

# The impacts of psychosocial risks in relation to gender: how to address them in the workplace

Silvia Bertocco\*

1. Introduction. 2. Psychosocial risks from a gender perspective. 3. Key psychosocial vulnerability factors for women. 4. Highlights on teleworking and hybrid working. 5. Possible solutions: tailored preventive measures.

## Abstract

This paper investigates the impact of psychosocial risks on female workers and explores potential remedial measures aimed at ensuring the effective protection of women's health and safety. After delineating psychosocial risks and their principal determinants, the study underscores the imperative to incorporate a gender-responsive approach within the risk assessment framework, grounded in principles of gender-specific medicine, relevant health and safety legislation, as well as guidelines promulgated by INAIL and EU-OSHA. Additional essential measures to safeguard women's mental health include the implementation of targeted health surveillance protocols and the provision of tailored, comprehensive training programs. The implementation of such measures can, at present, be facilitated through the deployment of artificial intelligence technologies.

**Keywords:** Psychosocial Risks; Gender Perspective; Gender Medicine; Vulnerability Factors; Gender-Sensitive Risk Assessment; Specific Health Surveillance; Specific Training.

## 1. Introduction.

Among the various risks that characterize the modern workplace, certain factors stand out for their pervasive impact on workers' health, safety, and overall well-being. Psychosocial ones play an increasingly important role, mainly linked to inadequate methods of planning, work organisation and human resources management. In other terms, they are related to the way work is organised, social factors and aspects of the working environment, as well as hazardous equipment and activities.<sup>1</sup>

Their gendered implications, however, represent a crucial dimension in the pursuit of workplace gender equity. It is important to underscore that gender differences in the labour

---

\* Associate Professor of Labour Law, University of Padova. This essay has been submitted to a double-blind peer review.

<sup>1</sup> Currently, work-related stress is the only psychosocial hazard subject to officially recognized assessment protocols. See: INAIL, *La metodologia per la valutazione e gestione del rischio stress lavoro-correlato*, Rome, 2017.

market are frequently linked to a differentiated distribution – both in type and incidence – of occupational diseases. Such disparities stem not only from unequal exposure to occupational health risks, but also from sex-specific physiological and social characteristics.

In order to understand the specificities and gender-related differences in psychosocial risks, it is first necessary to identify the main workplace risk factors, classified by task content and work context. It is important to emphasize that many of these factors are prevalent in occupations predominantly held by women. Moreover, following the Covid-19 pandemic, most studies underscore the relevance of gender in the analysis of teleworking conditions. After examining the underlying causes, the nature of psychosocial risks, and their differentiated impact on men and women, the study a series of proposed solutions.

A specific assessment pathway for these types of risks should first be established, based on Article 28 of Legislative Decree 81/08 and inspired by principles of gender medicine, as well as the gender-related guidelines issued by INAIL and EU-OSHA, together with the INAIL guidelines on work-related stress.<sup>2</sup> Furthermore, AI systems can now support risk assessment by incorporating the “human factor” and its varying impact across different risk categories, such as gender, age, and origin.<sup>3</sup>

Beyond risk assessment, the protection against psychosocial risks must be ensured through supplementary measures, including gender-sensitive health surveillance and targeted training programmes. The integration of artificial intelligence systems may further strengthen the implementation of such protective strategies.

## 2. Psychosocial risks from a gender perspective.

The work environment in the majority of the established EU Member States has changed from one focused on manufacturing to one that is service driven. The advances in technology and increasing globalisation have contributed to these changes and have also introduced new risks and hazards into the workplace.

Psychosocial risks and resulting consequences for mental and physical health are among the most challenging issues in occupational safety and health (OSH). Besides their detrimental effect on individual health, psychosocial risks can also negatively impact the efficiency of organisations as well as national economies.

---

<sup>2</sup> INAIL, *Salute e sicurezza sul lavoro una questione di genere*, Rome, 2023; INAIL, *La valutazione dei rischi in ottica di genere: aspetti tecnici*, Rome, 2024; INAIL, *Modulo contestualizzato al lavoro da remoto e all'innovazione tecnologica*, Rome, 2025; EU-OSHA, *New risks and trends in the safety and health of women at work. European Risk Observatory – Literature Review*, Publication Office, 2013, available at: <https://op.europa.eu/en/publication-detail/-/publication/00131ab8-46ad-4a16-a8da-6414ab12e83c/language-en#:~:text=Research%20from%20the%20European%20Commission,accidents%20affecting%20women%20at%20work%20;and%20ISO%2045003:2021,Occupational%20health%20and%20safety%20management%20for%20managing%20psychosocial%20risks,2021,available%20at%20https://www.iso.org/standard/64283.html#:~:text=This%20document%20gives%20guidelines%20for,promote%20well%20being%20at%20work;INAIL,La%20metodologia%20per%20la%20valutazione%20e%20gestione%20del%20rischio%20stress%20lavoro-correlato,2017.>

<sup>3</sup> Somma R., *Risk assessment, human variability and the possible new frontiers of Artificial Intelligence*, in Bertolazzi A., De Cet G., Vianello C., Zanini M.A., *Impact of the new technologies on workers' safety and health*, Edicom Edizioni, 2025, 69.

According to the International Labor Organization, “psychosocial risks” are defined as those risks that are generated by “an unfavorable interaction between work content, management, work organisation, environmental and organisational conditions with respect to the skills and needs of the workers”.<sup>4</sup>

Therefore, if they are viewed as an organisational issue, rather than an individual fault, these risks can be tackled in the same structured and organised way, as other OSH risks.<sup>5</sup>

In order to understand where gender specific characteristics lie to psychosocial risks, we must first list the main risk factors in the workplace, broken down by content and work context. We can identify them as follows: excessive workloads; poor internal communication; lack of involvement in decision-making processes; difficulties in career progression; job instability due to non-standard employment contracts (fixed-term contract, remote working, temporary agency work); work-life balance; mobbing; discrimination, violence, psychological or sexual harassment. It is important to emphasize that many of these risk factors are common in women’s jobs.

