Abstract
A discussion on the ageing of the working population and the necessary management strategies for this new paradigm is presented in this paper. The purpose of this article is to show that "older worker" is not, in itself, a risk for the management of occupational risk. A literature review was carried out concerning prejudices towards seniors workers (age over 50); e.g., it is a common belief that seniors workers are: i) more susceptible to accidents, ii) less reliable and iii) more resistant to change. However studies of the working population in Europe contradict such prejudice, showing that with adequate management of organizational environment, corporations have much to gain from the diversity of ages and experiences.

Keywords: Occupational hazard, active ageing, senior worker, emerging risk

1. Introduction
According to United Nations statistics, the world population of people aged over 60 will double in proportion, from 11% in 2010 to 21.8% in 2050, representing in absolute numbers approximately 2 billion of senior citizens (UN, 2009; WHO, 2002). Statistics of the European Union (EU27), pose relevant issues about ageing workforce in Europe, that need to be discussed amid decision makers, whether at the level of nations or companies. Eurostat population projections (Eurostat, 2010) show that the population ageing occurs across the 27 EU Member States, and:

i. Population will become older, projected median age rising from 40.4 years (2008) to 47.9 years (2060);
ii. The proportion of persons aged 65 years or over in the total population is forecast to increase from 17.1% (84.6 million) in 2008 to 30.0% (151.5 million) in 2060;
iii. The number of persons of working age (15-64 years old) will shift from 4 persons in 2008 to 2 persons in 2060 for every person aged 65 years or over (Eurofound, 2009).
These demographic changes will have major consequences for the welfare state, with impacts on old-age pensions, and higher health care costs for an increasing number of chronically ill seniors. In the meantime, the share of people that may contribute to social security premiums is falling. In this context, more and more people across Europe will have to work until an older age, both to meet the demand for labor as to alleviate the pressure on social security systems and pensions (Hershey et al., 2010).

As a result, the whole society (employers, employees and the state) need to develop actions towards prolongation of working life. Currently this strategy is to promote active aging defined as the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age (WHO, 2007, p.5). If it is urgent to promote active aging in organizations, one must question: in terms of risks in the workplace, what distinguishes them from other older workers (over 50 years)?

Using the age of 50 to define “older workers” is arbitrary. However, as many studies and also most policy-makers use the age of 50 to define the category of older workers in the labor market, we adopted this definition (Anxo et al., 2012). This article seeks to show that the age of the worker does not represent an increased risk, but a factor to be managed by the organization of work. Incidentally, in this aspect, which shows an increased risk to the health and safety of the older worker is discrimination and prejudice towards these professionals.

1.1. Longer Active Life
Active ageing allows people to realise their potential for physical, social, and mental well-being throughout the life course and to participate in society, while providing them with adequate protection, security and care when they need. This encompasses an increase in the labour force participation of older workers as well as the promotion of productive activities in the life phase of retirement such as the involvement of citizens in and commitment to matters of civil society (Henkens & Schippers, 2012). Active ageing is to grow old in good health, continuing to live independently and play a full role in society. An essential part of this goal is to enable older workers to remain healthy for longer in the labor market (Frerichs et al., 2012).

According to Frerichs & Taylor (2009), from the last decade, the member states of the European Union took a clear shift of emphasis from policies based primarily on the provision of “early exit” from the labour force to promoting “active” ageing aiming at an increase in retirement age.

Thus, many European companies have facilitated and supported the extension of the working life of individuals, through measures such as: flexibility, telecommuting, management of health and safety at work, lifelong learning, knowledge transfer experience for less experienced employees, ergonomic desktop and work organization (Camarinha-Matos & Afsarmanesh, 2011).

1.2. Work's Organization and Older Workers
However, the presence of older workers in all sectors and functions of organizations will bring implications for work organization. The organizations have to adapt environments and jobs to workers with less physical strength and mobility, but with more experience in the development of the tasks. Biological ageing is an irreversible process and involutive, manifested progressively the level of cells, organs and systems, and its effects on individuals are quite heterogeneous (Motta et al., 2005, p. 242). Therefore, organizations must put the emphasis on "age management", i.e. the ability of the individuals, seeking a balance between work and individual resources (Sedlatschek, 2012). The age should be only one among several other factors that managers need to take into account when considering the "adequacy" between workers and specific types of work.

