SAFETY AT WORK IN ITALY IN A GENDER APPROACH: PSYCHOSOCIAL RISKS[1]

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1. Introduction

The Italian labour market is still characterized by strong gender inequalities sharpen by the Covid-19 pandemic. Despite the continuous improvement recorded in recent decades, women show a higher unemployment rate than men (10.4% compared to 8.6% in 2020) and a lower employment rate (48.4% versus 66.6%), also due to the persistence of an unequal distribution of family carers' burden. Gaps also concern the type and quality of employment. In fact, women are more employed in part-time and fixed-term jobs compared to men. The higher level of female education does not translate into an advantage in the labour market although it is a protective factor in phases of crisis such as the pandemic one (Istat, 2021a). The labour market in Italy remains strongly segregated. Vertical and horizontal segregation related to the persistence of gender stereotypes that influence women in their study paths and career choices (Barigozzi and Montinari, 2022). In 2020, female employment is concentrated in a limited number of occupations: 50.9% in only 19 while that of men in 51 occupations. Furthermore, women are less likely to reach top positions in organizations. The feminization of work is interlaced with the "ethnicization" of some sectors such as agri-food, care and health. Occupations that concern the "reproduction of life" are covered by Italian and foreign women, interchangeable segments of the labour market characterized by a low level of bargaining and hardly hit by the pandemic (Istat, 2021b). At the same time, the pandemic has called into question the legitimacy of a hierarchy of skills that places all the skills and jobs necessary for the reproduction of life and society on the lowest rung. These occupations have become "key or essential" and, in the world context, protests focused on the lack of safety in the workplace and the absence of personal protective equipment by these workers have been taken place (Bergfeld and Farris, 2022).

[1] This article is the joint work of the authors, however paragraphs 1 and 4 are written by Eugenia De Rosa, paragraph 2 by Antonella Iorio, paragraph 3 by Barbara Boschetto.

The pandemic has therefore led to rethink physical and psychological health and safety as a fundamental dimension of work and highlighted the importance of considering gender differences. Firstly, the effects of the gendered structure of the labour market on the exposure of men and women to risk factors at work should be considered. Official data on the Italian context showed the existence, before the pandemic, of significant gender gaps in terms of health and safety at work as well as the peculiarities of some work contexts and types of occupations (Boschetto *et al.*, 2016, 2017). The importance of adopting a gender approach in health and safety at work is also recognized by the Italian legislation. In fact, Legislative Decree 81/2008 introduces the obligation of a risk assessment connected to gender differences in the workplace and a sensitive concept of health and safety at work that is "no longer neutral" but take into account gender differences in risk assessment and prevention measures (Giammarioli, 2017, INAIL 2021). However, this indication to date does not seem widely accepted. Some difficulties are the interconnections between biological and social variables (Conti, 2016) and "the lack of standardized methods to take into account a gender approach ... to evaluate occupational risk concerning organizational and social aspects" (Giammarioli, 2017). Gender should not be considered as a homogeneous category. Multiple and intersecting factors can influence a different exposure to risk factors at work such as socio-demographic (e.g. age, education, citizenship) and employment characteristics (e.g. hourly regime, size of the organizational context, public or private sector). It is also necessary to consider long-term structural changes of the labor market such as feminization and aging of the workforce (Jones, *et al.*, 2011; Collingwood, 2011) as well as greater flexibility and precariousness (Artazcoz *et al.*, 2005). These changes have prompted increasing attention to psycho-social risks (Bongers *et al.*, 1993; Bonde, 2008; Leka and Jain, 2010; Dominique *et al.*, 2013) including harassment and bullying, stress, depression and anxiety. These are aspects can have a strong impact on productivity (Karasek *et al.*, 1990; Luthans *et al.*, 2007; Jones *et al.*, 2011) and on the health and well-being of man and women workers. On this scenario, the health crisis and the consequent economic crisis resulting from the pandemic had a strong impact. Hence the interest in investigating the situation of health and safety at work in Italy, in the context of the pandemic, using data from an Istat study carried out in 2020 on the issue.