The direct consequences of these risks are stress, anxiety, depression, mental and physical disorders leading to many lost working days, increased accident and injury rates and financial costs.

The World Health Organization has shown that depression and anxiety disorders are more widespread among women than men. This greater female prevalence may be due to hormonal (just think of post-partum depression) and biological factors (men and women may react differently to the same exposure to a specific risk), but also to socio-cultural factors<sup>6</sup> which make it more difficult for women to balance work and family life, to access executive positions, on the other hand, exposing them to greater risks of occupational segregation, harassment and violence.<sup>7</sup>

This highlights the fundamental need to approach women’s health through the lens of gender medicine and to uphold the principle of gender-sensitive healthcare provision.<sup>8</sup>

---

<sup>4</sup> ILO, *Psychosocial factors at work. Recognition and control – Report of the Joint ILO/WHO Committee on Occupational Health, Ninth Session, Geneva, 18-24 September 1984*, Occupational safety and health Series, 56, 1986, 6; INAIL, *Salute e sicurezza sul lavoro una questione di genere*, 2023, 3.

<sup>5</sup> EU-OSHA, *Healthy workers, thriving companies - a practical guide to wellbeing at work*, European Agency for Safety and Health at Work, 2017; EU-OSHA, *New risks and trends in the safety and health of women at work - European Risk Observatory. Literature review*, 2023.

<sup>6</sup> Weber C., Henke N., *Employment trends and their impact on women’s OSH*, 2014, available at: <https://oshwiki.osha.europa.eu/en/themes/employment-trends-and-their-impact-womens-osh>; Vitaletti M., *Sulla differenza di genere nel Testo Unico in materia di salute e sicurezza nei luoghi di lavoro*, in *Lavoro, Diritti, Europa*, 1, 2025, 4; INAIL, *Salute e sicurezza sul lavoro una questione di genere*, 2023, 3; INAIL, *La valutazione dei rischi in ottica di genere: aspetti tecnici*, 2024, 34.

<sup>7</sup> Marinelli F., *Come sviluppare politiche di contrasto alla violenza e alle molestie sui luoghi di lavoro: l’OIL indica la strada nel Report “Preventing and addressing violence and harassment in the world of work through occupational safety and health measures*, in *Lavoro, Diritti, Europa*, 1, 2025, 1; Baranska P., Picard S., *Sicure al lavoro, sicure a casa, sicure online*, Bollettino ADAPT, 25, 2024, 2. Also: Eurofound, *Violence in the workplace: Women and frontline workers face higher risks*, 27 February 2023, available at: <https://www.eurofound.europa.eu/en/commentary-and-analysis/all-content/violence-workplace-women-and-frontline-workers-face-higher-risks>.

<sup>8</sup> Gender medicine is defined as the study of the impact of biological differences (defined by sex), as well as socio-economic and cultural factors (defined by gender), on the health and disease status of each individual. It was only with the enactment of Law No. 3 of 2018 that the Ministry of Health, in collaboration with the National Institute of Health, formally acknowledged the necessity to develop a gender-oriented health strategy. Subsequently, on 13 June 2019, the Minister of Health issued a decree adopting the Plan for the Implementation

### 3. Key psychosocial vulnerability factors for women.

Women are particularly vulnerable to psychosocial risks for several reasons. First of all, women traditionally play multiple roles, both at work and at home. Within the social system, women are typically viewed as the primary “caregivers”, assuming responsibility for household management and the care of children and aging parents. Although the European Union and Italy are developing a body of legislation, supported by established jurisprudence, to protect the role of caregivers,<sup>9</sup> there remains limited recognition of the psychological burden borne by these individuals, predominantly women. On the other hand, it is true that the recent tendency of judges to extend the right to reasonable accommodations to caregivers is indicative of this need.<sup>10</sup>

Another key factor is occupational segregation, or the concentration of women’s activity in a few sectors, which appears to be increasing rather than decreasing over time. Consequently, women constitute a disproportionately high presence in traditionally lower-remunerated sectors characterized by limited opportunities for career advancement, including healthcare, education, and social services.

Moreover, although the number of women managers has increased slightly since 2003, women remain under-represented in management positions and in the decision-making processes within companies. Concrete evidence shows that limited career opportunities for women can directly impact their health and safety at work. The combination of performing the same tasks over a long period of time, coupled with the repetitive and monotonous nature of many women's jobs, can lead to health risks such as stress and musculoskeletal disorders (MSDs).

Equally detrimental to women’s mental health and safety are the risks of discrimination, violence, and harassment to which women are disproportionately exposed. This encompasses conduct such as inappropriate behavior, unsolicited sexual advances, and discriminatory treatment. Additionally, new forms of harassment, such as cyber-harassment, are an emerging issue in some sectors, for example in education, or in types of work such as telework and hybrid work, where women are more prevalent than men.<sup>11</sup>

---

and Dissemination of Gender Medicine, pursuant to Article 3 of Law No. 3/2018. *See*: Vitaletti M., nt. (6), 6; INAIL, *La valutazione dei rischi in ottica di genere: aspetti tecnici*, 2024, 74. Previously: Briar C., ‘*Women’s health and safety at work: is there a problem?*’, in Briar C. (ed.), *Hidden health hazards in women’s work*, Dunmore Publishing, Wellington, New Zealand, 2009, 12.

