



Management Decision

Engaging public servants: Public service motivation, work engagement and work-related stress

Silvia De Simone Gianfranco Cicotto Roberta Pinna Luca Giustiniano

Article information:

To cite this document:

Silvia De Simone Gianfranco Cicotto Roberta Pinna Luca Giustiniano , (2016), "Engaging public servants", Management Decision, Vol. 54 Iss 7 pp. 1569 - 1594

Permanent link to this document:

<http://dx.doi.org/10.1108/MD-02-2016-0072>

References: this document contains references to 105 other documents.

To copy this document: permissions@emeraldinsight.com

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

Engaging public servants

Public service motivation, work engagement and work-related stress

Engaging
public
servants

Silvia De Simone and Gianfranco Cicotto
*Department of Pedagogy, Psychology, Philosophy,
University of Cagliari, Cagliari, Italy*

Roberta Pinna
*Department of Economics and Business,
University of Cagliari, Cagliari, Italy, and*

Luca Giustiniano
LUISS Guido Carli University, Rome, Italy

1569

Received 3 February 2016
Accepted 1 May 2016

Abstract

Purpose - Considering the ongoing international debate on the role of public administrations in economic systems, the interest around public service motivation (PSM) has significantly grown among practitioners and scholars in the past two decades. Following the research streams that have investigated topics of organizational behavior within the public context, the purpose of this paper is to examine the influence of PSM on public employees' feelings of job satisfaction. The novelty of the study lies in linking some characteristics of the work context presumed to be more prevalent in public organizations with specific job characteristics, regarded as relevant antecedents of job satisfaction. **Design/methodology/approach** - The study is based on two complementary studies conducted in an Italian public administration. The paper shows how PSM influences job satisfaction, job engagement, and life satisfaction.

Findings - This paper shows how PSM influences job satisfaction, job engagement, and life satisfaction. The findings display how job engagement affects both job and life satisfaction in such contexts. Additionally, the findings display how job engagement affects both job and life satisfaction in such contexts.

Research limitations/implications - Although based on a specific context of public administration, the analysis allows some generalizations.

Originality/value - Based on these results, the paper contributes to two main streams of the literature. First, it enriches the existing research on PSM by analyzing how it can be managed in complex organizations. Second, it informs the literature on job satisfaction and work-related stress and relates to the intersection between organizational behavior and human resource management that informs the drawing up of HR policies. Furthermore, the paper sheds new light on how to deal with such problems and at the same time opens new avenues for investigations.

Keywords Public service motivation, Job satisfaction, Work-related stress

Paper type Research paper

1. Introduction

While an organization can offer a good quality of working life, it cannot offer *per se* a good quality of health or well-being. It can only offer conditions to foster those things. Nonetheless, such efforts might generate both negative and positive influences upon working life and individual satisfaction. Thus, better understanding is needed in order to guide the design of HR policies, mostly in less managerial-oriented settings, like some public administrations.

As interactions between employees and organizations are complex in nature, this study attempts to provide a deeper understanding of them. Within such a framework,



the study focusses on work-related stress (WRS), public service motivation (PSM), work engagement, and job and life satisfaction in a public administration.

Occupational stress has attracted the attention of a large amount of research and, despite almost two decades of studies, the interest in the topic does not show signs of weakening. The fact that prolonged or intense stress can have a negative impact on individuals' health is by now generally accepted (Cooper *et al.*, 2001). WRS is one of the major health and safety problems in the EU (EU-OSHA, 2014) and the USA (American Institute of Stress, 2013) which does not only affect employees' psycho-social conditions. In fact, it might also result in productivity losses, absenteeism, and eventually employee turnover. Such phenomena have been proved to have a close relation with job satisfaction, not only in terms organizational productivity. Job satisfaction has been found to influence the organizational productivity as it might reduce absenteeism and turnover (Spector, 1997).

Several studies have found that, compared to private employees, public servants present higher levels of dissatisfaction with their job (Baldwin and Farley, 2001; Rainey, 1989; Steel and Warner, 1990). Notwithstanding the institutional missions that often rely upon altruistic or higher order needs, the very structure of these organizations characterized by greater levels of bureaucracy and inner conflict potential jeopardize and limit their realization, and so dissatisfaction eventually prevails. Therefore, more than other types of organizations, public administrations expose employees to motivational tensions involving PSM, work engagement, job satisfaction, and WRS.

PSM is characterized by altruistic intentions that motivate individuals to serve the public interest (Perry and Wise, 1990). According to Perry and Wise (1990), individuals with high levels of PSM should therefore display significantly higher levels of job satisfaction, performance, and commitment in public organizations in comparison with individuals with lower levels of PSM. Some previous research has shown that work context and job characteristics may play a central role in determining job satisfaction (e.g. DeSantis and Durst, 1996). Little research, however, has examined the implications of PSM and work engagement on job satisfaction and work life. The conclusion that understanding and fostering PSM would help public organizations improve the overall public service performance (Perry and Wise, 1990) has certainly contributed to the growing interest in PSM. However, the supposed relationship between PSM, work engagement, and job satisfaction represents an area of investigation as yet uncovered. Work engagement can be considered a positive, fulfilling affective motivational state of work-related well-being. To this extent, it can be seen as the antipode of job burnout. Engaged employees are seen as energetic and enthusiastically involved in their job (Bakker *et al.*, 2008). Existing research investigates work engagement through two dimensions: energy (vigor) and identification (with one's work). So work engagement reflects intense and energetic involvement in work. Connections between corporate and individual values are central to such a discourse. Research has indeed shown that employees who perceived a high level of congruence between their characteristics and the requirements of the job experience a high level of job satisfaction (Brick *et al.*, 2002).

This paper discusses the results of a research project commissioned of the authors by an Italian public administration on the assessment of the risk stress at work aimed at analyzing psychosocial factors that may prevent the negative effects of stress on workers. The purpose of this paper is to explore the relationship between seven primary sources of stress at work (Management Standards Indicator Tool, "HSE"),

PSM, job satisfaction, work engagement, and life satisfaction in a specific profession, that of inspectors. The paper also studies the specific stressors that characterize the work of judicial police officers of the inspectors. The case is representative in terms of the attractiveness and reputation of the public sector, which is consistently characterized by the noncompetitive level of pay and the lack of mobility of career paths. Such conditions might represent a serious threat for PSM and job engagement as well as increase WRS and jeopardize the well-being of employees.

The paper is structured as follows. First, the theoretical framework of the research is discussed, following the research methodology and the analysis conducted by using two complementary studies, a survey based on a questionnaire administered to all inspectors of an administration and a second study in which members of the inspection service were involved in five focus groups to investigate the specific stressors that characterize the work of judicial police officers of the inspectors. Finally, the paper closes with the discussion of the findings and their implications for theory and practice.

2. Conceptual framework

2.1 WRS

The experience of WRS has attracted the attention of a large number of scholars during the last two decades - attention that has not waned. Research shows that prolonged or intense stress can harm individuals' health (Cooper *et al.*, 2001; Johnson *et al.*, 2005), depending also on differences in occupations and their basic stressors. The model proposed by Cooper and Marshall (1976) includes five sources of work stress: factors intrinsic to the job, including poor physical working conditions, work overload, or time pressure; role ambiguity and role conflict in the organization; career development; relationships with bosses or colleagues; and organizational structure and climate, including lack of involvement in decision making. The resulting amount of stress experienced by employees is likely to be related to the interaction of a set of factors including occupation, presence of work stressors, and the support employees receive. Some studies have addressed the sources of stress characterizing work environments and their psychosomatic symptoms (Cooper and Marshall, 1978; Sutherland and Cooper, 1988, 1990). Public contexts represent a field in which work-related stressors are more likely to appear, because of several reasons: the service and intangible nature of the activities generally deployed, the lack of structured HR systems encompassing the pay and career systems, the lack of competitive logics, and the eventual exposure to the general public.

Public service organizations are subject to additional sources of stress, being embedded in more widely regulated and institutionalized frameworks in which new practices and operational procedures are often infused into the organizational settings in a top-down, a critical manner (e.g. Camilleri, 2006). Such stressors add to the regular ones to which every organization is potentially exposed. So public service organizations seem to have a structural level of risk of WRS which is higher than in other organizational settings. Accordingly, employees appraise their work as threatening or challenging and are afraid that their coping resources are insufficient or inadequate for managing the situation (Lazarus and Folkman, 1984). Apart from the physiological effects (e.g. impact on the autonomic nervous systems) and psychological reactions (e.g. isolation, frustration), stress may affect the organizational activities, threatening the motivational activation of individuals. Such motivational symptoms of discomfort or strain include loss of enthusiasm, loss of interest, erosion of work motivation, disappointment, boredom, and demoralization (e.g. Maslach *et al.*, 2001).

Individuals face the risk of stress by activating coping strategies aimed at mastering, tolerating and reducing the stressors as they tend to exceed the individual resources (Lazarus and Folkman, 1984). Up to the point at which individuals appraise their coping resources as adequate for managing the contingent situation, they will not experience distress but will be enacted by the sense of challenge (LePine *et al.*, 2005), as resourceful individuals tend to be less vulnerable to stress (Lazarus and Folkman, 1984).

