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*Sécurité au travail : Comparaison entre les travailleurs étrangers et Italiens*

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# Safety at Work in Italy: A Comparison of Italians and Foreigners

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**Barbara Boschetto, Eugenia De Rosa, Cristiano Marini and Michele Antonio Salvatore**

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## Introduction

- 1 Increasingly, foreigners in Italy represent a structural component of society and the labour force (Bonifazi and Marini, 2014). The proportion of foreign workers rose from 4.3% in 2004 to 10.3% in 2014, although they continue to suffer from a serious lack of representation and remain vulnerable and disadvantaged in the labour market (Istat 2015a).
- 2 More frequently in low-skilled employment and less likely to follow upward mobility paths (Istat 2015a), foreign workers are mainly employed in heavy, dangerous, nonpermanent, poorly paid and socially disadvantaged jobs (Ambrosini 2005 ; Bonifazi 2014).
- 3 One important dimension of job quality is occupational health and safety. Most studies have shown that foreign workers bear a risk of injury higher than native born workers (Ahonen and Benavides, 2007; and Salminen 2011). In Italy too, studies focusing on restricted areas (Pittau and Spagnolo, 2003; Bacciconi et al. 2003, 2006; Colao et al. 2006; and Galossi and Mora 2008), as well as on the whole country (Salvatore et al. 2012; and IDOS and INAIL, 2014), have also shown higher risks for foreigners, especially men in certain economic sectors.

- 4 The recent economic and financial crisis has worsened working conditions by causing greater job insecurity, underemployment and an overall reduction in the quality of work, in particular for migrants (Istat, 2015).
- 5 Despite the effect of the crisis on the quality of work, the rate of accidents at work (excluding commuting accidents) fell by 36% in Italy from 2007 to 2012 (Inail 2014). This went some way towards the strategic objective of 25% fewer injuries established by the European Commission on the Strategy on Health and Safety at Work 2007-2012.
- 6 The multi-year European strategies “2002-2006,” ”2007-2012,” and “2014-2020”<sup>2</sup> (European Commission, 2002, 2007, and 2014), for which the European Commission established the guidelines for action in this field, have been adopted by member states in different ways (European Commission 2013).
- 7 In Italy, the main innovation was Legislative Decree 81/2008 (Implementation of Article 1 of Law No. 123 of August 3<sup>rd</sup>, 2007 Concerning Occupational Health and Safety), which applied European Directive 89/391 on measures to improve the conditions of health and safety at work, and formally introduced a new model of protection based on a culture of prevention and workplace risk assessment. Yet, in spite of the overall decline in the number of injuries, improvements in legislation and policy may obscure many different situations of various groups of workers in terms of both accidents at work and perceived risk of injury.
- 8 In fact, administrative data show that an overall decrease in the number of accidents at work (including commuting accidents) in Italy in the last decade (28% fewer between 2004 and 2013) has affected mainly Italian nationals, and foreigners only in recent years, at percentages of respectively 29% fewer and 20% fewer (Inail 2009, 2014).
- 9 The unequal distribution of risk of injury between Italians and foreigners reflects various factors. These include types of discrimination based on migrant status, gender, and age, as well as labour market segmentation. In Italy, male foreigners are more frequently employed in manual labour while female foreigners tend to do domestic and care work.
- 10 The administrative data do not cover another important dimension of safety at work, that is, the subjective component. Using data from the Italian Labour Force Survey, this paper intends to investigate both the subjective and objective dimension. The first is reflected in the occurrence of injury, the second in the individual's perception of being exposed to the risk of injury.
- 11 Our hypothesis is that the Italian labour market segmentation by gender and migrant status results in an unequal distribution of risk of injury and a different perception of risk by Italians and foreigners.
- 12 The main aim of this paper is to analyse foreign and Italian workers' different probabilities of accidents at work (excluding commuting accidents) and their perceived risk of injury, taking into account the different structure of the Italian labour market by gender. Secondly it examines the relationship between objective and subjective dimensions of risk of injury. Thirdly, specific groups more exposed to risk of injury and less risk aware are identified as potential targets for accident prevention measures and actions to raise awareness of health and safety rights.