<sup>9</sup> See Directive EU 2019/1558 Work-life balance for parents and carers. The Directive also promotes the reallocation of the parental relationship to the other parent, encouraging parenthood regardless of sex (female or male). In Italy Law 104/1992, although it doesn’t explicitly mention the term “caregiver,” it provides indirect protections such as paid leave for those assisting family members with serious disabilities, or the need for consent for caregiver transfer (art. 33, paragraph 5); Law No. 205/2017, paragraphs 254–256, was the first law to define the *family caregiver* as someone who assists and cares for a spouse, cohabitant, relative, or in-law who is not self-sufficient, even in cases of severe disability. See Cass. Civ. 3 July 2025, n. 18063; Cass. 20 May 2024, n. 13934; Cass. 10 May 2023, n. 12649.

<sup>10</sup> European Court of Justice – Case C-38/24 (September 11, 2025), *Italy* where the EU Court ruled that caregivers must be protected from indirect workplace discrimination and that Employers are required to provide reasonable accommodations to support caregivers’ responsibilities; Cass. 17 January 2024, n. 1788.

<sup>11</sup> D’Souza N., Forsyth D., Blackwood K. (2020). *Workplace cyber abuse: Challenges and implications for management*, in *Personnel Review*, 50, 7/8, 2020, 1774, <https://doi.org/10.1108/PR-03-2020-0210> .

Some particularly vulnerable groups include young women, women with care obligations, migrant women engaging in informal work, such as cleaning and home care, women in multiple jobs and very young mothers.<sup>12</sup>

European and Italian anti-discrimination legislations are very thorough and supplemented by criminal penalties for crimes of violence and harassment, but they do not consider physical and psychological consequences, such as fear, anxiety and post-traumatic stress disorder (PTSD), long-term sickness absence, displacement and even suicide.<sup>13</sup> From this perspective, particular significance attaches to the recent ILO Report titled “*Preventing and addressing violence and harassment in the world of work through occupational safety and health measures*”, which illustrates that the implementation of prevention systems and intervention programs targeting workplace violence and harassment cannot be relegated—as appears to be the case in numerous jurisdictions—to anti-discrimination legislation alone. Rather, it is imperative that such phenomena be expressly recognized and incorporated within the scope of psychosocial risks governed by national health and safety legislation.<sup>14</sup>

Another significant factor contributing to women’s vulnerability stems from their disproportionate representation in precarious and part-time employment, which frequently affords reduced economic security, exacerbates exposure to psychosocial stressors, and is associated with adverse health outcomes such as migraines, diminished self-esteem, decreased motivation, and occupational dissatisfaction.<sup>15</sup>

The final key factor to consider is women’s mental health. As stated above, women report higher incidences of anxiety and depression compared to men, with these conditions often being exacerbated by the dual demands of familial responsibilities and occupational roles, as well as by exposure to stressful or adverse workplace environments.<sup>16</sup>

---

<sup>12</sup> Eurofound, nt. (7).

<sup>13</sup> See the ILO Conventions n. 111/1958 and n. 190/2019; Directive 2000/78/EC; Directive 2000/43/EC; Directive 2006/54/EC; Italian Equal Opportunities Code (Legislative Decree 198/2006) that implements EU directives, recently updated by Law No. 162/2021; Legislative Decrees No. 215/2003 and No. 216/2003 that transpose EU directives on racial and religious discrimination, disability, age, and sexual orientation.

<sup>14</sup> ILO, *Preventing and addressing violence and harassment in the world of work through occupational safety and health measures*, 2024, available at: <https://www.ilo.org/publications/major-publications/preventing-and-addressing-violence-and-harassment-world-work-through>. The report analyzes how OSH frameworks can be used as a direct entry point for preventing violence and harassment by addressing root causes and promoting safer work environment. See also: Marinelli F., nt. (7), 3.

<sup>15</sup> Zeytinoglu I.U., Seaton M.B., Lillevik W., Moruz J., *Working in the margins: women’s experiences of stress and occupational health problems in part-time and casual retail jobs*, in *Women Health*, 41, 1, 2005, 87.

<sup>16</sup> De Girolamo G., *Differenze di genere in salute mentale*, Il Pensiero Scientifico Editore, Rome, 2025, 15. For further discussion on algorithmic discrimination in human resource management, refer to: Palmirotta F., *La prevenzione delle discriminazioni algoritmiche: tra azioni positive, accomodamenti ragionevoli e obbligo di sicurezza*, in *Diritto antidiscriminatorio e trasformazioni del lavoro (Atti XXI Congresso nazionale AIDLASS)*, La Tribuna, Milan, 2025, 647.

#### 4. Highlights on teleworking and hybrid working.

The increasing shift towards remote and hybrid working since the onset of the pandemic has had a strong negative impact on women in terms of work-life conflict, cyberbullying, stress, and health outcomes.<sup>17</sup> It therefore becomes necessary to examine emerging psychosocial risks, which may manifest across multiple dimensions, particularly in connection with hyperconnectivity, the growing complexity of team management, social isolation, and the evolving skill requirements of the workforce.<sup>18</sup> The extreme vagueness of the legislation makes exploring the gender dimension of remote working and occupational safety and health (OSH) even more urgent.

Indeed, Italian legislation regarding health and safety measures in the context of teleworking is confined solely to Article 3 of Legislative Decree No. 81/2008, which merely imposes on employers the obligation to inform employees about the correct use of computers, as well as the duty to ensure the implementation of measures designed to mitigate the risk of social isolation. In relation to what is commonly referred to as “smart working” (lavoro agile), Law No. 81/2017 delegates its implementation primarily to collective bargaining agreements and individual contracts. Moreover, the statutory provisions addressing the employer’s obligations in regards to health and safety, remain limited and lack comprehensive regulatory detail. The latter merely confirms the employer’s duty to guarantee the safety of the technological equipment supplied (pursuant to Article 18, Law No. 81/2017), and his obligation to safeguard health and safety through the provision of written documentation to employees, delineating both general and specific occupational risks inherent to their work (Article 22, Law No. 81/2017).<sup>19</sup> Regrettably, it is worth emphasizing that the identification of preventive measures to be implemented fails to explicitly address gender considerations.

