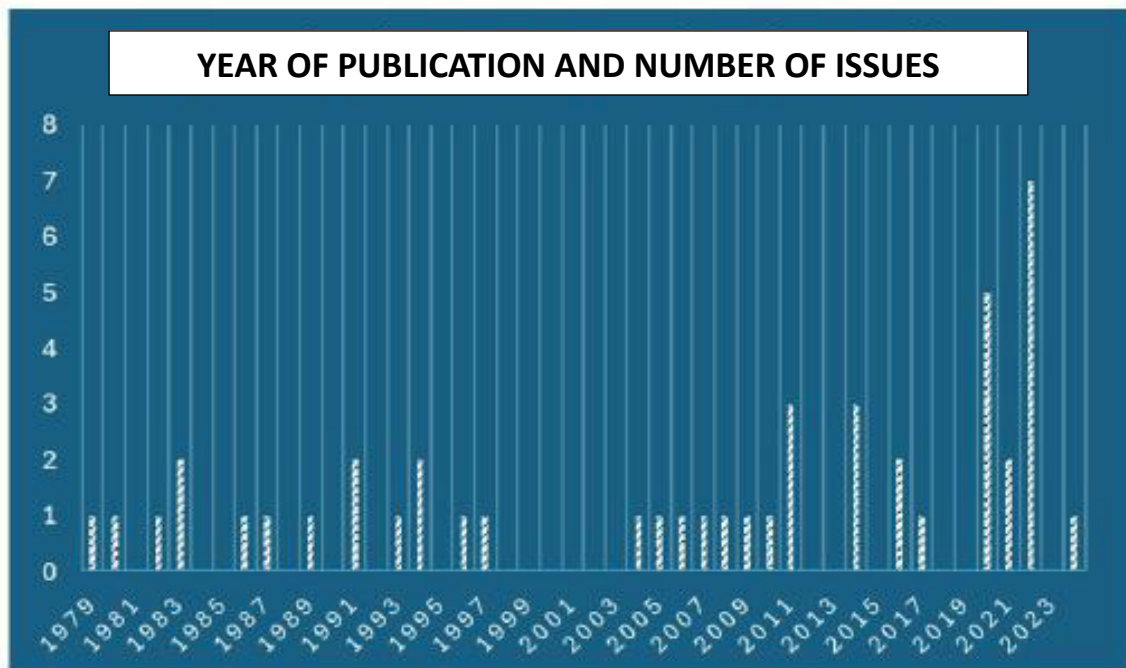


Figure 2. Year of publication and quantity of publications relevant to the topic

We analysed the content of the relevant publications using the grounded theory approach (Glaser & Strauss 2017), meaning we conducted the analyses without formulating any preliminary hypotheses. The grounded theory methodology is suitable for providing an explanation of a social phenomenon or process without relying on prior assumptions. Its theoretical basis is the process of data collection, coding, and analysis, so the results are strictly data-driven, making it a flexible methodology capable of exploring complex social phenomena. After reading the publications, we coded the emerging themes using open coding. Then, using the axial method, we compared the codes with one another and organized them into larger groups, naming these larger groups based on the most tangible content according to their substance. Using this methodology, we were able to identify 4 major thematic areas into which a significant portion of the publications could be classified.

3. RESULTS

Based on the content analysis and categorization of publications found in the literature on women and the printing industry, the following four major themes have been identified: women heirs; the role of trade unions; women as creators; and women's movements.