The work ability is the balance between work and individual resources. Besides the workplace, also family and close community influence this balance. Also according Sedlatschek (2012), age management has the following eight goals:
1. Better awareness about ageing
2. Fair attitudes towards ageing
3. Age management as a core task and duty of managers and supervisors
4. Age management included in HR policy,
5. Promotion of work ability and productivity
6. Lifelong learning
7. Age-friendly work arrangements, and
8. Safe and dignified transition to retirement.
Anxo et al. (2012) analyzed the main evolutions and the current situation of the 50-74 year olds on the labour market in eight European countries (Denmark, France, Germany, Italy, The Netherlands, Sweden, Poland and the UK). The authors concluded that stretching the permanence of people at work brings social implications, such as increased inequalities between groups of older workers, increasing uncertainty about the age of retirement, the way to keep lower educated workers in their jobs, sustainable working conditions, increasing risks of age discrimination.

The dominant approach in organizations is still focused on the idea that older workers represent an increased risk in the workplace. But gradually has been gaining ground a model based on the premise that the older worker is a potential to be recognized and used by nations using increasingly the skills, experience and wisdom of the elderly, not only to take the initiative for their own betterment but also to participate actively in the improvement of the whole society. In the European Parliament resolution on the Second United Nations World Assembly on Ageing (European Parliament, 2002), the European Parliament:

*Reiterates its opinion that it is necessary to step up the fight against all forms of discrimination on the labour market, in particular discrimination against older workers, and to encourage, through refresher and vocational retraining measures, including new technologies, and through changes in the organization of work and working hours, and industrial safety and health protection in keeping with the needs of the elderly, the re-entry of persons excluded from the labour market into working life; believes that phased retirement schemes are a possible way to preserve older workers’ experience and knowledge by handing it down to younger ones.*

The resulting Political Declaration of the Second World Assembly on Ageing, 2002, held by the UN in Madrid, in Article 5, the nations represented there, brings the following commitment:

*They reaffirmed their commitment not to limit efforts to promote democracy, strengthen the rule of law and promoting equality between men and women, as well as promote and protect human rights and fundamental freedoms, pledging to eliminate all forms of discrimination, among them, discrimination on grounds of age (UN, 2002, p. 10).*

Ageing is perceived by many as a threat instead of one of our greatest achievements. The growing number of older people is seen as a burden on the working-age population. These fears neglect, however, the fact that a growing number of older people are in good health, have valuable skills and experience and are willing to make a significant contribution to society, a contribution from which young people can strongly benefit. Allowing people to stay active as they grow older and to continue contributing to society is key to tackling the challenge of demographic ageing (Eurobarometer, 2012).

3. Results and Discussions

Several studies have shown that age-related bias is quite prevalent in today's society, being even more present than sexism or racism in the workplace (Anxo et al., 2012; Segrave, 2001). Older workers have been stereotyped in terms of productivity, reliability, adaptability and resistance to innovation. However, several studies have shown that such is not the case. In fact, there is evidence that older workers are more reliable and productive, and are less prone to accidents than younger workers (EUROSTAT, 2006; Henkens, 2005; Segrave, 2001).

3.1. Older workers are more resistant to changes

Older workers can acquire new knowledge and skills. The learning does not depend on age, but the learning process changes with age (Ilmarinen, 2012). It is therefore important that older workers have access to training and equal opportunities to acquire new knowledge and update their professional skills. In lifelong learning, should be used for learning and teaching strategies appropriate (Rupp, Vodanovich & Crede, 2006). Thus, the older people will not change the combined resistance to them.

3.2. Productivity and older workers

According to Conen, Van Dalen & Henkens (2012, p.630), the empirical evidence on the relationship between age, wage and productivity is inconclusive, because in studies correlating age with costs and labor productivity, some studies show that there is a gap between wage and productivity increase with age (see Kotlikoff & Gokhale, 1992; Flabbi & Ichino, 2001; Hellerstein & Neumark, 2004; Ilmakunnas & Maliranta, 2005), while others find little evidence of this gap (Van Ours & Stoeldraijer, 2011). Employers often view older workers as more productive, but also more costly, than someone younger in a similar position (Midtsundstad, 2011).
3.3. Accidents at work and older workers