2. Data and methods

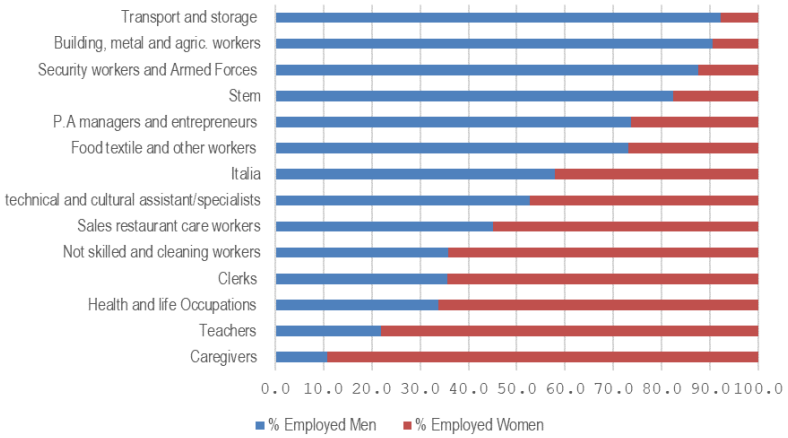
This study uses data from the 2020 ad hoc module on accident at work and other work-related health problems included into Italian 2020 Labour Force survey.

The survey, conducted by the Italy's National Institute of Statistics (ISTAT), provides the official estimates of the main aggregates of the labour market (numbers in employment and unemployment, people not seeking work) disaggregated by socio-demographic and employment characteristics. The survey is continuous and is carried out every week of the year, with results published monthly, quarterly and yearly. Participants are sampled adopting a two-stage sampling method: municipalities (stratified by demographic size) are used for the first stage and households for the second stage. All household members over fifteen are interviewed. In the 2020 the ad-hoc module on "Health and Safety at work" was submitted only to households in second wave. The module is organised in three sub-modules: accidents at work, work-related health problems, and exposure to physical and psycho-social risk factors at work. The target population is persons aged 16-74 years employed or not employed with a past experience of work. The first, on accidents at work, should establish how many accidents occur and which type, what kind of job was concerned as well as how long a worker was absent due to the accident. The second sub-module, on work-related health problems, analyses the number and types of such health problems, whether they limit the daily activities, characteristics of job and absence from work. The third sub-module, on exposure to risk factors at the workplace, should identify whether a worker is exposed to some relevant risk factors for physical and/or mental well-being. The target group of our study are men and women in employment who responded to question concern the exposure to risk factors for mental well-being at work. The analysis is carried out on 44,665 individuals, 25.096 employed man and 19.569 employed women (22 million and 900 thousand employed people, approximately 9 million employed women). The estimation of the probability of being exposed to psychological health risks, for specific risk factors and at least one was analysed by logistic regression models, stratified by sex and occupation. These models made it possible to calculate odds ratios (OR) with 95% confidence intervals adjusted for potential confounders. Variables used as regressors in the models are age, citizenship, level of education, profession, part time/full time and the type of contract (permanent or fixed term). In order to identify the discriminants of a higher psychological health risk between men and women, an ad hoc aggregation was created at the second level of the Italian classification of occupations (Cp2011). This 13-mode variable groups occupations, is focused on the occupational field or competence ("job families") and not on the occupational level[2]. The gender distribution of these occupational groups shows the great

[2] The groups identified are: managers and entrepreneurs; STEM occupations; health occupations; teachers; legal, social and cultural associate or professionals; clerks; sales and restaurant workers; building and metal workers; other types of workers (agricultural, food, textile, etc.); transport and storage workers; cleaners and not skilled occupations; caregivers; armed forces and security workers.

imbalance that exists in the labour market. Some occupations are male-dominated: primarily heavy jobs such as building or metalworkers, or transport and storage workers, but also the more qualified and prestigious occupations that, for historical-cultural reasons, still suffer of a gender gap in favour of men: these are the managerial and scientific occupations. Women, on the other hand, are more present in caring, teaching or other jobs with closer contact with patients or customers: the occupations of teachers, health workers, cleaners and personal care workers are female-dominated (Figure 1).

Figure 1 – *Employed people by occupations and gender. Percentage.*



Source: Labour Force Survey: Ad Hoc Module 2020.