## Data and methods

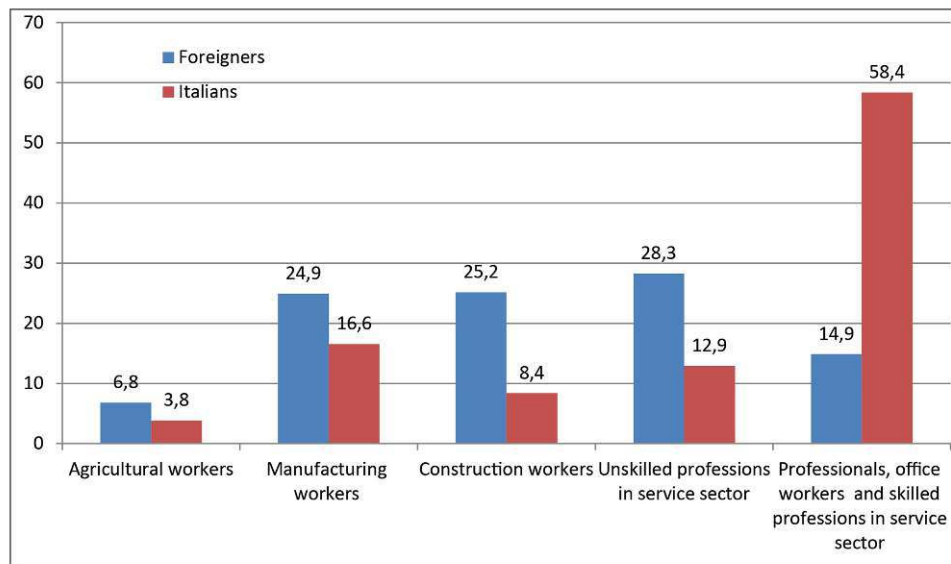
- 13 This study uses data from the Labour Force Survey in Italy for the second quarter of 2013. The survey was conducted by Italy's National Institute of Statistics (Istat) and provides official estimates of the main labour market aggregates (statistics on employment, unemployment, and people not seeking work) segmented by socio-demographic and employment characteristics. The survey is continuous and is carried out every week of the year, with results published monthly and quarterly. Participants are sampled via 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.<sup>3</sup> In the second quarter of 2013, the ad hoc module on "Health and Safety at Work" was inserted into the Labour Force Survey. The module, previously introduced in the second quarter of 1999 and 2007, consisted of three sections: accidents at work, work-related health problems, and perception of exposure to physical and psychosocial risk factors at work (Istat 2014). The first two sections concern the objective component of occupational health and safety, the last section concerns the subjective component by collecting data on the perception of different types of risk (among physical risks: chemicals, dusts, fumes or gases; noise or vibration; difficult work postures or work movements; handling of heavy loads; activities involving strong visual concentration and risk of accidents; and among psychological risks: severe time pressure or work overload; harassment or bullying; and violence or threat of violence).
- 14 The target group of our study were employed men and women<sup>4</sup> who responded to two questions: 'Have you had any accidents resulting in injury at work during the last year?' and 'Would you say that you are exposed to possible risk of injury at work?'
- 15 The analysis was carried out on 49,807 individuals, including 4,803 foreigners from high migration pressure countries<sup>5</sup> which account for approximately 96% of the total number of resident foreigners. Given their low numbers, particularly in jobs at higher risk of injury, foreign citizens of more developed countries were excluded.
- 16 Using logistic regression models, we analysed the association between nationality and the occurrence of accidents, as well as the association between nationality and the perceived risk of injury. Logistic regression models allow us to study these relationships adjusting for potential confounders. They make it possible to calculate odds ratios (ORs) that compare Italians' and foreigners' probability of injury at work. ORs were also calculated to compare the probability of perceiving the risk of injury by nationality. All of the analyses were stratified by gender and type of occupation, given the different activities performed by men and women and the associated levels of risk. In particular, the principal foreign nationalities were also analyzed.
- 17 In this study we considered only accidents occurring in the workplace, not accidents occurring while commuting between home and work.