2.2 PSM

The framework for PSM has been effectively reconstructed by Schott *et al.* (2014) who draws upon the work done by Perry and Wise (1990). From that seminal paper, the interest and research in PSM has increased immensely among both scholars and practitioners of public administration (Perry and Hondeghem, 2008). Perry and Wise (1990), in using the concept of PSM, refer to “an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations” (p. 368). Alternatively, Rainey and Steinbauer (1999) define it as “a general, altruistic motivation to serve the interest of a community of people, a state, a nation or humankind” (p. 20). PSM can be also seen as “a motivational force that induces individuals to perform meaningful public service (i.e. community and social service)” (Brewer and Selden, 1998, p. 417). As Brewer *et al.* (2000) note, PSM is important not just to motivation but also to productivity, improved management practices, accountability, and trust in government, making it one of the major topics of investigation in public administration today. Vandenaabeele’s (2007) definition goes a step further because it also refers to the origin of PSM. In his view, PSM is “the belief, the values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate” (p. 549). More recently, Perry and Hondeghem (2008) see PSM as “an individual’s orientation to delivering services to people with a purpose to do good for others and society.” In spite of this definitional variety, what unifies all definitions is the idea of providing “meaningful public service” or serving the community. Perry and Wise (1990) maintain that individuals with a high sense of public interest are more likely to choose work as public servants. This assertion is supported by several studies showing differences between the levels of PSM in public and private contexts (Houston, 2000; Rainey, 1982; Wittmer, 1991). As summarized by Moynihan and Pandey (2007, p. 41), employees with high levels of PSM appear to contribute in positive ways, as “they are more willing to engage in whistle-blowing to protect the public interest (Brewer and Selden, 1998), they exhibit higher levels of organizational commitment (Crewson, 1997), they believe that their jobs are important, which, in turn, leads them to work harder (Wright, 2001), they are more likely to be high performers and enjoy higher job satisfaction, and they are less likely to leave their jobs” (Naff and Crum, 1999). While the majority of scientific studies support these results, further investigation seems to be needed.

A variety of empirical studies on PSM have explored its antecedents and outcomes. For example, Perry and Wise (1990) address the impact of institutional effects on PSM; Camilleri (2007) and DeHart-Davis *et al.* (2006) investigate the effect of demographic antecedents on PSM, such as age, gender, and level of education (Bright, 2007; Camilleri, 2007; DeHart-Davis *et al.*, 2006; Pandey and Stazyk, 2008; Perry, 1997); and Moynihan and Pandey (2007) analyze the effect of organizational influences.

PSM is most often investigated as an independent variable, relating to the founding assumption that “in public service organizations, PSM is positively related to individual performance” (Perry and Wise, 1990, p. 370). So individuals with high levels

of PSM are expected to perform well, given the perceived meaningfulness of their jobs (Perry and Wise, 1990; Wright and Grant, 2010). Computationally, the outcomes of PSM are mostly measured by self-reported outcome variables, such as individual performance (Alonso and Lewis, 2001; Frank and Lewis, 2004; Leisink and Steijn, 2009; Naff and Crum, 1999; Vandenberghe, 2009), organizational commitment (Camilleri, 2006; Crewson, 1997; Leisink and Steijn, 2009), job satisfaction (Bright, 2008; Wright and Pandey, 2008), organizational performance (Brewer and Selden, 1998; Kim, 2012), and interpersonal citizenship behavior (Pandey *et al.*, 2008).

2.3 Work engagement

Work engagement is becoming more and more central in research in organizational psychology (Sonnentag, 2011). The construct of work engagement refers to a type of functional work involvement linking hard work with enjoyment of the duties (Schaufeli and Bakker, 2001), or as a positive state of mind, related to work and characterized by vigor, dedication, and absorption (Schaufeli *et al.*, 2002). Such a stream of research partially overlaps both with the growing interest around the positive aspects of work and organizational life (Nelson and Cooper, 2007) and with companies' search for psychologically connected employees and managers (Bakker *et al.*, 2011).

The construct of work engagement was initially defined by Kahn (1990) as "the harnessing of organizational members' selves to their work roles" (p. 694). What is central in Kahn's (1990) perspective is the amount of energy and commitment employees have for work, and the way in which they are heterogeneously activated. Within such a setting, engaged employees are energetically and effectively connected with their work, as they are physically, cognitively and emotionally involved (Kahn, 1990; Maslach and Leiter, 1997). Conversely, disengaged employees are emotionally disconnected with work and co-workers, and even physically less involved (Kahn, 1990). According to Schaufeli *et al.* (2002), who developed an operationalized concept of engagement, work engagement refers to "a positive fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). In that sense, vigor refers to "high levels of energy and mental resilience while working, the willingness to invest efforts in one's work and persistence even in the face of difficulties," while dedication can be regarded as "a sense of significance, enthusiasm, inspiration, pride and challenge" (p. 74). Absorption, instead, is the state of "being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (p. 75). In synthesis, work engagement translates into work the personal energy employees bring with them. Apart from being energetic and enthusiastic, they accept that work deserves their energy on a regular basis. It is also reflected in getting to the essence of challenging problems and an attention to details. They become absorbed in their work, experiencing flow in which they lose track of time and diminish their response to distraction. Work engagement describes employees' ability to bring their full capacity to solving problems, connecting with people, and developing innovative services. Employees' responses to organizational policies, practices, and structures affect their potential to experience engagement (Bakker and Leiter, 2010).

Research has shown that work engagement promotes job satisfaction (Alarcon and Edwards, 2011; Saks, 2006) and life satisfaction (Bakker *et al.*, 2005; Demerouti *et al.*, 2005; Hakanen and Schaufeli, 2012; Lehner *et al.*, 2013; Wells, 2009; Wilcock, 2001). Other researchers found that work engagement had a strong direct effect on job satisfaction and a weaker direct effect on life satisfaction (De Simone *et al.*, 2014).

Engaged workers have the best results, have an orientation to the customer, make more money, are more loyal, expend more energy than what is required of them, reduce errors and accidents through their high level of attention, live and work with more pleasure, and are more resistant to stress. As this feeling leads to increased productivity in those who experience it, the employees' involvement in work is not only reflected positively in their earnings, but throughout the organization (Schaufeli and Bakker, 2001).

Other research shows the actual reduction of the perception of stress in subjects who are engaged (Schaufeli and Bakker, 2004; Van der Colff and Rothmann, 2009). Of particular interest is the observed relationship between the engagement and the demands/work resources according to the job demands-resources model (Schaufeli and Bakker, 2004). Regardless of one's requirements, resources - personal and business - determine the outcome in terms of engagement or stress: on this front you can "play the organizational management" of WRS.

Research on work engagement has shown significant relations with several work-related outcomes and organizational performance, such as low turnover intention (Saks, 2006; Schaufeli and Bakker, 2004), low burnout (Schaufeli and Bakker, 2004; Schaufeli *et al.*, 2002), and low work stress (Britt *et al.*, 2005). Some relevant effects have also been registered on more general performance indicators, such as better employee productivity, financial performance, organizational commitment, organizational citizenship behavior, and customer satisfaction (Saks, 2006). In addition, some empirical studies support the common sense conclusion that work engagement contributes to positive work and organizational variables (e.g. job satisfaction and performance) (Alarcon and Edwards, 2011; Giallonardo *et al.*, 2010; Harter *et al.*, 2002; Kamalanabhan and Prakashsai, 2009; Saks, 2006; Sonnentag, 2003). Moreover, engaged employees generally gain sufficient job resources (Alarcon and Edwards, 2011; Hobfoll, 2001; Macklin *et al.*, 2006; Schaufeli and Bakker, 2004).

2.4 Job and life satisfaction

The construct of job satisfaction has involved several definitions. One way to deal with job satisfaction is to consider the two common approaches to its measurement (Spector, 1997): namely, the global approach and the composite approach. The latter assesses the pattern of attitudes a person holds regarding different facets of the job (e.g. fringe benefits, coworkers, nature of the job itself, job conditions, policies and procedures, pay and supervision).

This study is instead grounded on the global approach, which explains job satisfaction based on an individual's overall affective reaction to his or her job as proposed by Locke (1976) and Spector (1997). For Locke (1969), job satisfaction is when the expectations that an individual holds for a job match the ones actually received from the job. Thus, he describes job satisfaction as a pleasant or positive emotional state resulting from the appraisal of one's job experience. Spector (1997) considers job satisfaction to be an attitude related to the extent to which people like or dislike their jobs. The definitional framework has also been completed by Brief (1998), who regards job satisfaction as an affective and/or cognitive evaluation of one's job. Considering such constitutive elements, a low level of job satisfaction should lead to negative effects in the job environment, such as absenteeism, turnover, and low productivity (Spector, 1997).

Some incongruence in the definitions of life satisfaction has arisen in empirical studies (Iverson and Maguire, 2000). Some researchers define it as a global assessment

of people's quality of life (Judge *et al.*, 1998; Judge and Watanabe, 1993) while others consider it a combination of different aspects of life (e.g. Andrews and Withey, 1976). This paper accepts the definition of life satisfaction as a judgmental process in which individuals assess the quality of their lives on the basis of their own unique set of criteria (Shin and Johnson, 1978). Such a definition is based on the cognitive evaluation of the quality of one's experiences that span an individual's entire life (DeNeve and Cooper, 1998; Treistman, 2004).

The deepening of job and life satisfaction might have major impacts upon the managerial choices related to addressing organizational behavior and the overall organization design. Since job satisfaction is crucial to the enactment of the organizational design (e.g. Weick, 2010), the analysis of its antecedents and the investigation of its interrelation with other organizational phenomena remains central. This study does not concentrate on the effect of job satisfaction on productivity. It instead attempts to shed light upon the effects of a lack of job satisfaction. To this extent, it acknowledges that job satisfaction has a key role also in avoiding dysfunctional behavior by being an antecedent in preventing WRS (Caprara *et al.*, 2003).