3.1 The role of women in industry before the Industrial Revolution

Numerous publications have been written about those exceptional and successful women who, prior to the Industrial Revolution, ran printing workshops after losing their entrepreneur husbands or fathers, and thus inherited the family business, feeling a sense of responsibility to keep it running to support their families. The stories of such successful women have been of interest to scholars studying female printers since the first half of the 1900s and have inspired them to compile bibliographies on women business leaders in the fields of book manufacturing and publishing; an example of this is Stowel (1979), who compiled a list of successful female entrepreneurs in the American book manufacturing industry. Another example from the United States is Walker's (1987) collection on outstanding female entrepreneurs, which features more than a dozen courageous women who successfully ran their printing businesses. In an article published in a historical journal, Beech (1983) lists numerous successful

Parisian women who ran printing businesses through their husbands or fathers. Their success was significantly driven by the effectively inherited network of connections. However, the business life cycle exhibited different dynamics for women, as remarriage could mean that a new husband took over the management of the company. Charlotte Guillard's compelling story of a prominent Parisian Renaissance lady inspired Goldstein (2019), while Jeffery (2020) and Limbach (2022) examined similar events and figures in the German-speaking world. Before the Industrial Revolution, women's opportunities and fates were similar regardless of country, or even continent.

3.2 The role of trade unions in the development of gender inequality

Following the Industrial Revolution and the dramatic mechanization of the industry, women nevertheless primarily performed semi-skilled work as folders and seamstresses—that is, they were engaged in lower-prestige, lower-wage tasks within the bookmaking process (Hunt 1983, Coutrap & McQuin 1996). The reasons leading to this situation have been examined by several researchers, such as Burr (1993), Frances (1991), Thomson (1994). Summarizing their findings, it can be concluded that the activities of male-dominated trade unions contributed significantly to the emergence of inequality. For example, Christina Ann Burr (1993) of the Department of History at the University of Windsor examined whether, between 1850 and 1914, printing industry unions employed exclusionary strategies toward women in their operations and negotiations, which may have contributed to the development of a specific division of labour between men and women, and this could have become entrenched in the long term. Through an analysis of historical documents, Burr demonstrated that men secured better-paid positions at the expense of women, using the institution of the trade union to do so, so that within the organization, gender interests prevailed over class interests. Furthermore, employers were also unwilling to pay female workers the same wages as male skilled workers. According to surviving historical evidence, there were instances in America where, when an employer would have hired a woman for a higher-prestige position, male coworkers refused the job (Thomson 1994). This may explain why, although the proportion of women, for example, in the American printing industry in the United States increased significantly after the Industrial Revolution—from 40.8% to 55.8%—the proportion of women in higher-paying, more prestigious printing positions did not even reach 1% (Thomson 1994). Ava Baron (1989), who revealed in her work how employers in America “exploited” the female and child labour force to weaken the workforce and power of male workers, such as to break the 1835 printers' strike. Naturally, men resented the presence of women and children in their workplaces, as they felt their livelihoods and their roles as breadwinners were threatened, and thus viewed them as enemies. Surprisingly, the situation has not changed much since the early 1900s, as examined by Burr (1993), during union negotiations. In her research, Dawson (2014) examined the situation in the 2000s. According to the findings, issues regarding women's equal opportunities and equal pay had not been adequately incorporated into union negotiations even by 2010. Even when the topic was placed on the agenda, the negotiation process effectively ensured that the issue remained invisible.

3.3 The role of trade unions in the development of gender inequality

The question arises as to whether we should discuss women and their roles in the printing industry solely on the basis of the positions they hold. Or whether we should adopt a significantly broader, feminist approach to discussing women as creators and their inspirational influence, as well as their power to shape society. Sarah Werner draws attention to in her 2020 article. In the history of the printing industry, we must not simply talk about the history of women, but about feminist printing history. With her feminist approach, Werner examines not only female publishing professionals and printers, but the entire process of printing/ publishing and the social impacts of women's participation in it. In other words, how this differs from the history of women and printing. In her article, she presents historical excerpts showing how women contributed to creative processes as well.