## Results

### Men

- 18 Slightly over half (50.1%) of foreign men in Italy in 2013 were employed in industry (24.9% in manufacturing sector and 25.2% in construction); and 28.3% held unskilled jobs in services. Among Italian workers, 25.0% were employed in industry while nearly six out of ten (58.4%) were in highly skilled professions or employed as office workers (figure 1).

**Figure 1: Employed by citizenship and type of occupation (percentage). Men, Italy, II quarter 2013**



- 19 The accident rate was higher among foreigners: 3.4% had suffered at least one injury in the last twelve months, compared to 2.6% of Italians (table 1). Among the workers in the manufacturing sector, foreigners presented a higher incidence than Italians (6.2% compared to 3.8%), especially plant operators and machinery operators (8.5% vs. 4.0%), and those in more qualified professions (1.9% vs. 1.5%). For other types of occupations, the Italians were more likely to have reported an injury: for construction workers 4.8% compared to 3.3% of foreigners.

**Table 1: Accidents at work (percentage and OR adjusted by age) and perceived risk of accidents at work (percentage and OR adjusted by age and accident) by citizenship and occupation. Men, Italy, II quarter 2013**

Type of occupation	Accidents at work			Perceived risk of accidents at work			
	%		OR (CI 95%) Foreigners vs Italians	%		OR (CI 95%) Foreigners vs Italians	
	Foreigners	Italians		Foreigners	Italians		

Agricultural workers	1.7	2.7	0.93	0.39-2.26	38.4	48.2	0.90	0.64-1.25
Manufacturing workers	6.2	3.8	1.41	0.98-2.01	62.3	61.0	1.02	0.86-1.21
<i>Plant operators, machine operators and vehicle drivers</i>	8.5	4.0	2.31	1.36-3.93	63.0	59.8	1.10	0.83-1.48
Construction workers	3.3	4.8	0.61	0.36-1.02	73.2	68.3	1.22	1.00-1.49
Unskilled professions in service sector	2.8	4.4	0.82	0.50-1.34	55.4	59.4	0.57	0.48-0.67
Professionals, office workers and skilled professions in service sector	1.9	1.5	0.77	0.31-1.90	26.1	33.8	0.71	0.56-0.89
Total	3.4	2.6	1.31	1.04-1.64	54.3	46.5	1.36	1.25-1.48