3. Method

The present paper describes the results of an research project commissioned of the authors by a Italian public administration. The company has asked to remain anonymous and not to provide data to allow for their identification. This project aims to assess the risk stress at work and analyze psychosocial factors that may prevent the negative effects of stress on the workers.

The research involved employees holding the position of inspector in a public administration in two principal studies, whose goals and methods have been shared with management. In the final step of this research project, a follow-up of the data will be released to the management of the public administration in which some of the actions will include a planned intervention with proposals strongly anchored to the results. The involvement of management from the beginning of the research should facilitate the implemented actions for the prevention of stress and promotion of the inspectors' well-being at work.

The research includes two complementary studies. In the first study, an anonymous online questionnaire was administered to all inspectors of the administration via the management company sending a link to the questionnaire by e-mail. Prior to the administration of questionnaires, short training, and information sessions were organized for all workers in order to share the objectives and procedures of the research. Participation in the research was encouraged by management and was voluntary. In the second study, five focus groups involving members of the inspection service were conducted to investigate the specific stressors that characterize the work of judicial police officers of the inspectors.

The particular aim of this paper is to study the relationships between seven primary sources of stress at work (HSE's Management Standards Indicator Tool), PSM, job satisfaction, work engagement, and life satisfaction in a specific profession, that of inspectors. In addition, the paper studies the specific stressors that characterize the work of judicial police officers of the inspectors and to determine whether there are differences in order to discern the variables investigated in the three different groups of inspectors interviewed.

3.1 Study 1 (questionnaire)

The aim of this primary study is to investigate the relationships between seven primary sources of stress at work (HSE's Management Standards Indicator Tool), PSM, job satisfaction, work engagement, and life satisfaction in a specific profession, that of inspectors.

3.1.1 Participants. Data were collected from inspectors operating a public organization in southern Italy. The questionnaire was distributed to all 200 inspectors and 68 percent of the questionnaires were returned, resulting in 137 usable questionnaires. The data analysis was conducted only on those participants who had fully answered the survey. Of the 137 participants, 58 percent were female ($n = 80$) and 42 percent male ($n = 57$), with a mean age of 49.49 years ($SD = 6.67$). The research participants are divided on the basis of the specific role played in the organization: 48 are inspectors of internal service not in contact with the public (35 percent), 28 are inspectors of internal service in contact with the public (20 percent), and 61 are inspectors of external service (45 percent). The internal inspectors in contact with the public work within the offices of the headquarters providing assistance to citizens; on the contrary, the inspectors in internal service without public contact work within the offices of the headquarters but operate only in contact with colleagues. The inspectors who perform external service carry out unannounced inspections in local companies.

3.1.2 Measures. 3.1.2.1 Management standards. HSE's Management Standards Indicator Tool is a 35-item questionnaire relating to the seven primary sources of stress at work (Kerr *et al.*, 2009; INAIL, 2011a). These are:

- (1) demands - issues such as workload, work patterns, and the work environment;
- (2) control - how much say employees have in the way they do their work;
- (3) supervisors' support - the encouragement, sponsorship, and resources provided by the organization and the line management;
- (4) colleagues' support - the encouragement provided by the colleagues;
- (5) relationships - promoting positive working to avoid conflict and dealing with unacceptable behavior;
- (6) role - whether people understand their role within the organization and whether the organization ensures that they do not have conflicting roles; and
- (7) change - how organizational change (large or small) is managed and communicated in the organization.

The management standards represent a set of conditions that, if present, reflect a high level of health well-being and organizational performance. Items have a five-point scale of frequency (1 = never, 5 = always).

3.1.2.2 PSM. The following five statements were used to measure this construct:

- (1) meaningful public service is very important to me;
- (2) I am not afraid to go to bat for the rights of others even if it means I will be ridiculed;
- (3) making a difference in society means more to me than personal achievements;
- (4) I am prepared to make enormous sacrifices for the good of society; and
- (5) I am often reminded by daily events about how dependent we are on one another.

The items are from Alonso and Lewis (2001) with a five-point rating scale (1 = strongly disagree, 5 = strongly agree).

3.1.2.3 Job satisfaction. According to the global approach that assesses job satisfaction based on an individual's overall affective reaction to his or her job (Spector, 1997), this construct was measured using the brief overall job satisfaction measure II (Judge *et al.*, 1998). The respondents evaluated their perceptions of satisfaction concerning their current job on a response scale from 1 to 5 (1 = strongly disagree, 5 = strongly agree). The five items were: "I feel fairly well satisfied with my present job," "On most days I am enthusiastic about my work," "Each day of work seems like it will never end," "I really enjoy my work," and "I consider my job rather unpleasant."

3.1.2.4 Engagement. The level of work engagement was assessed by the Utrecht Work Engagement Scale (UWES), developed by Schaufeli *et al.* (2002), and which was recently validated in Italy as UWES-9 (see Balducci *et al.*, 2010). Items have a five-point scale of frequency (1 = never, 5 = always).

3.1.2.5 Life satisfaction. Satisfaction with life was assessed through the single item developed by Lance *et al.* (1989). Participants were requested to indicate their life satisfaction on a ten-point rating scale ranging from "very dissatisfied" (1) to "very satisfied" (10).

3.1.3 Data analysis. A series of exploratory factor analyses (EFA) were conducted to evaluate the dimensionality of the scales using SPSS software. The principal components extraction method was used for EFA with the oblique rotation because the dimensions are theoretically correlated with one another (Cudeck, 2000). The internal consistency of each scale is measured through Cronbach's α . The correlation between variables was calculated using the *r* Pearson coefficient and the analysis of variance with ANOVA and MANOVA.

3.1.4 Findings. Table I shows the results of the EFAs that establish the monofactorial structure of the scales.

Comparing engagement, job satisfaction, and PSM, no differences were found between males and females (ANOVA: sig. > 0.05). As can be seen from the results shown in Table II increasing age is correlated with being more satisfied, more engaged, and more motivated.

An overview of the relationships between variables in the sample of inspectors is shown in Table III, which shows the averages, standard deviations, and Pearson's correlations.

Scale	% variance	Cronbach's α	
Job satisfaction	63.97	0.852	Table I. Explained variance and reliability scales
Engagement	53.34	0.944	
PSM	46.86	0.787	

Scale	R^2	β	Sig.	
Job satisfaction	0.087	0.295	0.000	Table II. Influence of age, linear regressions
Engagement	0.036	0.191	0.025	
PSM	0.066	0.256	0.002	

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Demands	3.42	0.65	-									
2. Control	3.65	0.79	0.398***	-								
3. Supervisors' support	3.25	0.92	0.359***	0.524***	-							
4. Colleagues' support	3.67	0.69	0.338***	0.551***	0.608***	-						
5. Relationships	3.83	0.69	0.412***	0.445***	0.313***	0.375***	-					
6. Role	4.11	0.73	0.373***	0.509***	0.500***	0.424***	0.481**	-				
7. Change	2.87	0.96	0.449***	0.430***	0.655***	0.462***	0.430**	0.607***	-			
8. Life satisfaction	7.21	1.69	0.263**	0.357***	0.220**	0.237**	0.363**	0.438***	0.323***	-		
9. PSM	3.93	0.57	0.028	-0.046	0.110	0.102	-0.058	0.127	0.073	0.078	-	
10. Engagement	3.30	0.76	0.221**	0.428***	0.430***	0.336***	0.268**	0.563***	0.494***	0.448***	0.338***	-
11. Job satisfaction	3.33	0.84	0.398***	0.516***	0.402***	0.356***	0.370***	0.597***	0.513***	0.584***	0.290**	0.780***

Notes: *Sig. <0.05; **Sig. <0.01; ***Sig. <0.001

Table III.
Descriptive statistics
and Pearson's
correlations

The strongest correlation ($r = 0.780$) and with a high degree of significance (sig. <0.001) is between job satisfaction and engagement; in other words, those who are more satisfied with their work are even more involved and committed.

There is an interesting association between supervisors' support and other variables such as change, engagement, and job satisfaction: this stresses the importance of the support of the various hierarchical levels to which the individual worker responds.

However, the lack of correlation between PSM and management standards appears clear. This indicates that the orientation to the public service - up or down - is in no way linked to the perception of risk of WRS. In addition, it also emphasizes that the risk of WRS is the result of the action of organizational variables on the individual. In the sample, PSM is related to both engagement ($r= 0.338$) and the job satisfaction ($r= 0.290$).

Engagement correlates positively with all sizes of management standards. The same result is found with job satisfaction, showing strong positive correlations with management standards.

Does work have some degree of association with overall satisfaction of life? The indices show that high levels of life satisfaction correlate with high levels of understanding and awareness of role ($r = 0.438$), engagement ($r = 0.563$), and job satisfaction ($r = 0.597$). There also exists, but with less intensity, a relationship with the management standards, which means that overall a low risk of WRS is accompanied by high levels of life satisfaction, without determining it.

The correlations examined led to a consideration of the effect of important variables on others. Linear regressions have been calculated and the results are shown in Table IV.

In the examined sample, it can be seen that PSM promotes a higher level of engagement and job satisfaction. In addition, engagement influences job satisfaction to a strong degree and life satisfaction moderately.