3. Results

The main indicators of the 2020 module show some gender differences in occupational health and safety (Istat, 2021c). Among employed persons aged between 16 and 74, men have a higher incidence of accidents at work (1.7% compared with 1.2% of women) and a higher perception of being subject to physical health risks at work (65.2% compared with 58.1% of women)[3]. In

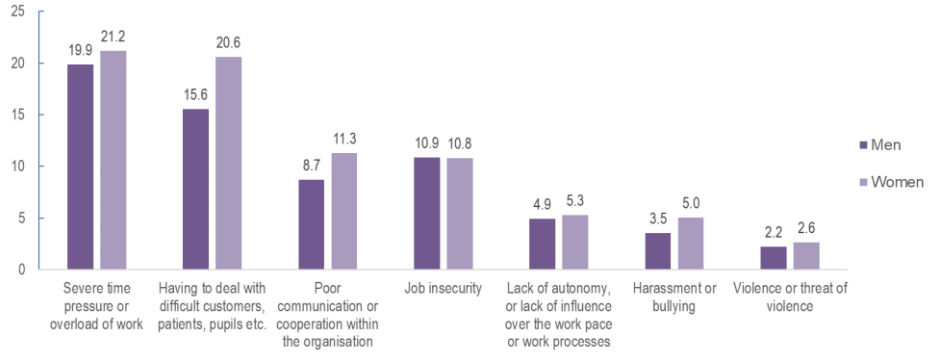
[3] The risk factors for physical health observed in 2020 are divided into 11 categories: hand and arm repetitive movements (declared by 32.2% of the employed), painful or tiring positions (31.2%), strong visual concentration (22.0%), handing or moving heavy loads (17.5%), risk of falling, slipping or tripping (17, 0%), exposure to dust, gases, fumes, chemicals (14.1%), risks related to the use of hand or mechanical tools (13.1%), excessive noise (11.9%), vehicle use (9.2%), vibration (7.9%) and the residual category 'other risk factor' (9.2%).

contrast, employed women suffer more from health problems caused or made worse by their work (5.9% vs. 5.2% of men), including stress problems, depression and anxiety, and report greater exposure to psychological health risks at work. 40.9% of women feel exposed to at least one risk factor among those surveyed compared with 37.7% of men.

Gender differences are more pronounced in the youngest age group, between 15 and 34 years (38.5% women vs. 31.9% men and in the oldest age group, 55-74 (39.6% vs. 35.8%). As the educational qualification increases, the exposure to at least one psychological health risk grows for both genders, but in greater proportion for women: the exposure is similar among those with a low education, increases slightly for women in secondary education, and further among those with a tertiary qualification. Among foreigners, the difference is reversed: men are more exposed (30.6%) than women (27.5%).

The gender distribution of the different psychological risk factors shows that women are more exposed to almost all risks (Figure 2).

Figure 2 – *Employed people by psychological risk factors and gender. Percentage.*



Source: Labour Force Survey: Ad Hoc Module 2020.

Men and women felt some factors similarly: is the case of the fear of losing their job (10.9% men and 10.8% women), the pressing time or excessive workload (21.2% women and 19.9% men) and the lack of autonomy (5.3% women and 4.9% men). Other factors are felt significantly more by women: the risk of having to dealing with difficult patients or clients (20.6% women 15.6% men), lack of communication or cooperation (11.3% vs. 8.7%) and bullying or harassment (5.0% women and 3.5% men). Women also perceive violence or the threat of violence more.

3.1 Health at work: occupations at risk by gender

The logistic regression models show the different probability of feeling exposed to psychological health risks between men and women and between different occupations. First by using the reconstructed indicator expressing 'feeling exposed to at least one risk factor', among the eight investigated, as the dependent variable, and then in detail using specific risks as dependent variables.