In addressing this issue, it is imperative that enterprises prioritize the adoption of an equitable and gender-responsive framework for work–life balance within teleworking and hybrid work arrangements, grounded on principles of employee autonomy and mutual trust.<sup>20</sup>

---

<sup>17</sup> Turrin M., *Telework as a driver of inequalities in the labour market*, in *Italian Labour Law e-Journal*, 2, 17, 2024, 379; Arabadjieva K., Franklin P., *Home-based telework, gender and the public-private divide*, in Countouris N., De Stefano V., Piasna A., Rainone S. (eds.), *The future of remote work*, Report 143, European Trade Union Institute (ETUI), Brussels, 2023, 67; Fiata E., *L’iniziativa europea sul diritto alla disconnessione*, in *Lavoro, Diritti, Europa*, 4, 2021, 9; Allen T. D., Merlo K., Lawrence R. C., Slutsky J., Grey C.E., *Boundary management and work-nonwork balance while working from home*, in *Applied Psychology*, 70, 1, 2021, 72; Chung, H., *Gender, flexibility stigma and the perceived negative consequences of flexible working in the UK*, in *Social Indicators Research*, 151, 2, 2020, 521; Chung H., Van der Lippe T., *Flexible working, work-life balance, and gender equality: Introduction*, in *Social Indicators Research*, 151, 2020, 365.

<sup>18</sup> Significant updates regarding the evaluation of occupational risks and the formulation of appropriate interventions are discussed in: INAIL, *Modulo contestualizzato al lavoro da remoto e all’innovazione tecnologica*, 2025, 5; Brolo M., *Il lavoro agile tra emergenza pandemica e riemersione della questione femminile*, in *Labor*, 4, 2020, 509.

<sup>19</sup> See in particular: Casiello G., *La sicurezza e la tutela contro gli infortuni e le malattie professionali nel lavoro agile*, in Biasi M., Zilio Grandi G. (eds.), *Commentario breve allo statuto del lavoro autonomo e del lavoro agile*, Cedam, Padova, 2018, 646; Preteroti A., *La responsabilità del datore di lavoro per il buon funzionamento degli strumenti assegnati al lavoratore agile*, in Biasi M., Zilio Grandi G. (eds.), *ibidem*, 593.

<sup>20</sup> Arabadjieva K., Franklin P., *Home-based telework, gender and the public-private divide*, in Countouris N., De Stefano V., Piasna A., Rainone S., nt. (17), 78. See also the interesting Report of the European Economic and Social Committee, *Opinion. Teleworking and gender equality – conditions so that teleworking does not exacerbate the unequal*

From this standpoint, a further pivotal measure to mitigate psychosocial risks and promote an improved work-life balance is the right to disconnect (Article 19, Law 81/2017), which seeks to curtail the extension of working hours and to safeguard the separation between professional obligations and private life.<sup>21</sup>

Notwithstanding, the right to disconnect lacks explicit incorporation of the gender dimension in the legislative frameworks of most countries, including Italy. In contrast, France stands as the sole European jurisdiction that has enacted the right to disconnect with an explicit mandate to advance gender equality (Articles L. 2242-8 and L. 3121-64 of the Labour Code).<sup>22</sup>

## 5. Possible solutions: tailored preventive measures.

The analysis conducted thus far, indicates that women exhibit a heightened susceptibility to psychosocial risks compared to men; nevertheless, it is essential to underscore that existing legislation addressing the aforementioned vulnerability factors generally maintains a neutral stance with respect to sex and gender.<sup>23</sup>

It should be emphasized that prior occupational health and safety regulations, including Legislative Decree No. 626/1994, similarly did not differentiate between genders. As a result of this legislative framework, there has been a lack of adequate recognition and resource allocation concerning the identification and prevention of gender-specific occupational risks. Consequently, workplaces, machinery, equipment, workstations, and personal protective equipment (PPE) have predominantly, been designed and calibrated based on the anthropometric and physiological characteristics of an average “Western male” of standard age and build. Moreover, distinctions related to gender in risk assessment documentation have frequently been conflated with provisions aimed solely at protecting pregnant workers (Legislative Decree No. 151/2001) or caregiver workers (Law no. 104/1992), a framework that is now widely regarded as both outdated and overly reductive.<sup>24</sup>

---

*distribution of unpaid care and domestic work between women and men and for it to be an engine for promoting gender equality.* SOC/662, 2021, available at: <https://webapi2016.eesc.europa.eu/v1/documents/EESC-2020-05159-00-01-AC-TRA-EN.docx/content>.

<sup>21</sup> INAIL, *Modulo contestualizzato al lavoro da remoto e all'innovazione tecnologica*, 2025, 10. See also: Rota A., *Riflessioni intorno al (la) prevenzione del bore-out: chi è questo sconosciuto?*, in *Lavoro, Diritti, Europa*, 1, 2025, 2; Preteroti A., *Ambiente digitale e benessere: la disconnessione come diritto della personalità e strumento di tutela della dignità umana*, in *Rivista giuridica Ambienteditto.it*, 3, 2023, 1; Cataudella M.C., *Tempo di lavoro e tempo di disconnessione*, in *Massimario Giurisprudenza del lavoro*, 4, 2021, 857.

<sup>22</sup> Morel L. (2017), *Le droit à la déconnexion en droit français* La question de l'effectivité du droit au repos à l'ère du numérique, in *Labour&Law Issue*, 3, 2, 2017, 15.