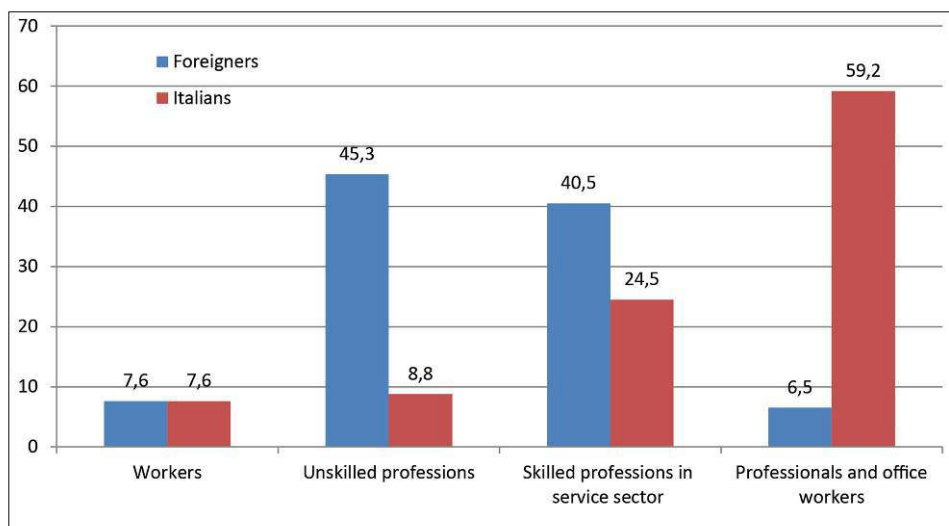
- 20 Among foreigners, the proportion of those who perceive the risk of injury in the workplace was even higher, at 54.3% compared to 46.5% for Italians. The incidence for foreigners was higher among construction workers (73.2% compared to 68.3% of Italians) and workers in the manufacturing sector (62.3% compared to 61.0%).
- 21 Foreigners were significantly more likely than Italians both to suffer an injury and to perceive the risk: the odds ratio of accidents, adjusted for age, was 1.31 (95% CI: 1.04-1.64); the odds ratio of the perceived risk of injury, adjusted for age and accident occurrence, was 1.36 (95% CI: 1.25-1.48).
- 22 As for accidents by job category, among workers in manufacturing, foreigners presented odds 1.41 times higher than Italians (95% CI: 0.98-2.01). In particular, the odds ratio for plant operators and machine operators reached 2.31 (95% CI: 1.36-3.93). For the other job categories, there were no significant differences by nationality except for construction workers, where accident occurrence was lower among foreigners (OR= 0.61; 95% CI: 0.36-1.02).
- 23 Focusing on the perceived risk of injury among construction workers, foreigners presented odds that are 1.22 (95% CI: 1.00-1.49) times that of Italians. In contrast, the perception of foreigners was lower among unskilled workers in services (OR=0.57; CI 95%: 0.48-0.67) and among highly skilled professionals (OR= 0.71; CI 95%: 0.56-0.89). For other categories, including manufacturing workers and the subcategory of plant operators and machine operators, there were no significant differences of perception by nationality (but, as just stated, there were such differences in terms of risk of injury).
- 24 Among foreign workers in manufacturing, we analyzed the differences between each of the three main nationalities (Romanians, Albanians and Moroccans) and other citizens.

- 25 Romanians and Moroccans presented a higher risk of injury (OR equal to 2.10 and 3.28 respectively) but, in the case of Romanians, the same perception as Italians, while a greater perception of this risk was detected only for Moroccans (OR= 2.47). For Albanians, there were no significant differences compared to the rest of the foreign population for either injury rate or perceived risk.

## Women

- 26 Foreign women in Italy were almost totally employed in the service sector (9 out of 10) and mostly in unskilled occupations (45.3%); only 6.5% were employed in highly skilled professions or as office workers, compared to 59.2% of Italians (figure 2).

**Figure 2: Employed by citizenship and type of occupation (percentage). Women. Italy. II quarter 2013**



- 27 The proportion of employed women who suffered an injury at work in the last 12 months amounted to 1.5% for Italians and 1.6% for foreigners (table 2).
- 28 Foreign women presented a higher incidence than Italians in highly skilled professions (1.5% compared to 1.2%) and in unskilled occupations (2.1% compared to 1.9%), particularly among cleaners (4.9% compared to 2.2%). For other occupations, the percentage of those reporting injury was higher for Italians: among blue collar workers it was 3.0% compared to 1.8%, while for skilled workers in the service sector it was 1.7% compared to 1.1%.