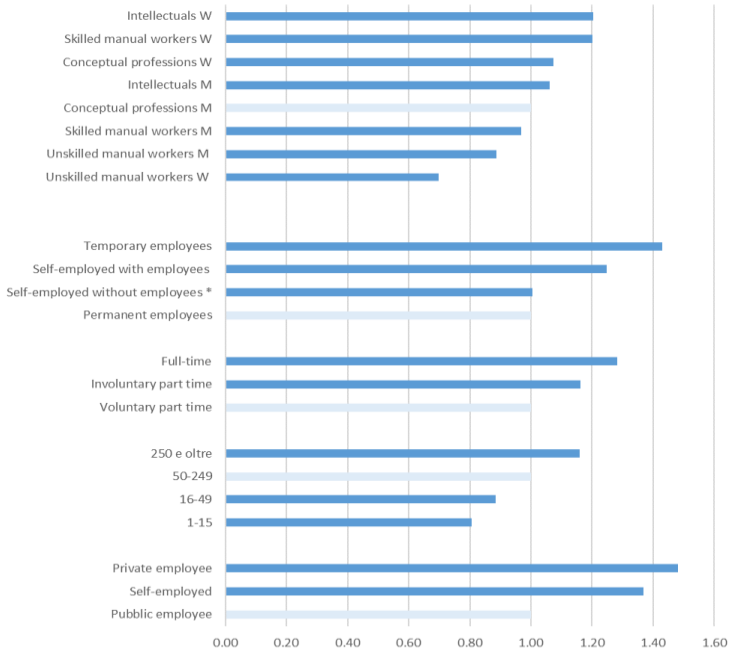
In order to examine the interaction between occupation type, gender and the perception of at least one risk factor for psychological health, an aggregate occupation variable was created. The variable groups, distinctly by gender, occupations into four level mode: intellectual, conceptual, skilled manual and unskilled manual occupations, excluding the Armed Forces. This variable was used as independent in the logistic regression model, with other potential confounders, including some job and socio-demographic characteristics, in order to highlight which elements present a significantly higher probability of perceived risk for psychological health.

The type of occupation, crossed by gender, indicates that women perceive the risk to a greater extent than men in all occupational groups except for unskilled occupations (figure 3). Women employed in intellectual or managerial occupations have a 20% higher exposure to psychological risk than men employed in conceptual occupations, the reference category, (IC 95%: 1.11-1.31), the same proportion is also observed among women employed in skilled manual occupations, such as trade and skilled trades occupations (odds ratio 1.20). Women with conceptual occupations, compared to their male counterparts, have a similar but still higher probability (odds 1.07) and a very similar odds ratio is presented by men in intellectual/managerial occupations. Men and women in unskilled professions have a perception 10% and 30% lower than the reference category.

Among the contract typologies the higher exposure is reported by fixed-term employees with 43% more than permanent employees, and self-employed persons 25% more. Being a private employee also affects the probability almost 50% more than being a public employee (CI 95%: 1.41-1.55). Working in small and medium-sized enterprises protects against psychological risk factors: 20% and 10% respectively. Full-time worker were 28% more likely than those chose part-time.

The probability of being exposed to psychological risk is significantly higher for people in the middle age group, for those with a tertiary education for Italians and for residents in in the North-East.

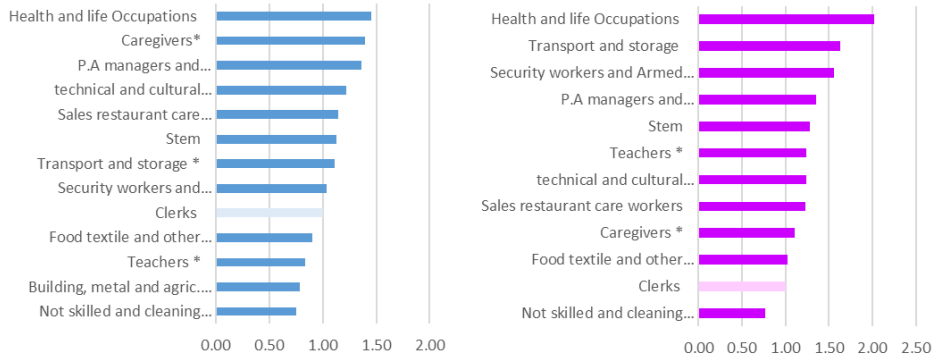
Figure 3 – *Exposure to at least one psychological risk factor by occupations and gender, firm size, contract type working hours. Odds ratio*.