From Table 1 it can be concluded that the absence from work due to accidents at work for a day or more is quite stable throughout the age groups, but the prolonged sick leave is related to age. Older workers with more accidents often experience lack of work longer than younger workers. The occurrence of accidents decreased in most age groups between 1999 and 2007, but slightly increased in workers aged 15 to 24 years from 3.8% in 1999 to 4.0% in 2007 (figure 1). Increased employment rates and the ageing of the workforce in the EU might result in a decreasing overall accident rate. However, it was found that older workers with accidents often reported more prolonged absence from work than younger workers. If employment in the service sector and in highly skilled, non-manual occupations, where accidents are generally less frequent than in other sectors and occupations, continues to grow, the occurrence of accidents might decrease in the future on the EU27 (Eurostat, 2010, p.35).

3.4. Health and older workers

The presence of individuals in the workplace are closely related to their ability to work. The trend toward decreased working capacity with age due to difficulties in adapting between environmental conditions of work and changes in individual features (Sedlatschek, 2012).

According to Ilmarinen (2012), the major health problems of older workers consist of Musculoskeletal disorders and mental disorders of the forum, and the depression is also one of the most common reasons for work disability and early retirement. Although health and physical fitness tend to deteriorate as we get older, there are several other functions that improve with age. For example, strategic thinking, wit, consideration for others, wisdom, decision-making capacity, capacity rationalization, control of their own lives, the holistic perception and language skills improve with age (Sedlatschek, 2012). Sick leave of at least one day but less than one month decreased with age in workers, whereas sick leave of at least one month increased with age (EUROSTAT, 2010).

According to the LFS ad hoc module 2007 apud Eurostat (2010), the proportion of workers with a health problem related to the work that resulted in no sick leave was relatively similar in all age groups (41% - 42%), being that the sick leave of one or more days increased with age (from 46% to 36%), and the occurrence of sick leave of a month or more increased with age, from 13% to 23% (figure 2). In the EU-OSHA’s European Risk Observatory’s expert forecast, it was described that workers highly exposed to a combination of physical and psychosocial risk factors at work are more likely to report musculoskeletal problems than workers exposed to only physical risk factors of musculoskeletal disorders or psychosocial risks (Eurostat, .

4. Conclusion

The effects of biological aging in people are very heterogeneous. Therefore, organizations must put the emphasis on "age management", i.e. the ability of the individuals, seeking a balance between work and individual resources. Currently organizations and European governments has adopted a management model based on the premise that the older worker is a potential to be recognized and harnessed, using increasingly the skills, experience and wisdom of the elderly, not only to take initiative of their own betterment but also to participate actively in the improvement of the whole society.

According to Eurobarometer (2012, p. 25), generally people feel that older people play a major role in society, especially within their families where 82% feel they have a major role. Seven out of ten feel that they have a major role in politics (71%) and in being active in the local community (70%). Also, two thirds (67%) feel that they play a major role in the economy. Notably, most citizens (nine out of ten or more) feel that people 55 years and over have a role in each of the areas discussed (either major or minor) and only 4% or less feel that they have no role at all.

To Hutsebault (2003), the promotion of active aging should be the goal of every society:

- Policy makers need to be convinced of the need to extend their working lives;
- Employers must provide a suitable working environment to promote active aging potential of an intergenerational workforce, discouraging early retirement;
- Unions need to fight for better working conditions for an active life more productive.

Older workers do not represent the simple age condition, an increased risk in the workplace. Before there are many studies that identify the presence of elders in the workforce as an asset in intergenerational interaction. Each generation has its own strengths and weaknesses, the strengths of older workers should be better identified and leveraged in order to become valuable assets in every workplace.
Acknowledgment

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References


Figure 1: accidental injuries work-related in different age groups by year (%)
Source: Adapted the Eurostat (2010, p.35)

Figure 2. Sick leave in employed persons with a work-related health problem in the EU27 by years (%)
Source: Adapted the Eurostat (2010, p.53)

Table 1. Accidents at work (by year), sick leave and prolonged sick leave in the EU27 by age (%)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Accident(s) at work</th>
<th>Sick leave &gt; 1 day</th>
<th>Sick leave &gt; 1 month</th>
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<tbody>
<tr>
<td>15-24</td>
<td>3.9</td>
<td>70.8</td>
<td>14.3</td>
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<td>25-34</td>
<td>3.4</td>
<td>71.6</td>
<td>19.5</td>
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<tr>
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