**Table 2. Accidents at work (percentage and OR adjusted by age) and perceived risk of accidents at work (percentage and e OR adjusted by age and accident) by citizenship and occupation. Women. Italy. II quarter 2013**

Professione	Accidents at work		Perceived risk of accidents at work	
	%	OR (CI 95%) Foreigners vs Italians	%	OR (CI 95%) Foreigners vs Italians

	Foreigners	Italians			Foreigners	Italians		
Workers	1.8	3.0	0.61	0.18-2.04	48.6	45.8	0.87	0.63-1.21
Unskilled professions	2.1	1.9	1.08	0.62-1.91	26.9	41.2	0.50	0.42-0.60
Cleaners	4.9	2.2	2.15	0.97-4.72	41.3	40.1	0.86	0.63-1.18
Skilled professions in service sector	1.1	1.7	0.60	0.31-1.18	24.1	36.3	0.55	0.47-0.65
Professionals and office workers	1.5	1.2	1.45	0.38-5.61	26.4	28.5	0.91	0.63-1.32
Total	1.6	1.5	1.09	0.77-1.55	27.1	33.1	0.76	0.69-0.84

- 29 Among foreign women, the proportion of those who perceive the risk of suffering an injury in the workplace was lower, at 27.1% compared to 33.1% for Italians. The lower incidence among foreigners occurred in all occupational groups, particularly among unskilled workers (26.9% compared to 41.2%).
- 30 Thus, controlling for age, foreigners did not present significant differences in the probability of suffering injury, either in general or in relation to the job categories considered. Only for cleaners was the risk higher for foreigners than Italians (OR= 2.15; CI 95%: 0.97-4.72).
- 31 Foreign women presented a significantly lower perceived risk than Italians (OR=0.76; CI 95%: 0.69-0.84), controlling for age and occurrence of injury. In particular, they showed a lower perception of risk both in unskilled occupations (OR=0.50; CI 95%: 0.42-0.60) and in skilled service occupations (OR=0.55; CI 95%: 0.47-0.65). There were no significant differences by nationality in the other job categories.

## Conclusions

- 32 Our findings confirm that foreign workers in Italy are a disadvantaged segment of the labour market; as well as working mainly in lower paid occupations with few security and promotion opportunities, they are also less protected in terms of occupational health and safety.
- 33 The segmentation of the labour market impacts health and safety, with gender and nationality interacting to shape occupational health and safety differences.
- 34 The overall decrease in the number of accidents at work in Italy in recent years has not substantially affected the difference between Italians and foreigners, with foreigners bearing a higher risk overall.
- 35 Male foreigners are the most disadvantaged, both in terms of accidents at work and risk perception. In particular, the risk of injury for Italians is higher among manufacturing workers (25% of the total male foreign employed), and especially plant operators,



machine operators and vehicle drivers. However, in this category foreigners show the same level of perception as Italians. Specifically, among foreigners, a higher probability of accidents at work is observed among Moroccans and Romanians, but Romanians do not perceive a greater risk than those of other nationalities. This result confirms the disadvantaged status of Romanians in Italy, compared to both natives and other foreigners. Romanians find work more readily, but this is due to the fact that they tend more often than other immigrants to accept underemployment and temporary jobs. This disadvantage of the Romanians may also be due to the more recent influx from Romania, especially compared to that of Albania.

- 36 There are conflicting findings for construction workers: foreigners have a lower probability of being injured than Italians, although they have a greater perception of injury. From 2007 to 2013, the accident rate in the construction sector decreased from 4.3% to 3.9% for Italians, and decreased even more for foreigners, from 7.5% to 2.7%. Yet the discrepancy between a lower accident rate and higher perception of risk is probably due to underreporting of accidents rather than to a genuine improvement in safety conditions. The economic crisis has worsened working conditions in this sector and it is, in fact, likely that unregistered contracts have made overseas workers vulnerable to blackmail.
- 37 Among women, no differences in the rate of accidents at work emerge between Italians and foreigners, while the perception of risk is lower among foreigners. The only occupation in which foreign women are at a clear disadvantage is cleaning, where their risk of accidents is more than double that of Italians, while the perception of risk is similar for the two groups. Cleaning services are one of the few sectors characterized by growing employment in the recent crisis (Istat 2015b), and include potential risk factors such as subcontracting, small business size, and long and unusual working hours. The European Agency for Safety and Health at Work (EU-OSHA 2009) found that as workers, cleaners face particular risks such as slipping, tripping and falling, especially during cleaning operations using liquids. Specific measures are therefore required in this sector, and cleaning firms need to be engaged on the basis of the quality of service rather than cost.
- 38 Overall, the empirical evidence suggests a need to implement measures targeted at foreigners. In particular, health and safety training taking into account language difficulties should be promoted in sectors where more foreigners are more widely employed. At the same time, special measures to increase awareness of safety rights in the workplace, especially in sectors with a greater chance of injury and lower perception of risk, are also required.