Source: Labour Force Survey: Ad Hoc Module 2020.

To deepen the analysis, the model was applied to three specific risks (dependent variables) on which to investigate the different propensities of the employed, based on belonging to one of thirteen occupational groups, stratified by gender and adjusted for socio-demographic confounding variables. The first risk factor taken into account is being exposed to a to severe time pressure or overload of work: for both genders the health occupations are the most exposed to this risk factor. Among men, the health employed feel this risk factor 1.46 (95% CI: 1.20-1.77) times more than white-collar workers, taken as the reference category; the entrepreneurs and managers in public administration 1.36 (95% CI: 1.12-1.66) times more (figure 4). they are followed by management, legal and cultural specialists and technicians; trade and restaurants workers and the employed in STEM professions. The least exposed to excessive workload were unskilled workers (odds ratio 0.75; 95% CI: 0.59-0.95) and metal and building workers (odds ratio 0.79; 95% CI: 0.68-0.91).

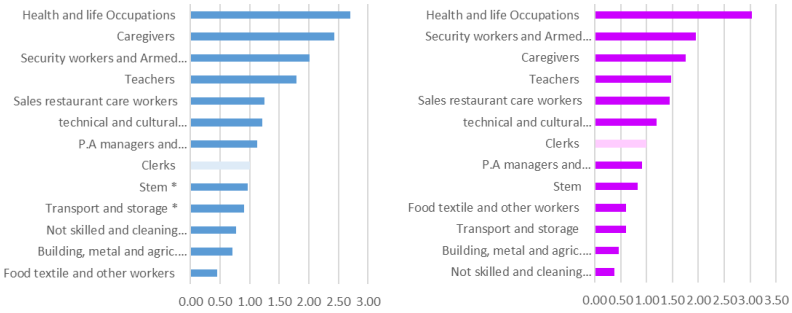
Figure 4 – *Exposure to time pressure and overload by occupations and gender. Odds ratio.*



Source: Labour Force Survey: Ad Hoc Module 2020.

Women employed in the health and life sciences professions, such as doctors, pharmacists, nurses, social workers, are more than twice as likely to be exposed to an excessive workload compared to female clerks (odds ratio = 2.02; 95% CI: 1.76-2.32). This is followed by female workers in the transport and storage sector (odds ratio 1.63; 95% CI: 1.12-2.33), those in the security and armed forces sector (odds ratio 1.56; 95% CI: 1.08-2.23) and in the STEM area (odds ratio 1.28; 95% CI: 1.05-1.56). On the other hand, female workers in the unskilled occupations show a lower risk propensity (odds ratio 0.77; 95% CI: 0.62-0.94). The probability of being exposed to bullying or harassment in the workplace is more than four times higher among men in the armed forces or security than among office workers. (odds ratio 4.37; CI 95%: 3.18-6.05). Doctors, nurses and healthcare workers are also exposed to these risks more than three times as much as white-collar (odds ratio 3.34; 95% CI: 2.34-4.81). This is followed by transport and storage workers (odds ratio 2.16), unskilled workers (odds ratio 1.90) and trade and catering workers (odds ratio 1.73). Among women, the most exposed to this risk, respect the office workers, are security and armed forces workers (odds ratio 3:43; 95% CI: 2.11-5.41) , the employed in health occupations (2.4 ; 95% CI: 1.91-3.02;). For all other categories there are no significant differences in the perception of this specific risk. The third psychological health risk factor considered is to deal with difficult people such as patients, clients, students... Exposure to this risk is highest among 'contact' professions for both genders. Among men, the most exposed are those employed in the health and life sector: odds ratio 2.70 (95% CI: 2.22-3.29), followed by caregivers (odds ratio of 2.43) and security and armed forces workers, who are twice as likely as office workers (figure 5). Teachers and those employed in commerce and restaurants are also significantly exposed to this risk.

Figure 5 – *Exposure to "deal with difficult people" by occupations and gender. Odds ratio.*



Source: Labour Force Survey: Ad Hoc Module 2020.

