

Stress-related diseases: significant influence on the quality of life at workplaces

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Abstract

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The European Agency for Safety and Health at Work considers stress and quality of life as emerging. One of the first issues they prioritize mainly as a psychosocial risk is the changing world of work. We went to investigate if "job contract" (traditional/atypical) increases levels of stress. The purpose of this study was to identify the possible relationships between individual and organizational aspects of work (self-efficacy, engagement, autonomy and satisfaction) and levels of stress in two categories of individuals, traditional and atypical workers, in order to emphasize probable differences, and to increase the efficacy at work aims to re-balance, when necessary, a condition of psycho- physical well-being. The results show significant differences. In fact, our findings obtained show different values: self-efficacy relates negatively to stress, which in turn relates negatively to engagement. The study must be considered as a preliminary assessment for a study of broader intervention to increase quality of life.

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1. Introduction

The insecurity situations arising from organizational dynamics (such as restructuring, internationalization and, not least, new types of contract) - are emerging as important sources of stress level: organizational, group and individual, often transforming the work place in an environment which is hostile and above all extremely demanding from a psychological aspect (De Cuyper & De Witte, 2010). The great transformations in the last decade have affected life and work contexts, prompting people to rethink life project, values and beliefs (Santisi, Patanè, & Ramaci, 2010). Indeed, sometimes the abuse of flexibility has inevitably led to the configuration of a work place marked by predominantly

"precarious" working life and consequently also the personal life (Salmieri, 2009). Flexibility, such as new contractual forms have helped to reshape the relationship between individual and work experience, changing the significance and centrality of work. Traditional and permanent contracts are being replaced more and more by boundless working experiences (Ramaci, Alario, & Santisi, 2014).

Research shows the inverse correlation between job flexibility and well-being (Howard, 1995; Barling, Weber, & Kelloway, 1996; Gowing, Kraft, & Campbell Quick, 1998; Hesselink & Van Vuuren, 1999; De Witte, 1999; Kinnunen, Mauno, Naetti, & Happonen, 1999; Mohr, 2000; Sverke & Hellgren, 2002; Isaksson & Bellagh, 2002; Santisi & Ramaci, 2012). Flexibility has become a negative experience, precariousness and organizational disease (Danna & Griffin, 1999). Data explain particularly negative effects, especially in minority groups (eg., youth, women, adult and temporary workers) (Silla, De Cuyper, Gracia, Peiro, & De Witte, 2009; Ferrari & Veglio, 2006) which experience, more than other workers, great difficulties to manage their careers (Parasuraman, Purohit, Godshalk, & Beutell, 1996; Ilies, Schwind, & Heller, 2007), satisfy their professional ambitions (Hill, Hawkins, Ferris, & Weitzman, 2001) and increase their quality of life reducing psychological stress.

2. Problem statement

We start by describing the evidence that flexibility benefits a person and leads to healthier outcomes. This includes satisfaction, positive emotions, and autonomy (Pellerone, Passanisi, & Bellomo, 2015; Sheldon, Cummins, & Khamble, *in press*). Before describing the process of analysis, we need to enlighten how we define atypical work, opposed to traditional, "job satisfaction", stress and work engagement. We mean by "traditional" any kind of work relationship regulated by a permanent contract, while by "atypical" all of those who belong to the following groups: temporary workers, in - training employees, project workers and occasional labours, regulated by temporary contract of employment (Connelly & Gallagher, 2004). Stress has been implicated as a cause of several psychosomatic disorders (Aronsson & Göransson, 1999; Craparo, Gori, Mazzola, Petruccioli, Pellerone, & Rotondo, 2014). First introduced by (Selye, 1956), the term stress is now widely used to describe a state of physical and psychological tension with special features in the modern daily life. A general theoretic framework, based on a bio psycho-social model of stress, includes environmental parameters and individual processes of perception and coping with stressors. The state of stress depends on the interaction between an individual's environment and his representation (Pellerone, Craparo, & Tornabuoni, 2016). Stress may have a role in the quality of life and well being (Blandini, Fecarotta, Buscemi, & Ramaci, 2015; Saks, 2006). The concept of "work engagement" has recently emerged. This is understood as the ability of individuals to act in order to follow the interests of the organization while feeling engaged and distressed (Platania, Santisi, Magnano, & Ramaci, 2014). "Engagement" has been defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, & González-Romá, 2002). Not only work engagement is a positive experience in itself, but it also seems related to good health, positive work outcomes, perceptions of self-efficacy and work performance (Schaufeli & Bakker, 2004), lower work stress (Britt, Castro, & Adler, 2005) and well-being (Saks, 2006; Bellini, Ramaci, & Bonaiuto, 2015). The concept of work satisfaction has occupied a prominent place in work psychology. Locke (1976)