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## NOTES

1. Italy's National Institute of Statistics
  2. Three major challenges have been identified: to improve implementation of existing health and safety rules; to improve the prevention of work-related diseases; and to take account of the ageing of the EU workforce.
  3. Permanent members of collective facilities (hospices, children's homes, religious institutions, barracks, etc.) are excluded.
  4. Excluding those in the armed forces.
  5. High migration pressure countries do not include: in Europe, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Luxembourg, Netherlands, Portugal, United Kingdom, Spain, Sweden, Andorra, Cyprus, Iceland, Lichtenstein, Malta, Monaco, Norway, San Marino, Switzerland and the Vatican; in North America, Canada and the United States; in Asia, Israel and Japan; and all of Oceania.
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## ABSTRACTS

Foreigners in Italy are mainly employed in low-skilled manual jobs where there is a greater exposure to the risk of injury. This study aims to analyze foreigners' and Italians' different probabilities of accidents in the workplace, and their perception of this risk, as well as the objective and subjective dimensions of injury at work.

The data is taken from the ad hoc module on "Health and Safety at Work" in the Labour Force Survey (Istat)<sup>1</sup> in the second quarter of 2013. This section also collected data on accidents at work and the perceived risk of accidents at work.

Our findings identify critical issues for foreign workers from countries with high migration pressure compared to Italian born workers. Overall, foreign men, in particular, workers in manufacturing, especially plant operators and machine workers, have a significantly higher risk of injury than Italians. Among women, foreign cleaners are clearly disadvantaged compared to Italians. There is a discrepancy between the subjective and objective dimensions of the phenomenon, because, in the presence of a greater risk of injury for foreigners, perceived risk is not always significantly higher than Italians.

En Italie, les travailleurs étrangers sont principalement employés dans les emplois peu qualifiés pour lesquels il existe une grande exposition au risque de blessure.

Cette étude vise à analyser les différentes probabilités d'accidents au travail des travailleurs étrangers et Italiens, de leur perception respective de risque ainsi que les dimensions subjective et objective de ces blessures au travail.

Les données proviennent de la section "Santé et sécurité au travail" de l'"enquête sur la force de travail" (Istat) réalisée durant le second quart de l'année 2013. Les données sur les accidents du travail, ainsi que la perception du risque sont également collectées

Les résultats montrent que le risque est plus fort pour les travailleurs étrangers originaires des pays à forte pression migratoire que chez les travailleurs nés en Italie.

De manière générale, les étrangers masculins, en particulier ceux qui travaillent dans l'industrie,

et plus particulièrement ceux qui travaillent en usine, sur des machines, ont un risque significativement plus élevé que les Italiens.

En ce qui concerne les femmes, le personnel de nettoyage est nettement désavantagé par rapport aux Italiens

On remarque également un écart entre la perception objective et subjective, notamment en cas de risque élevé de blessures, car dans le cas du risque élevé de blessures, la perception n'est pas significativement plus élevée chez les travailleurs étrangers que chez les Italiens.

## INDEX

**Keywords:** migrant worker, accident at work, perceived risk of injury, labour market, Italy

**Mots-clés:** travailleur migrant, accident au travail, risque perçu de blessure, marché du travail, Italie

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