Even among women, who, as mentioned, are prevalent in the care and teaching professions, the most exposed professions are those in the health care sector, who are three times more likely to be exposed to this risk factor than office workers (95% CI: 2.64-3.48). security workers are twice as likely, followed by carers (odds ratio of 1.76; 95% CI: 1.39-2.20) and teachers (odds ratio of 1.47; 95% CI: 1.27-170). It is evident from the above results that those employed in the health professions are the most exposed to psychological health risks. Naturally, the occurrence of the Covid-19 Sars pandemic emergency during the collection year accentuated the occupational health and safety problems of these workers. They were exposed more because of their greater workload, but they were among the most exposed also in previous surveys. A focus on them shows that female nurses and therapists are the category most exposed: 1.42 times more likely than their male colleagues (IC 95%: 1.12-1.80).

4. Conclusion

The data of the Istat ad hoc module of 2020 on health and safety at work, together with the information from the Labor Force Survey in which this module was inserted, are an important source for investigating gender differences related to this dimension and to provide information for planning prevention activities which take into account gender differences. A fundamental and unavoidable aspect is the occupational vertical and horizontal segregation for which different tasks entrusted to men and women can entail different exposures to risk. By adopting a classification that considers the sector and function of occupation and going into the detail of the different risk factors, this study highlights that timing and excessive workload, difficulty in dealing with clients and patients, bullying and

harassment are factors particularly felt by women. The work contexts in which women are more likely to be exposed to risk factors for psychological health are those with a strong relational content. Having to deal with difficult people are particularly felt by teachers and shop assistants/restaurateurs but above all by health workers. Also, for bullying and harassment, health is the area most affected along with occupation in the safety. The pandemic has put pressure on the health system and health professions, where women are the majority especially among nurses. Data used in this study testify to this situation. Women show a higher probability of exposure to psychological risks (+ 30% more than men), especially nurses and those working in larger settings and among employees in the private sector. A comparison with the data of the next ad hoc module will make it possible to make a comparison between the period of the pandemic and the post-pandemic. Future developments of a gender approach in health and safety should consider the intersection of gender with other characteristics and therefore intersectional risks that are not the sum of exposure to multiple characteristics (e.g., gender and citizenship; gender and sexual orientation) but refers to a different "qualitative" experience not visible if analysed in a single-category perspective. A gender-sensitive approach should also overcome a cisgender and binary conception of gender. Risks related to the experience of trans people and non-binary identities within work environments permeated by a cis-regulatory and heteronormative organizational culture should be considered. Finally, a further aspect partly linked to the previous ones, is the importance of discrimination and working climate as a dimension of health and safety at work considering both the more tangible forms and the less tangible forms (De Rosa *et al.*, 2022) such stereotypes and microaggressions (Sue, 2010).

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SUMMARY

Despite the improvement in the female employment rate in recent years, up to the 2020 pandemic crisis, gender gaps in the Italian labour market are still evident, if not more pronounced following the Covid-19 pandemic. However, women's disadvantage is not only measured in the levels of employment and unemployment, but also in the type of occupation performed. In 2020, 50.9% of female employment is concentrated in only 19 occupations (men in 51 occupations). The different structure of male and female employment, with the strong horizontal and vertical segregation of women, has effects on occupational health and safety conditions at work. A gender approach is certainly useful in highlighting the peculiarities of certain work contexts and types of occupations. The aim of this study is to analyse the different likelihood of males and females to become ill with stress, depression or anxiety for work-related reasons and to perceive psychological health risks by investigating certain occupational groups, the created “job families' such as management and entrepreneurial occupation, health occupations, those in the security or trade sectors. The analysis is based on data from the ad hoc module 'Health and safety at work' included in the Labour Force Survey in the year 2020. The module collected information on accidents at work, health problems and perceptions of various risk factors for physical and psychological health in the workplace. It emerges that female workers are more critical than male workers for certain occupational groups. Overall, women suffer significantly more from stress than men and are more exposed to psychological health risk factors. In particular, women workers in healthcare, transport and storage, security and businesswomen and managers in public administration. Among the psychological risk factors for these categories, excessive workload, having to deal with difficult people, such as clients, patients and students, and being bullied or harassed are particularly felt. Above all highlighted are the unsafe conditions for psychological health in the health professions, particularly affected by the pandemic, where female disadvantage is even more pronounced.

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