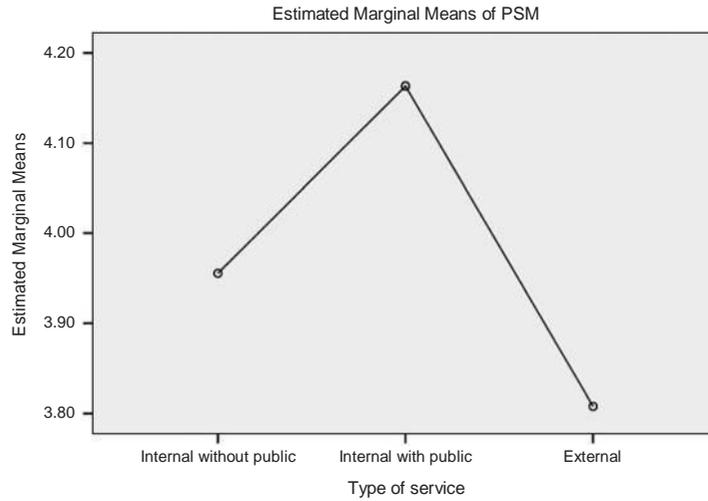
In accordance with the Ministerial Circular of *Ministero del Lavoro e delle Politiche Sociali* (Ministry of Labour and Social Policies, No. 23692 - November 18, 2010) which regulates the procedures of WRS risk assessment, the sample is divided into three subgroups: inspectors of internal service not in contact with the public, inspectors of internal service in contact with the public, and inspectors of external service.

The study of the psychological dimensions of the inspectors can be deepened by checking the existence of differences between the three groups of inspectors (internal without public, internal with public, external). MANOVA *post hoc* tests, with the Bonferroni method for correcting multiple comparisons, were calculated, and their results are shown in the following figures (Figure 1).

The existing differences are of a few tenths of a point, but they are significant. The main difference is between those who carry out internal service with public contact and those who perform external service (Figure 2).

Table IV.
Influence of PSM
and engagement on
job satisfaction and
life satisfaction

Predictor	Dependent variable	R^2	β	Sig.
PSM	Engagement	0.114	0.338	0.000
	Job satisfaction	0.084	0.290	0.001
Engagement	Job satisfaction	0.608	0.780	0.000
	Life satisfaction	0.201	0.448	0.000



MANOVA			
df	F	Sig.	Part η^2
2	3.910	0.022	0.055

Bonferroni Test			
Type of Service	M (DS)	Mean Difference	Sig.
Internal without public	3.95 (0.49)	Internal with public	-0.2079 0.365
		External	0.1474 0.527
Internal with public	4.16 (0.53)	Internal without public	0.2079 0.365
		External	0.3553 0.019
External	3.80 (0.61)	Internal without public	-0.1474 0.527
		Internal with public	-0.3553 0.019

Figure 1.
Differences of PSM
between groups
of inspectors

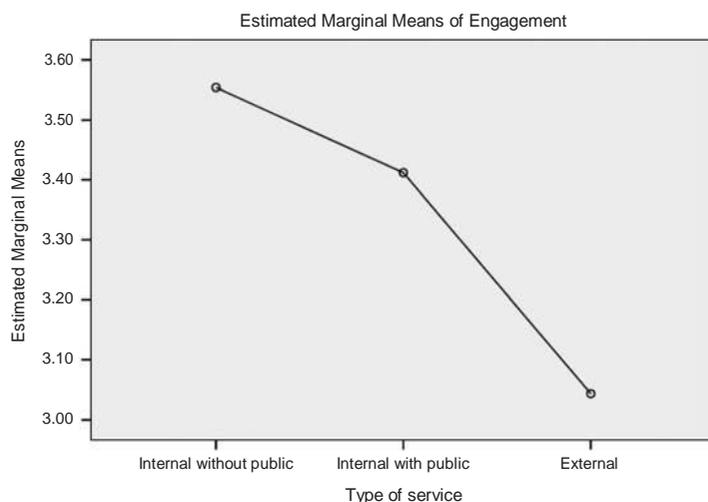
This result may suggest that the inspectors in the sample feel more involved and immersed in their work when they experience their activities in contact only with colleagues (Figure 3).

Even for this dimension, the group of inspectors in external service presents lower values than the others. In this case, the difference is significant between those who perform internal or external service. A greater sense of job satisfaction is therefore experienced when the inspectors are in a protected situation - inside the headquarters - rather than at the controlled companies.

A further analysis was carried out to compare the indices of the management standards between the various groups. The results are shown in Figure 4.

Data analysis shows that the group of inspectors in external service is the group most critical with respect to different sources of stress measured through HSE's Management Standards Indicator Tool. There are significant differences as regards the source of stress "relationships." The highest score was obtained by the group of inspectors in internal service not in contact with the public, with "role" as the source of stress.

Age does not affect the levels of the management standards (linear regression: sig. >0.05); "role" is the only factor that increases slightly with age ($R^2 = 0.039$;



MANOVA			
df	F	Sig.	Part η^2
2	7.044	0.001	0.095

Bonferroni Test				
Type of Service	M (DS)	Mean Difference		Sig.
Internal without public	3.55 (0.65)	Internal with public	0.1422	1.000
		External	0.5105	0.001
Internal with public	3.41 (0.77)	Internal without public	-0.1422	1.000
		External	0.3684	0.085
External	3.04 (0.76)	Internal without public	-0.5105	0.001
		Internal with public	-0.3684	0.085

Figure 2. Differences of engagement between groups of inspectors

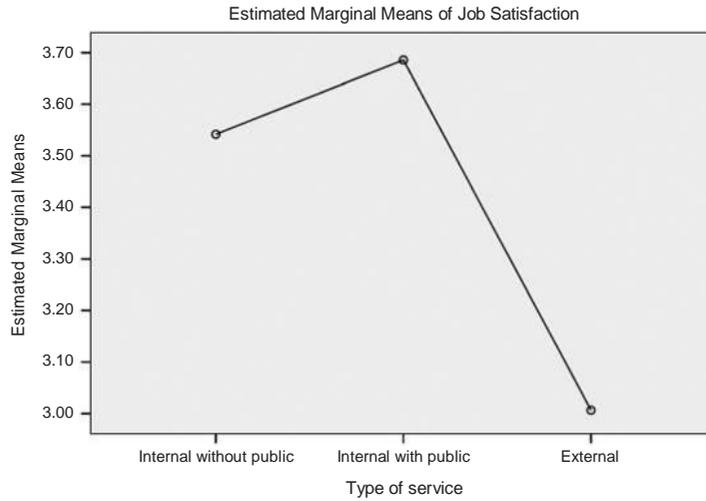
$\beta = 0.197$; sig. = 0.021). In fact, the HSE’s Management Standards Indicator Tool requires there to be awareness of the worker relative to the position that covers the organization and that the worker understands his or her role and responsibilities, awareness and understanding that will certainly increase with age. ANOVA applied to gender indicates that there are no significant differences between men and women (sig. >0.05): thus, the working men and women interviewed experienced the same perceived risk of WRS.

3.2 Study 2 (focus groups)

The aim of this second study is to investigate the specific stressor that characterize the work of judicial police officers of the inspectors.

3.2.1 Participants and procedure. In the second study, five focus groups were conducted in order to investigate specificity of stressors that characterize the work of judicial police officers of the inspectors.

The focus groups, organized with the support of management, had a total of 61 inspectors participating: 35 women (56 percent) and 26 men (44 percent). In each group, the composition by gender was evenly distributed. The average age of inspectors



MANOVA			
df	F	Sig.	Part η^2
2	9.618	0.000	0.126

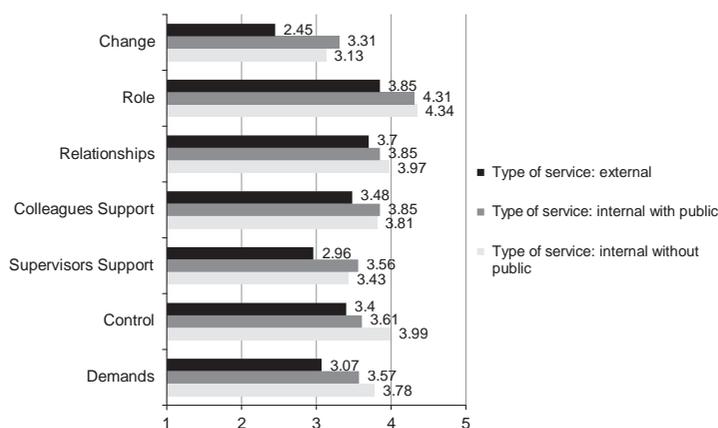
Bonferroni Test				
Type of Service	M (DS)	Mean Difference		Sig.
Internal without public	3.54 (0.74)	Internal with public	-0.1440	1.000
		External	0.5351	0.002
Internal with public	3.68 (0.85)	Internal without public	0.1440	1.000
		External	0.6792	0.001
External	3.01 (0.80)	Internal without public	-0.5351	0.002
		Internal with public	-0.6792	0.001

Figure 3. Differences of job satisfaction between groups of inspectors

interviewed was 48.5 years ($SD = 7.58$). Focus groups were held at the headquarters of the public administration. The inspectors were recruited on the basis of voluntary participation. Each focus group lasted 90 minutes and was conducted by a researcher and an observer. After a brief introduction by the participants, the researcher outlined the objectives and stimulated the debate on the subject of interest so that everyone took part in the conversation. The group sessions focussed on the topic of “stressors at work” to explore the specificity of stressors that characterize the work of judicial police officers of the inspectors, in order to - for those interested - “bring to light clearly the real causes of pressure that occur in their work environment” (INAIL, 2011b, p. 4).