Significant works created throughout history, as well as innovations in perspective, often did not receive sufficient attention in their own time. It also happened that outstanding works were published under the

names of women's husbands, because this made them more "marketable." In recent years, several researchers, historians, and editors have sought to introduce these works, which were sinking into oblivion, and these exceptional women to the general public. Numerous publications and articles have appeared on the subject. In their book *Aims and Objectives*, Levy & Kandice (2020) compiles bibliographic data on female authors who received little or no publicity, as well as editors, translators, and publishing staff who were part of the creative process. In her book, edited in 2021, Briar Levy presents the biographical stories of lesser-known women from the Harlem Renaissance period onward who earned their living through graphic design, created outstanding works, and thereby shaped public taste. Fanni et al. (2020) compiled their book *Natural Enemies of Books – A Messy History of Women in Printing and Typography*, a book designed with sophisticated graphics and typography, introduce the reader to female printers, illustrators, writers, typographers, and typesetters who, through their own narratives, shed light on the inequalities in the printing industry.

2.4 Women's solidarity and movements

Attempts had already been made in 19th-century England to break the dominance of men. Since the dominant trade unions portrayed female printers as a threat to the wages of "breadwinners," the women responded by founding their own printers' organization. The "Women's Printing Society," established in 1876, employed both working-class and middle-class women as printers. When distributing business profits, they took into account the interests of both investors and employees, which is why they proved to be very successful (Tusan 2004). We can say that women's full social sensitivity was evident here as well, because they did not prioritize the interests of a single interest group. The organization published its own weekly periodical titled "Women's Penny Paper," where women could make their voices heard (Alexiou 2022). The publication was designed and produced by women and spoke to women in a unique way, thus allowing them to showcase and draw attention to women's talents. A similar women's movement also emerged in 19th-century America. The Boston weekly newspaper titled "The Olive Branch" employed exclusively women for publishing and printing tasks. In defiance of the prejudices of the time, which sought to confine women to the "kitchen" (Roman 2022). This publication platform enabled women to express their own creative voices during this era.

Within the so-called "Second Wave" feminist movement launched in the second half of the 20th century changes also began in the printing industry, which aimed at women's liberation, so that women would not be undervalued workers. Within this framework, in the 1980s in England, numerous offset printing shops founded and run by women were established, but unfortunately, due to their lack of capital, they did not survive for long. For those who participated in the movement, the initiative played a life-changing role. It is important to note that the common operational model of feminist printing presses was a collectivist- democratic form. Generally, everyone handled every task; they were less specialized than in male-led businesses, because they viewed this as consistent with radical democratic and feminist ideals (Baines 2022).

3. CONCLUSIONS

A review of the literature shows that throughout history, the principle of equal opportunity for women has often been violated. Although women demonstrated their talent before the Industrial Revolution, when they successfully ran the businesses, they had inherited and were thus recognized in their own time and held in high esteem, even if, upon remarriage, the new husband took over the company's management duties. But with the Industrial Revolution, mass production, and the struggle for survival, they were outmatched by men's bargaining power and authority and were thus pushed into lower-prestige jobs. Men, as "breadwinners and family providers," fought for higher wages for themselves, which severely undermined the principle of equal pay. This phenomenon is still evident today, and not just in the printing industry. Female printers, in the face of clear discrimination, formed movements and coalitions, and used the media to make their voices heard with varying degrees of success. Women's means of self-expression, and the display of their talent, also manifested in creative work; numerous

works have survived by female writers, graphic artists, artists, and book editors. These received only limited attention in their own time due to strong stereotypes and discrimination.

Today, compared to the historical facts presented, a significant improvement can be observed in this area, but further research could focus on assessing the current situation in the printing industry regarding the extent to which gender stereotypes still exist, the extent to which women hold lower-prestige positions, whether the principle of equal pay is realized, and whether their works receive the same attention in creative work. The practical outcome of this research is that it draws attention to the challenges women face regarding equal opportunity and the importance of combating stereotypes. In the face of these challenges, women's movements and coalitions play a significant role in the resolution processes and can prompt company leaders to improve selection processes and implement equal opportunity measures.

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