<sup>23</sup> Pezzini B., *Costituzione italiana e uguaglianza dei sessi. Il principio antisubordinazione di genere*, in Pezzini B., Lorenzetti A., *70 anni dopo tra uguaglianza e differenza. Una riflessione sull'impatto del genere nella Costituzione e nel costituzionalismo*, Giappichelli, Turin, 2019, 1-14.

<sup>24</sup> Vitaletti M., nt. (6), 8. See also: Cass. pen., Sez. III, 15 June 2022, n. 36538. In that ruling, the judge affirmed that the employer is required to assess health risks for pregnant and postpartum female workers, even where the workforce includes women outside the age range scientifically defined as reproductive, on the grounds that the protections set forth in article 6, Legislative Decree 151/2001, are extended to female workers in cases of adoption or foster care.

---

As underscored in the INAIL Report on the significance of gender in Risk Assessment (2024), Legislative Decree No. 81/2008, informed by advances in gender-based medicine, transcends the traditional notion of the gender-neutral worker embedded in earlier legislation. It acknowledges and incorporates gender-specific differences as a substantive element, as exemplified by the explicit differentiation between ‘male worker’ and ‘female worker’ within the framework of risk assessment (cf. Article 28, Legislative Decree No. 81/2008).<sup>25</sup>

It is imperative to conduct a thorough analysis of occupational safety and health (OSH) risks stratified by gender, sector, and occupation, to ensure that protective measures are effectively calibrated to the specific needs of each gender.

This requires beginning with a gender-sensitive risk assessment framework that facilitates the identification of tailored preventive interventions, rather than conforming female workers to a predominantly male normative model. Indeed, the adoption of a comprehensive risk assessment methodology that explicitly incorporates the gender dimension enables the formulation of optimal preventive strategies, thereby addressing and mitigating deficiencies inherent in prevailing approaches to work planning, organizational structures, and human resources management. In more precise terms, the prevailing legislative framework expressly recognizes physical and social gender distinctions as a determinative criterion in the fulfillment of the obligation to conduct a comprehensive and accurate risk assessment.<sup>26</sup>

European Institutions endorse this paradigm, emphasizing that a prerequisite for ensuring the effectiveness of protection lies in the explicit recognition—within the risk assessment documentation – of the diversity among employees, beginning with gender, age, and geographical origin.<sup>27</sup>

Primarily, it must be noted that the term “gender risk” is conceptually inaccurate, as belonging to a specific gender does not in itself constitute a risk. Rather, it is a matter of integrating a gender-sensitive perspective into the assessment of all risks inherent in work processes, by interpreting them in light of the differences arising from the distinctive biological, social, and cultural characteristics of men and women, as well as from the dynamics of interaction between male and female workers within the organizational context – particularly with regard to organizational and psychosocial risks.<sup>28</sup>

Moreover, it should be underlined that the obligation to safeguard the physical integrity and moral personality of each worker (Article 2087 of the Italian Civil Code) entails the personalization of safety measures, taking into account both sex and psychological condition. Accordingly, the employer bears the duty to assign tasks to each worker in a manner proportionate to their psychophysical capacities, in strict compliance with the provisions

---

<sup>25</sup> Already in Article 1, as well as in Articles 6 and 40 Legislative Decree No. 81/2008, etc. See: INAIL, *La valutazione dei rischi in un’ottica di genere. Aspetti tecnici*, 2024, 34.

<sup>26</sup> It is important to emphasize that domestic jurisprudence regards an incomplete or insufficient risk assessment as equivalent to a total omission of that obligation. Among others Cass. pen., Sez. IV, 28 February 2025, n. 8301; Cass. pen., Sez. IV, 5 April 2024, n. 15621.

<sup>27</sup> E.g., the EU Strategic Framework on Health and Safety at Work 2021–2027 and the European Commission’s document COM(2021) 323 final, 14.

<sup>28</sup> See: INAIL, *La valutazione dei rischi in un’ottica di genere. Aspetti tecnici*, 2024, 34.

---

established under Article 18, paragraph 1, letter c) of Legislative Decree No. 81/2008, and in collaboration with the designated occupational health physician.<sup>29</sup>

Lastly, it is incumbent to specify that the risk assessment must encompass all female employees, not exclusively those who are pregnant or serving as caregivers. In relation to the latter, the employer is obliged to augment the standard protective measures with targeted preventive interventions addressing psychosocial risks.

Indeed, as previously noted, a sensitive approach to groups of workers exposed to heightened risks during the risk assessment process is enshrined in the Italian legal framework under Article 28 of Legislative Decree No. 81/2008. This provision underscores the obligation to consider all risks, including those related to work-related stress, pregnant workers, as well as risks associated with gender differences, age, country of origin, and different types of employment contracts.

Therefore, in order to appropriately address the impact of psychosocial risks with respect to gender, it is essential that the risk assessment process be grounded in gender-specific medicine and guided by legal frameworks, including the EU-OSHA Guidelines,<sup>30</sup> the Guidelines on Women's Health and Work-Related Stress Risk issued by INAIL in 2017, 2023 and 2024, as well as ISO Standard 45003:2021 "Guidelines for Managing Psychosocial Risks".

At the implementation level, the procedure for assessing psychosocial risks affecting female workers could draw upon the methodologies set forth in INAIL's documentation concerning gender differences and work-related stress,<sup>31</sup> thereby developing a structured approach divided into three distinct phases: 1) Preparation. The preliminary phase involves producing a structured overview of the organization, aimed at identifying relevant indicators such as the workforce composition disaggregated by sex, with reference to job roles, career progression, contractual arrangements, and access to training; 2) Assessing risk. The results of this preliminary assessment should, subsequently, be examined in relation to the psychosocial vulnerability factors described in Sections 3 and 4 of this paper; 3) Taking action. At this point, the employer shall proceed with the implementation and ongoing monitoring of the agreed-upon measures. It is imperative that the execution of these improvement actions be integrated into the organization's routine operational activities.