There was broad participation during the sessions; almost everyone contributed, albeit with different lengths of interventions. Some topics were treated with a strong emotional impact - such as safety - others with more rationality. A general agreement characterized the deepening of various themes.

The researchers also proposed a summary of the topics that emerged. The interactions were subsequently transcribed and submitted for content analysis with the purpose of surveying the recurring topics that emerged during the discussion. The text corpus was split into small parts, called information units, each corresponding to a



MANOVA	F	df _{between}	df _{within}	Sig.
Change	12.118	2	134	0.000
Role	7.839	2	134	0.001
Relationships	2.103	2	134	0.126
Colleagues' support	4.617	2	134	0.012
Supervisors' support	6.091	2	134	0.003
Control	8.286	2	134	0.000
Demands	21.940	2	134	0.000

Figure 4. Levels of management standards by type of inspectors' service

unique and short sentence. Each information unit was then classified into thematic categories by three independent researchers at different times. Categories that achieved a measure of agreement equal to 70 percent were chosen.

3.2.2 Findings. The analysis of the conversations identified five thematic groups which explain the principal work stressors of inspectors interviewed. These themes offer several arguments about work stressors and refer to different experiences of the focus group participants. Described below are the identified themes and the illustrative key quotes drawn from the different focus groups. The topics that emerged were job impoverishment, aggressions and protections, social recognition, need for training, and relationships with colleagues.

3.2.2.1 Job impoverishment. One of the main work stressors for the inspectors, according to their accounts, is the impoverishment of their job. According to the legislation in force, the role of the inspector not only involves punishment but also consulting and training for companies. At the moment, the consulting function is not promoted by the top management. Inspectors interviewed feel that just imposing sanctions is reductive to their mission:

I'd love my job more if I could do it - actually and mostly - in favor of citizens, getting rid of the rush for figures [Here she refers to the "number of sanctions" as a parameter for performance evaluation.] (Elisa, 56 y.o.).

I feel like running after quantitative results only, rather qualitative ones (Eleonora, 39 y.o.).

Inspectors want to play their full part, not just punishing companies but also by offering them support:

Rather than punish the companies we should inform them and give them the opportunity to remedy the deficiencies instead of issue penalties which are so severe that they have to stop the business and fire personnel (Simona, 38 y. o).

To educate companies to be inspected in order to inform them of the risks related to penalties (Paolo, 52 y.o.).

Excessive sanctions by the inspector can lead a small company to lay off employees or close, in fact betraying the inspectors' mission to support and protect workers and companies. This is particularly accentuated from the high density of inspectors in the area that generates repeated access to the companies, especially with the small number of firms that survived the global crisis of recent years.

3.2.2.2 Aggressions and protections. The participants spoke of forms of violence, threats, and reprisals which they are subjected to daily in carrying out their official duties. The inspectors are often the subject of verbal aggression and fear for the safety of themselves and their things. The companies being inspected consider the inspectors the embodiment of the sanctions and a representative of the state stepfather at whom they intend to vent their anger and hostility. Participants in the focus groups told of episodes of verbal aggression resulting in assault to the person and/or their property:

It's not surprising that the inspection activity is seen as unpleasant to a part of the [companies'] owner's culture, being resistant to any form of control. Controls on respect of rules exercised by the inspectors are seen as a major threat, something to tackle. What is unacceptable is that the management displays indifference and annoyance in the face of violence, threats, and retorts to which inspectors are exposed every day during their job (Daniele, 56 y.o.).

The tension in doing our job is perceived mostly when we are outside [at companies]. You do not feel either protected or supported by anybody. You feel at the mercy of the mood of the others [visited companies] (Beatrice, 44 y.o.).

The inspectors interviewed complained that the safeguards currently in use are not adequate, and complained of feeling alone, unprotected and unheard by top management:

The state we serve sees us as mere collection agents, leaving us alone without a lead [...] with no guidelines, also physically, considering that also the police forces do not rescue us in case of aggression (Angelo, 40 y.o.).

3.2.2.3 Social recognition. The inspectors interviewed also complained about the external perception of the role of the inspector as a source of stress:

The external perception of the role of the inspector is highly disappointing. Only a few people appreciate my job, while most of them disregard it (Massimiliano, 38 y.o.).

I feel unmotivated and I'm almost convinced my job is socially useless. Maybe we should have more credibility (Nicola, 62 y.o.).

The role of the inspector does not enjoy social recognition; on the contrary, it is increasingly despised and decreasingly credible and dignified.

3.2.2.4 Need for training. Another important work stress for the focus groups participants is the lack of training:

We are not educated and trained properly. That generates high stress, since we are called to confront very updated subjects [companies' personnel] (Valentina, 39 y.o.).

Inspectors reported that the continuous regulatory changes do not follow adequate information/training sessions. Indeed, sometimes inspectors, with great embarrassment, learn of innovations from auditees' consultants during the inspection:

More than the job itself, the legislative changes create stress (Fabrizio, 56 y.o.).

Also, the inspectors require specific training to handle the communicative relationship with the users, who sometimes manifest frustration, anger, and hostility:

We need to be trained for coping with the aggressions we suffer from the subjects we control (Silvia, 41 y.o.).

3.2.2.5 Relationships with colleagues. The inspectors said they experience daily as a source of stress the relationship with colleagues who exhibit inadequate behavior both inside and outside the office:

The main problem is often represented by the colleagues we work with. Not all of them are able to control their temper. Some of them are not well mannered or tend to boast about their job title (as it would mean anything, per se!). Some statements can often be misunderstood and generate conflicts with the users under their control (Giorgio, 58 y.o.).

I believe that having available colleagues and in line with your way of thinking is important for doing your job well [...] here it does not happen though (Eleonora, 39 y.o.).

The participants reported that they need more opportunities to meet with supervisors and colleagues for confrontation of these issues.

4. Discussion

The choice of methodology (questionnaire and focus group) has been very useful in terms of the objectives of the research. The results show that the sources of WRS discovered through focus groups are in line with the stress sources measured by the HSE management standards. On the one hand, the numerically measurable dimensions are useful to verify the existence of significant relationships between the variables studied; on the other hand, the reflections produced in the focus groups enabled the interpretation and contextualization of the quantitative data.

4.1 *The relationship between variables*

The correlation analysis (Table III) shows a strong relationship between job satisfaction and engagement: the participants more satisfied at work are also the most involved and engaged in their work (Caprara *et al.*, 2003; Saks, 2006; Wilcock, 2001). The data show (Table IV) that engagement predicts job satisfaction (Alarcon and Edwards, 2011; De Simone *et al.*, 2014; Saks, 2006). Job satisfaction and work engagement are positively correlated with HSE's management standards indicator, it follows that actions of HR management aimed at increasing the engagement of workers could also bring benefits in terms of job satisfaction and reduce the perception of WRS risk (Bakker and Leiter, 2010).

The data do not confirm the relationship between PSM and HSE's management standards indicator. In other words, the orientation to public service (high or low) is in no way linked to the perception of risk of WRS, the latter construct being the outcome of the action of organizational variables on the individual. The data show a correlation between PSM and job satisfaction, with PSM acting as a variable independent of the job satisfaction. According to the two-factor theory of Herzberg (1959), motivation and satisfaction are closely linked and job satisfaction is influenced by "motivation factors" associated with the work itself or by outcomes directly derived from it such as the nature of the jobs, achievement in the work, promotion opportunities, and chances for personal growth and recognition. It was also found that high levels of PSM are correlated with high levels of engagement. One possible explanation for this result is that a motivation to public service, in which a person feels that his or her work renders

a service to the community, can only increase the levels of dedication, enthusiasm, and pride in one's work, elements typical of engagement (Brewer and Selden, 1998; Crewson, 1997). These results are interesting for two main reasons. The first is that a useful assessment of the level of motivation in public service could be made in the selection of workers, as suggested by some authors (Perry and Wise, 1990). The second is that, utilizing an analysis of this subjective psychological dimension, managers could enrich the tasks of the employees so as to give meaning in line with the public service performed and positively influence the engagement and job satisfaction of workers (Brewer and Selden, 1998; Naff and Crum, 1999).

Engagement correlates positively with all of HSE's management standards indicators, which confirms the results of studies that have reported a negative correlation between levels of stress and engagement (Britt *et al.*, 2005; Schaufeli and Bakker, 2004; Van der Colff and Rothmann, 2009). In line with research showing the relationship between job stress and job satisfaction (Caprara *et al.*, 2003), the present study has the same result: job satisfaction correlates positively and quite strongly with the management standards indicators. Since it was found that engagement positively influences job satisfaction, promoting actions that increase the levels of engagement should act indirectly on increasing job satisfaction, reducing the perception of risk of WRS and contribute to a general improvement in well-being at work (Alarcon and Edwards, 2011; Saks, 2006; Schaufeli and Bakker, 2004; Van der Colff and Rothmann, 2009). In the literature and in the present study (see Table IV) there is evidence that high levels of engagement are not only related to an improvement in job satisfaction but also to an improvement in life satisfaction; thus, it is hypothesized that policies of HR management which increase engagement will have a positive impact on the organizational well-being in both psychosocial and economic terms (Alarcon and Edwards, 2011; De Simone *et al.*, 2014; Giallonardo *et al.*, 2010; Harter *et al.*, 2002; Kamalanabhan and Prakashsai, 2009; Saks, 2006; Schaufeli and Bakker, 2001; Sonnentag, 2003).

This study shows that high levels of life satisfaction are associated with high levels of understanding and awareness of role, engagement, and job satisfaction, which agrees with results from other research (Hakanen and Schaufeli, 2012; Wells, 2009). The data analysis also shows a positive association of life satisfaction with the management standards indicators, although of low intensity: a low risk of WRS is associated with high levels of life satisfaction, but does not determine it (Alarcon and Edwards, 2011; Hakanen and Schaufeli, 2012).

4.2 Differences between the various types of inspectors

The analysis of the data showed that the group of inspectors in external service has levels of engagement, job satisfaction, and PSM lower than that of the other groups (see Figures 1-3). The group of inspectors in internal service in contact with the public reported the highest values of PSM and job satisfaction. These workers can achieve their mission of public service in the protected area of the office environment, unlike their colleagues who work outside in the inspected companies. These differences can be explained by referring to the work content; the work is perceived as useful and in line with their aspirations and motivations when inspectors perform their work at the request of the citizens (internal service), rather than when exercising control over other companies (external service). In fact, the group of inspectors in internal service not in contact with the public is the group with the highest levels of engagement. It is probable that work with little outward interaction favors immersion in the work, being totally focussed and deeply involved in the work - elements characteristic of being engaged.

In assessment with the management standards indicators, the inspectors in external service recorded low values in the various indices, suggesting that this type of service puts them at a higher psychosocial risk (see Figure 4). The internal inspectors in contact with the public perceive a lower psychosocial risk. This finding suggests the need to invest in the strengthening of individual resources and in the soft skills because the inspectors will learn to manage customer relationships more effectively. In addition, as discussed in the focus groups, the global economic crisis of recent years has reduced the number of companies to be inspected; then the high density of the inspectors and the reduced number of companies has resulted in repeated access by inspectors to the same companies (EPSU, 2012). These repeated visits provoke negative reactions from employers being inspected who, as previously reported, react with verbal and physical attacks. The situation described in this study is reported in the European Union report on the condition of the inspectors, which regretted “the lack of cooperation of enterprises and the aggressions against Labour inspectors” (EPSU, 2012, p. 55). The same report also highlights the “lack of training of agents” (EPSU, 2012, p. 55), a theme that emerged in the focus groups in relation to the need for special training to handle the communicative relationship with subsidiaries and entities with users over the counter, which sometimes manifest frustration, anger, and hostility.

4.3 Comment of results

Data show that the issues discussed in the focus groups (Study 2) are linked to those of Study 1.

The sources of stress specific to the inspectors have a link with stress factors already discussed in the literature and included in the HSE Management Standards (Cooper and Marshall, 1978; INAIL, 2011a; Kerr *et al.*, 2009; Sutherland and Cooper, 1988, 1990). The topics of the focus groups related to the impoverishment of the quality of work and its quantitative increase fall into the categories of the demand and role factors as measured with HSE’s Management Standards Indicator Tool. The demand factor includes issues relating to work environment as well as to aggressions and protections. Especially regarding the protections, the inspectors interviewed feel inadequately supported by top management, a topic included in the factor of supervisors’ support. The HSE factor of change includes the need for training, for new procedures, and for any other business requirements, topics widely covered in the focus groups. As in the HSE, the focus groups make extensive references to the issue of relations with colleagues.

Finally, the comments about the social recognition are connect to the sense of utility inherent in PSM. Other comments made in the focus groups refer to characteristics of PSM, engagement, and job satisfaction:

I consider my job a service to the state and for the workers that refer to us, and I want to do it at the best. So even if we have plenty of duties and worries, I don’t care as they are part of my job (Linda, 51 y.o.).

Despite the common sense around public employees, I’m very proud of being one a ‘state employee’ working for the general interest (Sandro, 57 y.o.).

I love my job. I do it with attention, dedication, satisfaction, and professionalism (Franca, 60 y.o.).

Overall, I’m satisfied by my job (Silvio, 47 y.o.).

My job is stimulating (Luisa, 52 y.o.).

5. Conclusion and managerial implications

Starting from PSM, the paper shows that the level of WRS is not independent from the overall level of “effect” that the work environment has upon individuals. Goffee and Jones (1996) analyzed the organizational settings according to the two dimensions of “sociability” and “solidarity.” The findings of the present study show that even when the affiliative sense of belonging and the sense of purpose are low (so-called “dispersed” organizations; Goffee and Jones, 1996), WRS can take place. On the other hand, the sense of a superior purpose embedded in PSM, as well as being engaged in “work” (in the sense of a socially constructed entity) might mitigate the risk of WRS. To express it in the terms used by Goffee and Jones (1996), while approximating a more “networked” organization (high sociability, high solidarity), organizations can develop their own preventive mechanisms against the risk of WRS.

In order to activate such preventive mechanisms, tailored HR practices should be designed and implemented in public service organizations. These practices must, above all, prevent the rise of WRS and, if distress takes place, help employees to deal with it. Such practices should be linked to job analysis and job design.

Regarding job analysis, organizations should try to identify which situations are most likely to trigger WRS. This includes not only an analysis of the explicit sources of stress (e.g. lack of autonomy) but should also consider a deeper understanding of how organizational policies can subtly trigger further stressors (e.g. lack of status). In terms of job design, it is important to understand how work contexts cultivate the expression of desired behaviors and emotions without compromising workers’ sense of purpose and work engagement. This implies that managers (meant here in the role of organization designers) must be trained to listen to employees, and employees must be coached to participate and take some responsibility in organizational decisions (Castanheira and Chambel, 2010). Structural architectures of jobs are largely shaped by managers’ goals and decisions, without recognizing the service provider’s role in shaping these architectures (Grant *et al.*, 2010; Grant and Parker, 2009; Johns, 2010; Morgeson *et al.*, 2010). To this extent, similar to the paradigm shift that lead to the consideration of employees’ motivation rather just the efficiency of the tasks (e.g. through job enrichment and enlargement), a proper consideration of the employees’ sense of purpose and other relational aspects could inform job design (e.g. Puranam and Håkansson, 2015a, b; Von Krogh and Geilinger, 2015).

Something more can be done on the developmental side of employees. The detection of the risk of WRS can be treated as a form of critical incidents and used to help employees develop detecting skills, able to identify threats related to an upsurge of stress in advance, ask for support from supervisors or colleagues, and effectively train healthier emotion regulation strategies (Berking *et al.*, 2010; Cicotto *et al.*, 2014). This will increase employees’ overall perception of control, as well as the inner beliefs that they are resilient to stress (e.g. Lengnick-Hall *et al.*, 2011).

References

- Alarcon, G.M. and Edwards, J.M. (2011), “The relationship of engagement, job satisfaction and turnover intentions”, *Stress and Health*, Vol. 27 No. 3, pp. 294-298.
- Alonso, P. and Lewis, G.B. (2001), “Public service motivation and job performance evidence from the federal sector”, *The American Review of Public Administration*, Vol. 31 No. 4, pp. 363-380.
- American Institute of Stress (2013), “Workplace stress causes and consequences”, available at: www.stress.org/workplace-stress-causes-and-consequences/ (accessed August 4, 2015).

-
- Andrews, F.M. and Withey, S. (1976), *Social Indicators of Well-Being: American Perceptions of Quality of Life*, The Management Group, New York, NY.
- Bakker, A.B. and Leiter, M.P. (Eds) (2010), *Work Engagement: A Handbook of Essential Theory and Research*, Psychology Press, Hove.
- Bakker, A.B., Albrecht, S.L. and Leiter, M.P. (2011), "Key questions regarding work engagement", *European Journal of Work and Organizational Psychology*, Vol. 20 No. 1, pp. 4-28.
- Bakker, A.B., Demerouti, E. and Schaufeli, W.B. (2005), "Crossover of burnout and work engagement among working couples", *Human Relations*, Vol. 58 No. 5, pp. 661-689.
- Bakker, A.B., Schaufeli, W.B., Leiter, M.P. and Taris, T.W. (2008), "Work engagement: an emerging concept in occupational health psychology", *Work & Stress*, Vol. 22 No. 3, pp. 187-200.
- Balducci, C., Fraccaroli, F. and Schaufeli, W.B. (2010), "Psychometric properties of the Italian version of the Utrecht work engagement scale (UWES-9)", *European Journal of Psychological Assessment*, Vol. 26 No. 2, pp. 143-149.
- Baldwin, J.N. and Farley, Q.A. (2001), "Comparing the public and private sectors in the United States: a review of the empirical research", in Farazmand, A. (Ed.), *Handbook of Comparative and Development Public Administration*, 2nd ed., Marcel Dekker, New York NY, pp. 119-130.
- Berking, M., Meier, C. and Wupperman, P. (2010), "Enhancing emotion-regulation skills in police officers: results of a pilot controlled study", *Behavior Therapy*, Vol. 41 No. 3, pp. 329-339.
- Brewer, G.A. and Selden, S.C. (1998), "Whistle blowers in the federal civil service: new evidence of the public service ethic", *Journal of Public Administration Research and Theory*, Vol. 8 No. 3, pp. 413-440.
- Brewer, G.A., Selden, S.C., Facer, I.I. and Rex, L. (2000), "Individual conceptions of public service motivation", *Public Administration Review*, Vol. 60 No. 3, pp. 254-264.
- Brick, M., Jeffs, D. and Carless, S.A. (2002), "A global self-report measure of person-job fit", *European journal of Psychological Assessment*, Vol. 18 No. 3, pp. 43-51.
- Brief, A.P. (1998), *Attitudes in and Around Organizations*, Sage, Thousand Oaks, CA.
- Bright, L. (2007), "Does person-organization fit mediate the relationship between public service motivation and the job-performance of public employees?", *Review of Public Personnel Administration*, Vol. 27 No. 4, pp. 361-379.
- Bright, L. (2008), "Does public service motivation really make a difference on the job satisfaction and turnover intentions of public employees?", *The American Review of Public Administration*, Vol. 38 No. 2, pp. 149-166.
- Britt, T.W., Castro, C.A. and Adler, A.B. (2005), "Self-engagement, stressors, and health: a longitudinal study", *Personality and Social Psychology Bulletin*, Vol. 31 No. 11, pp. 1475-1486.
- Camilleri, E. (2006), "Towards developing an organisational commitment-public service motivation model for the Maltese public service employees", *Public Policy and Administration*, Vol. 21 No. 1, pp. 63-83.
- Camilleri, E. (2007), "Antecedents affecting public service motivation", *Personnel Review*, Vol. 36 No. 3, pp. 356-377.
- Caprara, G.V., Barbaranelli, C., Borgogni, L. and Steca, P. (2003), "Efficacy beliefs as determinants of teachers' job satisfaction", *Journal of Educational Psychology*, Vol. 95 No. 4, pp. 821-832.
- Castanheira, F. and Chambel, M.J. (2010), "Reducing burnout in call centers through HR practices", *Human Resource Management*, Vol. 49 No. 6, pp. 1047-1065.
- Cicotto, G., De Simone, S., Giustiniano, L. and Pinna, R. (2014), "Psychosocial training: a case of self-efficacy improvement in an Italian school", *Journal of Change Management*, Vol. 14 No. 4, pp. 475-499.