At this stage, it is considered appropriate to introduce a concluding verification phase to ensure the process's completeness and validity. The employer should perform a comprehensive review of the entire risk management cycle, encompassing risk assessment, strategic planning, and the implementation of appropriate mitigating measures.

---

<sup>29</sup> According to the jurisprudence of the Italian Supreme Court (Corte di Cassazione) Cass. pen., sez. IV, 21 July 2025, n. 26600, the employer "is required to appoint a competent occupational physician and to assign tasks to workers in consideration of their individual capabilities and conditions, with regard to their health and safety". This requires the employer "to verify that employees have the requisite knowledge, competencies, and physical and psychological capacities to carry out their assigned tasks safely".

<sup>30</sup> EU-OSHA, *Healthy workers, thriving companies - a practical guide to wellbeing at work*, 2018, available at: <https://osha.europa.eu/en/publications/healthy-workers-thriving-companies-practical-guide-wellbeing-work>.

<sup>31</sup> INAIL, *La metodologia per la valutazione e gestione del rischio stress lavoro-correlato*, 2017, 5, together with the update to the document: INAIL, *Modulo contestualizzato al lavoro da remoto e all'innovazione tecnologica*, 2025; INAIL, *La valutazione dei rischi in un'ottica di genere. Aspetti tecnici*, 1, 2024, 34.

---

A gender-sensitive risk assessment ought to be conducted through a participatory methodology that fosters interdisciplinary cooperation among internal corporate stakeholders (RSPP, RLS and the company doctor) as well as external experts, including psychologists and organizational management specialists.

Within the scope relevant to this paper, the company doctor assumes a crucial role in identifying psychosocial risks and assessing their gender-related implications. In this context, it is essential that the occupational physician be adequately trained in, and effectively implement, the principles of gender-based medicine, given that the objective is not to identify tasks or activities more suitable for a specific gender, but rather to compensate for differences in risk exposure through the implementation of appropriate work procedures.

In fact, pursuant to Article 41, paragraph 4, of Legislative Decree No. 81/2008, health surveillance enables the occupational physician to identify and prescribe the necessary diagnostic investigations in order to accurately assess workers' fitness for duty. More importantly, it allows the physician to recommend corrective measures in work organization.<sup>32</sup> Equally significant is the fiduciary role that the occupational physician may assume in collecting confidential disclosures from female workers, particularly with regard to deeply personal and often unspoken experiences, such as psychological distress, violence, harassment, and discrimination.

The entire risk assessment process may now be managed through digital technologies. In particular, predictive risk assessment using artificial intelligence systems proves especially relevant, as such systems have the ability to consider not only the absolute level of risk, but also the variability inherent in the actual workforce population, which influences the degree of exposure. Specifically, to the conventional  $R = P \times D$  matrix – where risk is defined by the correlation between the probability of occurrence of an adverse event and the severity of the resulting harm – an adjustment should be introduced to account for human variability factors (K factor), such as gender.<sup>33</sup>

Moreover, the analysis of the various preventive measures in relation to specific tasks and the individuals assigned to them, may be supplemented by gender-disaggregated health surveillance data, with a view to assessing their actual effectiveness or identifying the need for organizational adjustments aimed at restoring equity among workers performing the same duties.

Finally, the development of a prevention culture that takes gender differences into account is essential, particularly through targeted awareness-raising initiatives directed at employers and workers alike. The training programs for workers, pursuant to Article 37 of Legislative Decree No. 81/2008, and for employers, as provided for by the State–Regions Agreement of 17 April 2025, may constitute a valuable opportunity to foster greater awareness of gender differences, particularly in relation to psychosocial risks. In terms of content, training initiatives addressing gender-related issues should consider not only the risks present in the workplace, but also the strategies and measures adopted by the employer in relation to workforce management, pay transparency, and the effective participation of

---

<sup>32</sup> See: INAIL, *La valutazione dei rischi in ottica di genere: aspetti tecnici*, 2024, 33

<sup>33</sup> Somma R., nt. (3), 79; Tardiola A., *Tre quesiti sul rapporto tra sicurezza del lavoro e LA*, in *Lavoro Diritti Europa*, 3, 2024, 7.

female employees in representative bodies for the protection of health and safety. Furthermore, it is essential that such training be tailored to the individual worker's psychophysical condition.<sup>34</sup>

Artificial intelligence also represents a valuable resource in training contexts. Indeed, the 2025 State–Regions Agreement encourages the use of AI through digital and immersive tools, that is, intuitive and engaging instruments such as virtual reality systems capable of creating interactive environments. These technologies significantly enhance the retention of concepts and procedures. In addition, the psychosocial dimension of each individual, when stimulated through experiential learning, develops a deeper awareness of the value of actions and their impact on others.<sup>35</sup>

These measures transcend the basic requirements of occupational health and safety legislation and may be construed as a strategic mechanism for advancing gender equality within the workplace. Their purpose extends beyond the mere facilitation of women's participation and the assurance of equal career opportunities; they are also aimed at fostering a professional environment grounded in dignity and respect, devoid of stereotypes, discriminatory conduct, and any form of abuse—whether physical, verbal, or digital in nature.

A good working environment doesn't just prevent workers from becoming stressed or ill, it actually improves their wellbeing.