- Cooper, C.L. and Marshall, J. (1976), "Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health", *Journal of Occupational Psychology*, Vol. 49 No. 1, pp. 11-28.
- Cooper, C.L. and Marshall, J. (1978), *Understanding Executive Stress*, Macmillan, London.
- Cooper, C.L., Dewe, P.J. and O'Driscoll, M.P. (2001), *Organizational Stress: A Review and Critique of Theory, Research, and Applications*, Sage, Thousand Oaks, CA.
- Crewson, P.E. (1997), "Public-service motivation: building empirical evidence of incidence and effect", *Journal of Public Administration Research and Theory*, Vol. 7 No. 4, pp. 499-518.
- Cudeck, R. (2000), "Exploratory factor analysis", in Tinsley, H.E.A. and Brown, S.D. (Eds), *Handbook of Applied Multivariate Statistics and Mathematical Modeling*, Academic Press, San Diego, CA, pp. 265-296.
- DeHart-Davis, L., Marlowe, J. and Pandey, S.K. (2006), "Gender dimensions of public service motivation", *Public Administration Review*, Vol. 66 No. 6, pp. 873-887.
- Demerouti, E., Bakker, A.B. and Schaufeli, W.B. (2005), "Spillover and crossover of exhaustion and life satisfaction among dual-earner parents", *Journal of Vocational Behavior*, Vol. 67 No. 2, pp. 266-289.
- DeNeve, K.M. and Cooper, H. (1998), "The happy personality: a metaanalysis of 137 personality traits and subjective well-being", *Psychological Bulletin*, Vol. 124 No. 2, pp. 197-229.
- DeSantis, V.S. and Durst, S.L. (1996), "Comparing job satisfaction among public-and private-sector employees", *The American Review of Public Administration*, Vol. 26 No. 3, pp. 327-343.
- De Simone, S., Lampis, J., Lasio, D., Serri, F., Cicotto, G. and Putzu, D. (2014), "Influences of work-family interface on job and life satisfaction", *Applied Research in Quality of Life*, Vol. 9 No. 4, pp. 831-861.
- EPSU (2012), "A mapping report on Labour Inspection Services in 15 European countries", EPSU Secretariat, Brussels, available at: www.epsu.org/IMG/pdf/EPSU_Final_report_on_Labour_Inspection_Services.pdf (accessed August 4, 2015).
- EU-OSHA (2014), "Calculating the cost of work-related stress and psychosocial risks", European Agency for Safety and Health at Work, Bilbao, available at: <https://osha.europa.eu/en/highlights/calculating-the-cost-of-work-related-stress> (accessed August 4, 2015).
- Frank, S.A. and Lewis, G.B. (2004), "Government employees working hard or hardly working?", *The American Review of Public Administration*, Vol. 34 No. 1, pp. 36-51.
- Giallonardo, L.M., Wong, C.A. and Iwasiw, C.L. (2010), "Authentic leadership of preceptors: predictor of new graduate nurses' work engagement and job satisfaction", *Journal of Nursing Management*, Vol. 18 No. 8, pp. 993-1003.
- Goffee, R. and Jones, G. (1996), "What holds the modern company together?", *Harvard Business Review*, Vol. 74 No. 6, pp. 133-148.
- Grant, A.M. and Parker, S.K. (2009), "7 redesigning work design theories: the rise of relational and proactive perspectives", *The Academy of Management Annals*, Vol. 3 No. 1, pp. 317-375.
- Grant, A.M., Fried, Y., Parker, S.K. and Frese, M. (2010), "Putting job design in context: introduction to the special issue", *Journal of Organizational Behavior*, Vol. 31 Nos 2-3, pp. 145-157.
- Hakanen, J.J. and Schaufeli, W.B. (2012), "Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study", *Journal of Affective Disorders*, Vol. 141 Nos 2-3, pp. 415-424.
- Harter, J.K., Schmidt, F.L. and Hayes, T.L. (2002), "Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis", *Journal of Applied Psychology*, Vol. 87 No. 2, pp. 268-279.

-
- Herzberg, F. (1959), *The Motivation to Work*, John Wiley & Sons, New York, NY.
- Hobfoll, S.E. (2001), "The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory", *Applied Psychology*, Vol. 50 No. 3, pp. 337-421.
- Houston, D.J. (2000), "Public-service motivation: a multivariate test", *Journal of Public Administration Research and Theory*, Vol. 10 No. 4, pp. 713-728.
- INAIL (2011a), "Valutazione e gestione del rischio da stress lavoro-correlato", Manuale ad uso delle aziende in attuazione del D.Lgs. 81/08 e s.m.i. Ed. INAIL, Milano.
- INAIL (2011b), "Guida all'adattamento metodologico del focus group nel processo di valutazione e gestione del rischio stress lavoro-correlato", Ed. INAIL, Milano.
- Iverson, R.D. and Maguire, C. (2000), "The relationship between job and life satisfaction: evidence from a remote mining community", *Human Relations*, Vol. 53 No. 6, pp. 807-839.
- Johns, G. (2010), "Some unintended consequences of job design", *Journal of Organizational Behavior*, Vol. 31 Nos 2-3, pp. 361-369.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P. and Millet, C. (2005), "The experience of work-related stress across occupations", *Journal of Managerial Psychology*, Vol. 20 No. 2, pp. 178-187.
- Judge, T.A. and Watanabe, S. (1993), "Another look at the job satisfaction-life satisfaction relationship", *Journal of Applied Psychology*, Vol. 78 No. 6, pp. 939-948.
- Judge, T.A., Locke, E.A., Durham, C.C. and Kluger, A.N. (1998), "Dispositional effects on job and life satisfaction: the role of core evaluations", *Journal of Applied Psychology*, Vol. 83 No. 1, pp. 17-34.
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Kamalanabhan, T.J. and Prakashsai, L. (2009), "Employee engagement and job satisfaction in the information technology industry", *Psychological Reports*, Vol. 105 No. 3, pp. 759-770.
- Kerr, R., McHugh, M. and McCrory, M. (2009), "HSE Management Standards and stress-related work outcomes", *Occupational Medicine*, Vol. 59 No. 8, pp. 574-579.
- Kim, S. (2012), "Does person-organization fit matter in the public-sector? Testing the mediating effect of person-organization fit in the relationship between public service motivation and work attitudes", *Public Administration Review*, Vol. 72 No. 6, pp. 830-840.
- Lance, C.E., Lautenschlager, G.J., Sloan, C.E. and Varca, P.E. (1989), "A comparison between bottom-up, top-down, and bidirectional models of relationships between global and life facet satisfaction", *Journal of Personality*, Vol. 57 No. 3, pp. 601-624.
- Lazarus, R.S. and Folkman, S. (1984), *Stress, Appraisal, and Coping*, Springer, New York, NY.
- Lehner, B.S., Jung, J., Stieler-Lorenz, B., Nietzsche, A., Driller, E., Wasem, J. and Pfaff, H. (2013), "Psychosocial factors in the information and communication technology sector", *Management Decision*, Vol. 51 No. 9, pp. 1878-1892.
- Leisink, P. and Steijn, B. (2009), "Public service motivation and job performance of public sector employees in the Netherlands", *International Review of Administrative Sciences*, Vol. 75 No. 1, pp. 35-52.
- Lengnick-Hall, C.A., Beck, T.E. and Lengnick-Hall, M.L. (2011), "Developing a capacity for organizational resilience through strategic human resource management", *Human Resource Management Review*, Vol. 21 No. 3, pp. 243-255.
- LePine, J.A., Podsakoff, N.P. and LePine, M.A. (2005), "A meta-analytic test of the challenge stressor - hindrance stressor framework: an explanation for inconsistent relationships among stressors and performance", *Academy of Management Journal*, Vol. 48 No. 5, pp. 764-775.

- Locke, E.A. (1969), "What is job satisfaction?", *Organizational Behavior and Human Performance*, Vol. 4 No. 4, pp. 309-336.
- Locke, E.A. (1976), "The nature and causes of job satisfaction", in Dunnette, M.D. (Ed.), *Handbook of Industrial and Organizational Psychology*, Rand McNally, Chicago, IL, pp. 1297-1349.
- Macklin, D.S., Smith, L.A. and Dollard, M.F. (2006), "Public and private sector work stress: workers compensation, levels of distress and job satisfaction, and the demand-control-support model", *Australian Journal of Psychology*, Vol. 58 No. 3, pp. 130-143.
- Maslach, C. and Leiter, M.P. (1997), *The Truth About Burnout: How Organizations Cause, Personal Stress and What to Do About it*, Jossey-Bass, San Francisco, CA.
- Maslach, C., Schaufeli, W.B. and Leiter, M.P. (2001), "Jobburnout", *Annual Review of Psychology*, Vol. 52 No. 1, pp. 397-422.
- Morgeson, F.P., Dierdorff, E.C. and Hmurovic, J.L. (2010), "Work design in situ: understanding the role of occupational and organizational context", *Journal of Organizational Behavior*, Vol. 31 Nos 2-3, pp. 351-360.
- Moynihan, D.P. and Pandey, S.K. (2007), "The role of organizations in fostering public service motivation", *Public Administration Review*, Vol. 67 No. 1, pp. 40-53.
- Naff, K.C. and Crum, J. (1999), "Working for America does public service motivation make a difference?", *Review of Public Personnel Administration*, Vol. 19 No. 4, pp. 5-16.
- Nelson, D. and Cooper, C.L. (Eds) (2007), *Positive Organizational Behavior*, Sage, Thousand Oaks, CA.
- Pandey, S.K. and Stazyk, E.C. (2008), "Antecedents and correlates of public service motivation", in Perry, J.L. and Hondeghem, A. (Eds), *Motivation in Public Management: The Call of Public Service*, Oxford University Press, Oxford, pp. 101-117.
- Pandey, S.K., Wright, B.E. and Moynihan, D.P. (2008), "Public service motivation and interpersonal citizenship behavior in public organizations: testing a preliminary model", *International Public Management Journal*, Vol. 11 No. 1, pp. 89-108.
- Perry, J.L. (1997), "Antecedents of public service motivation", *Journal of Public Administration Research and Theory*, Vol. 7 No. 2, pp. 181-197.
- Perry, J.L. and Hondeghem, A. (Eds) (2008), *Motivation in Public Management: The Call of Public Service*, Oxford University Press, Oxford.
- Perry, J.L. and Wise, L.R. (1990), "The motivational bases of public service", *Public Administration Review*, Vol. 50 No. 3, pp. 367-373.
- Puranam, P. and Håkansson, D.D. (2015a), "Valve's way", *Journal of Organization Design*, Vol. 4 No. 2, pp. 2-4.
- Puranam, P. and Håkansson, D.D. (2015b), "Closing thoughts and open questions", *Journal of Organization Design*, Vol. 4 No. 2, pp. 22-23.
- Rainey, H.G. (1982), "Reward preferences among public and private managers: in search of the service ethic", *The American Review of Public Administration*, Vol. 16 No. 4, pp. 288-302.
- Rainey, H.G. (1989), "Public management: recent research on the political context and managerial roles, structures, and behaviors", *Journal of Management*, Vol. 15 No. 2, pp. 229-250.
- Rainey, H.G. and Steinbauer, P. (1999), "Gallopers elephants: developing elements of a theory of effective government organizations", *Journal of Public Administration Research and Theory*, Vol. 9 No. 1, pp. 1-32.
- Saks, A.M. (2006), "Antecedents and consequences of employee engagement", *Journal of Managerial Psychology*, Vol. 21 No. 7, pp. 600-619.

- Schaufeli, W.B. and Bakker, A.B. (2001), "Werk en welbevinden: naar een positieve benadering in de Arbeids- en Gezondheidspsychologie (Work and well-being: towards a positive occupational health psychology)", *Gedrag and Organisatie*, Vol. 14 No. 1, pp. 229-253.
- Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315.
- Schaufeli, W.B., Salanova, M., González-Romá, V. and Bakker, A.B. (2002), "The measurement of engagement and burnout: a two sample confirmatory factor analytic approach", *Journal of Happiness Studies*, Vol. 3 No. 1, pp. 71-92.
- Schott, C., van Kleef, D.D. and Steen, T. (2014), "What does it mean and imply to be public service motivated?", *The American Review of Public Administration*, Vol. 45 No. 6, pp. 689-707.
- Shin, D. and Johnson, D. (1978), "Avowed happiness as the overall assessment of the quality of life", *Social Indicators Research*, Vol. 5 No. 1, pp. 475-492.
- Sonnentag, S. (2003), "Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 518-528.
- Sonnentag, S. (2011), "Research on work engagement is well and alive", *European Journal of Work and Organizational Psychology*, Vol. 20 No. 1, pp. 29-38.
- Spector, P.E. (1997), *Job Satisfaction: Application, Assessment, Causes, and Consequences*, Sage, Thousand Oaks, CA.
- Steel, B.S. and Warner, R.L. (1990), "Job satisfaction among early labor force participants: unexpected outcomes in public and private sector comparisons", *Review of Public Personnel Administration*, Vol. 10 No. 3, pp. 4-22.
- Sutherland, V.J. and Cooper, C.L. (1988), "Sources of work stress", in Hurrell, J.J. Jr, Murphy, L.R., Cauter, S.L. and Cooper, C.L. (Eds), *Occupational Stress: Issues and Developments in Research*, Taylor and Francis, London, pp. 3-40.
- Sutherland, V.J. and Cooper, C.L. (1990), *Understanding Stress: A Psychological Perspective for Health Professionals*, Psychology & Health and Chapman, London.
- Treistman, D.L. (2004), "Work-family conflict and life satisfaction in female graduate students: testing mediating and moderating hypotheses", unpublished doctoral dissertation, University of Maryland, College Park, MD.
- Vandenabeele, W. (2007), "Toward a public administration theory of public service motivation: an institutional approach", *Public Management Review*, Vol. 9 No. 4, pp. 545-556.
- Vandenabeele, W. (2009), "The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSM-performance relationship", *International Review of Administrative Sciences*, Vol. 75 No. 1, pp. 11-34.
- Van der Colff, J.J. and Rothmann, S. (2009), "Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa", *SA Journal of Industrial Psychology*, Vol. 35 No. 1, pp. 1-10.
- Von Krogh, G. and Geilinger, N. (2015), "Valve's organization: opportunities and open questions", *Journal of Organization Design*, Vol. 4 No. 2, pp. 18-19.
- Weick, K.E. (2010), "Reflections on enacted sensemaking in the Bhopal disaster", *Journal of Management Studies*, Vol. 47 No. 3, pp. 537-550.
- Wells, A.L. (2009), "Unraveling the endogeneity problem with the relationship between job and life satisfaction", paper presented at the American Sociological Association Annual Meeting, San Francisco, CA.
- Wilcock, A. (2001), "Occupational science: the key to broadening horizons", *British Journal of Occupational Therapy*, Vol. 64 No. 8, pp. 412-417.

- Wittmer, D. (1991), "Serving the people or serving for pay: reward preferences among government, hybrid sector, and business managers", *Public Productivity and Management Review*, Vol. 14 No. 4, pp. 369-383.
- Wright, B.E. (2001), "Public-sector work motivation: A review of the current literature and a revised conceptual model", *Journal of Public Administration Research and Theory*, Vol. 11 No. 4, pp. 559-586.
- Wright, B.E. and Grant, A.M. (2010), "Unanswered questions about public service motivation: designing research to address key issues of emergence and effects", *Public Administration Review*, Vol. 70 No. 5, pp. 691-700.
- Wright, B.E. and Pandey, S.K. (2008), "Public service motivation and the assumption of person-organization fit testing the mediating effect of value congruence", *Administration & Society*, Vol. 40 No. 5, pp. 502-521.

About the authors

Silvia De Simone is a Senior Researcher in Work and Organizational Psychology and teaches Human Resource Management (HRM) at the University of Cagliari (Faculty of Human Sciences in Italy). Her research interests focus on gender in society and at work and HRM. She is the Coordinator of the Masters in HRM at the Cagliari University. Silvia De Simone is the corresponding author and can be contacted at: desimone.silvia@gmail.com

Gianfranco Cicotto is a Psychologist of Work and Organization. For many years he worked as a Chief Executive in a variety of companies. He currently works as a Freelance Trainer and a Consultant, for public and private organizations, and collaborates on psychological research with the University of Cagliari, Italy.

Roberta Pinna is an Associate Professor of Organization Studies at the University of Cagliari (Italy). His research focusses on how the characteristics of the organizational work environment may influence employee attitudes and performance. He is a Member of ASSIOA (Associazione Italiana di Organizzazione Aziendale), AIDEA (Associazione Italiana Di Economia Aziendale).

Luca Giustiniano (PhD in Management - Information Systems) is an Associate Professor of Organization Studies at the LUISS Guido Carli University (Rome, Italy). During his career he has been a Visiting Scholar at the Viktoria Institute (Sweden, 1999), a Visiting Associate Professor at the Sauder School of Business - University of British Columbia (Canada, 2011), at the Interdisciplinary Centre for Organizational Architecture (ICOA, Aarhus University, Denmark, 2014) and at the Nova School of Business and Economics, Lisbon (Portugal, 2015). He is a Member of ASSIOA (Associazione Italiana di Organizzazione Aziendale), EGOS (European Group for Organizational Studies), and AOM (Academy of Management).