## Bibliography

- Allen T. D., Merlo K., Lawrence R. C., Slutsky J., Grey C. E., *Boundary management and work-nonwork balance while working from home*, in *Applied Psychology*, 70, 1, 2021, 60-84;
- Arabadjieva K., Franklin P., *Home-based telework, gender and the public-private divide*, in Countouris N., De Stefano V., Piasna A., Rainone S. (eds.), *The future of remote work – Report 143*, European Trade Union Institute (ETUI), Brussels, 2023;
- Baranska P., Picard S., *Sicure al lavoro, sicure a casa, sicure online*, in *Bollettino ADAPT*, 25, 2024;
- Brollo M., *Il lavoro agile tra emergenza pandemica e riemersione della questione femminile*, in *Labor*, 4, 2020;
- Calderara D., *Garanzia della disconnessione nel rapporto di lavoro*, G. Giappichelli, Turin, 2024;

<sup>34</sup> See: Vitaletti M. (2025), nt. (6), 11; European Parliament resolution, 12 December 2023 *on mental health* (2023/2074(INI)) (C/2024/4162). Judicial interpretation of the duty to ensure training in matters of occupational health and safety, including psychosocial hazards, has become firmly consolidated. ee, among recent cases, Cass. pen. Sez. IV, 22 April 2025, n. 15697; Cass. Pen. Sez. IV, 13 February 2024, n. 6301

<sup>35</sup> Ricci F., Chiesi A., Bisio C., Panari C., Pelosi A., *Effectiveness of occupational health and safety training. A systematic review with meta-analysis*, in *Journal of Workplace Learning*, 28, 6, 2016, 355–377; Seo H.J., Park G.M., Son M., Hong A. J., *Establishment of Virtual-Reality-Based Safety Education and Training System for Safety Engagement*, in *Education Sciences*, 11, 2021, 786; Toyoda R., Russo-Abegão F., Glassey J., *VR-based health and safety training in various high-risk engineering industries: a literature review*, in *International Journal of Educational Technology in Higher Education*, 19, 1, 2022, 1–22.

- Casiello G., *La sicurezza e la tutela contro gli infortuni e le malattie professionali nel lavoro agile*, in Biasi M., Zilio Grandi G. (eds.), *Commentario breve allo statuto del lavoro autonomo e del lavoro agile*, Cedam, Padova, 2018;
- Cataudella M.C., *Tempo di lavoro e tempo di disconnessione*, in *Massimario Giurisprudenza del lavoro*, 4, 2021;
- Charalampous M., Grant C., Tramontano C., Michailidis E., *Systematically reviewing remote e-workers' well-being at work: A multidimensional approach*, in *European Journal of Work and Organizational Psychology*, 28, 1, 2019, 51-73;
- Chung H., *Gender, flexibility stigma and the perceived negative consequences of flexible working in the UK*, in *Social Indicators Research*, 151, 2, 2020, 521-545;
- Chung H., Van der Lippe T., *Flexible working, work-life balance, and gender equality: Introduction*, in *Social Indicators Research*, 151, 2020, 365-381;
- Countouris N., De Stefano V., Piasna A., Rainone S. (eds), *The future of remote work*, Report 143, European Trade Union Institute (ETUI), Brussels, 2023;
- Cuomo M., *La tutela del diritto alla disconnessione. Fonti, limiti e prospettive*, in *Lavoro, Diritti, Europa*, 3, 2023;
- De Girolamo G., *Differenze di genere in salute mentale*, Il Pensiero Scientifico, Rome, 2025;
- D'Souza N., Forsyth D., Blackwood K., *Workplace cyber abuse: Challenges and implications for management*, in *Personnel Review*, 50, 7/8, 2020, 1774-1793, <https://doi.org/10.1108/PR-03-2020-0210> ;
- European Economic and Social Committee, *Opinion. Teleworking and gender equality – conditions so that teleworking does not exacerbate the unequal distribution of unpaid care and domestic work between women and men and for it to be an engine for promoting gender equality*, 2021, available at: SOC/662. <https://webapi2016.eesc.europa.eu/v1/documents/EESC-2020-05159-00-01-AC-TRA-EN.docx/content> ;
- European Institute for Gender Equality (EIGE), *Gender Equality Index 2022. The COVID-19 pandemic and care*, Publications Office of the European Union, 2022;
- European Law Institute, *Guiding principles on implementing workers' right to disconnect*, 2023, available at: [https://europeanlawinstitute.eu/fileadmin/user\\_upload/p\\_eli/Publications/Guiding\\_Principles\\_Workers\\_Right\\_to\\_Disconnect.pdf](https://europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/Guiding_Principles_Workers_Right_to_Disconnect.pdf) ;
- European Parliament, *Resolution of 12 December 2023 on mental health (2023/2074(INI)) (C/2024/4162)*;
- European Parliament, *Resolution of 5 July 2022 on mental health in the digital workplace (2021/2098(INI))*;
- Eurofound, *Violence in the workplace: Women and frontline workers face higher risks*, 27 February 2023, available at: <https://www.eurofound.europa.eu/publications/blog/violence-in-the-workplace-women-and-frontline-workers-face-higher-risks> ;
- EU-OSHA – European Agency for Safety and Health at Work, *Hybrid work: new opportunities and challenges for occupational safety and health*, 2023, available at: <https://osha.europa.eu/en/publications/hybrid-work-new-opportunities-and-challenges-occupational-safety-and-health> ;
- EU-OSHA, *New risks and trends in the safety and health of women at work*, 2023;

- Fiata E., *L'iniziativa europea sul diritto alla disconnessione*, in *Lavoro, Diritti, Europa*, 4, 2021, 9
- Franklin P., Zwysen W., Piasna A., *Temporal dimensions of job quality and gender: Exploring differences in the associations of working time and health between women and men*, in *International Journal of Environmental Research and Public Health*, 19, 8, 2022;
- Fenoglio A., *Il diritto alla disconnessione del lavoratore agile*, in Biasi M., Zilio Grandi G. (Eds), *Commentario breve allo statuto del lavoro autonomo e del lavoro agile*, Cedam, Padova, 2018;
- Ferrara M.D., *Il ruolo della contrattazione collettiva e la tutela della salute nei luoghi di lavoro: la prospettiva di genere*, in Sclip G., *Sicurezza accessibile. La sicurezza sul lavoro in una prospettiva di genere*, EUT Edizioni Università di Trieste, Trieste, 2019, 59-84;
- ILO, *Psychosocial factors at work. Recognition and control – Report of the Joint ILO/WHO Committee on Occupational Health, Ninth Session, Geneva, 18-24 September 1984*, Occupational safety and health Series, 56, 1986;
- ILO, *Report on “Preventing and addressing violence and harassment in the world of work through occupational safety and health measures”*, 2024;
- INAIL, *La metodologia per la valutazione e gestione del rischio stress lavoro-correlato*, Rome, 2017;
- INAIL, *Salute e sicurezza sul lavoro una questione di genere*, Rome, 2023;
- INAIL, *La valutazione dei rischi in un’ottica di genere. Aspetti tecnici*, Rome, 2024;
- INAIL, *Modulo contestualizzato al lavoro da remoto e all’innovazione tecnologica*, Rome, 2025;
- ISO standard 45003:2021, *Occupational health and safety management – Psychological health and safety at work – Guidelines for managing psychosocial risks*, 2021;
- Lott Y., Abendroth A.K., *The non-use of telework in an ideal worker culture: why women perceive more cultural barriers*, in *Community, Work & Family*, 23, 5, 2020, 593-611;
- Magagnoli S., *Diritto alla disconnessione e tempi di lavoro*, in *Labour&Law Issue*, 7, 2, 2021;
- Magnusson C., *Flexible time—but is the time owned? Family friendly and family unfriendly work arrangements, occupational gender composition and wages: a test of the mother-friendly job hypothesis in Sweden*, in *Community, Work & Family*, 24, 3, 2021, 291-314;
- Marinelli F., *Come sviluppare politiche di contrasto alla violenza e alle molestie sui luoghi di lavoro: l’OIL indica la strada nel Report “Preventing and addressing violence and harassment in the world of work through occupational safety and health measures*, in *Lavoro, Diritti, Europa*, 1, 2025;
- Nunin R., *Lavoro femminile e tutela della salute e della sicurezza: nuovi scenari per una prospettiva di genere dopo il d. lgs. n. 81/2008*, in *Rivista del Diritto della Sicurezza Sociale*, 2011;
- Oakman J., Kinsman N., Stuckey R., Graham M., Weale V., *A rapid review of mental and physical health effects of working at home: How do we optimise health?*, in *BMC Public Health*, 20, 1, 2020;
- Pabilonia S. W., Vernon V., *Telework, wages, and time use in the United States*, in *Review of Economics of the Household*, 20, 2022, 687-734
- Palmirota F., *La prevenzione delle discriminazioni algoritmiche: tra azioni positive, accomodamenti ragionevoli e obbligo di sicurezza*, in *Diritto antidiscriminatorio e trasformazioni del lavoro (Atti XXI Congresso nazionale AIDLASS)*, La Tribuna, Milan, 2025, 647-654;
- Preteroti A., *Ambiente digitale e benessere: la disconnessione come diritto della personalità e strumento di tutela della dignità umana*, in *Rivista giuridica Ambienteditto.it*, 3, 1, 2023;
- Preteroti A., *La responsabilità del datore di lavoro per il buon funzionamento degli strumenti assegnati al lavoratore agile*, in Biasi M., Zilio Grandi G. (eds.), *Commentario breve allo statuto del lavoro autonomo e del lavoro agile*, Cedam, Padova, 2018;

- 
- Rota A., *Riflessioni intorno al(la prevenzione del) bore-out: chi è questo sconosciuto?*, in *Lavoro, Diritti, Europa*, 1, 2025;
- Sclip G., *Sicurezza accessibile. La sicurezza sul lavoro in una prospettiva di genere*, EUT Edizioni Università di Trieste, Trieste, 2019;
- Somma R., *Risk assessment, human variability and the possibile new frontiers of Artificial Intelligence*, in Bertolazzi A., De Cet G., Vianello C., Zanini M.A. (eds.), *Impact of the new technologies on workers' safety and health*, Edicom, 2025;
- Tardiola A., *Tre quesiti sul rapporto tra sicurezza del lavoro e IA*, in *Lavoro Diritti Europa*, 3, 2024, 1-8;
- Turrin M., *Telework as a driver of inequalities in the labour market*, in *Italian Labour Law e-Journal*, 2, 17, 2024;
- Verdonk P., Hooftman W.E., van Veldhoven M.J., Boelens L.R., Koppes L.L., *Work related fatigue: the specific case of highly educated women in the Netherlands*, in *International Archives of Occupational and Environmental Health*, 83, 3, 2010, 309–321;
- Vitaletti M., *Sulla differenza di genere nel Testo Unico in materia di salute e sicurezza nei luoghi di lavoro*, in *Lavoro, Diritti, Europa*, 1, 2025;
- Weber C., Henke N., *Employment trends and their impact on women's OSH 2023, 2014-2023*, available at: <https://oshwiki.osha.europa.eu/en/themes/employment-trends-and-their-impact-womens-osh> ;
- Zeytinoglu I.U., Seaton M.B., Lillevik W., Moruz, J., *Working in the margins: women's experiences of stress and occupational health problems in part-time and casual retail jobs*, in *Women Health*, 41, 1, 2005, 87–107.

Copyright © 2025 Silvia Bertocco. This article is released under a Creative Commons Attribution 4.0 International License