reports that over 3.300 articles have been compiled on this topic. Researches show that work satisfaction is also related to work attitudes: work satisfaction affects worker's productivity (Perie & Baker 1997), absenteeism, turnover (Brunetti, 2001), and hence organizational effectiveness work. It may have serious consequences for the well-being (Bardasi & Francesconi, 2004), of the individual in terms of physical and mental health, and satisfaction with life. Job dissatisfaction leads to stress and ultimately to burnout if allowed to continue unabated (Argentero, Dal Corso, & Vidotto, 2006). Recently, the attention of the researchrs has related to the positive aspects and subjective feelings concerning the perception of the quality of life, personal satisfaction, self-esteem, distress, sense of belonging, self-efficacy and quality of social relationships (Diener, 1984; Santisi & Ramaci, 2012), that can contribute to improving health conditions and reducing psychological levels of stress.

3. Research questions

“Insecurity” in the workplace is associated to contractual arrangements and to flexibility, based on a relation between "flexibility and insecurity". The European Agency for Safety and Health at Work considers stress and quality of life as emerging. It is the issue they prioritize when speaking about a psycho-social risk is the changing world of work. The word "precarious" is often used to connote both mobility by making up the employment relationship and the feeling of insecurity for their own work situation. In the literature, on the other hand, has been introduced only recently, the distinction between "objective" and "subjective" working safety (De Witte & Näswall, 2003): the first, more concrete and objective type, regards the mobile / flexible forms of employment contract; the other, more intangible and subjective refers to the perceptions and experiences which the employees feel in the workplace (Lozza, Graffigna, & Bosio, 2009). The work is undoubtedly a fundamental aspect in the life of each individual, however, it can also be exhausting and debilitating, and it can lead to feelings of stress and possible psychophysical duress. Researchers define a negative psychological condition of the worker which has a situation of mental and physical exhaustion (Guglielmi, Paplomatas, Simbula, & Depolo, 2007; Schaufeli & Enzmann, 1998; Schaufeli, Leiter, Maslach, & Jackson, 1996; Schaufeli & Salanova, 2007). Nonetheless the work can also make people feel satisfied, full of energy, and thus developing feelings of engagement. Finally, when it comes to organizational well-being it cannot be in line with what is the sense of satisfaction and happiness that people feel toward one's own life. Therefore, there are strong ties between the construct of well-being and concepts of happiness, satisfaction, health and quality of life (Platania, Santisi, Magnano, & Ramaci, 2014). Researchers have, however, concentrated mostly on the conditions that relate to the discomfort with the consequent disorders, rather than on factors that may instead be encouraged to stimulate individuals (Bakker & Demerouti, 2007; Bakker, Demerouti, & Schaufeli, 2003; Bakker, Demerouti, & Verbeke, 2004).

4. Purpose of the study

Starting from these premises the present study considers level of stress as a key variable to explain relationship with job satisfaction, work engagement and self efficacy in order to improve the quality of life. The study builds on and extends the previous research considering the role of the organizational context and in particular stress disorders of workers while they are in workspace. It distinguishes two

categories of individuals, traditional and atypical workers, in order to emphasize possible differences and increase conditions of psycho-well-being. Data are analyzed with multivariate methods that enabled to statistically control organizational variables. The participants were personally informed about the nature and purpose of the study. All the analyses were carried out using SPSS software package. Therefore, the following hypotheses are proposed:

Hypothesis 1: Stress relates negatively to self-efficacy

Hypothesis 2: Stress relates negatively to Organizational engagement

Hypothesis 3: Levels of stress correlate with experiences of satisfaction at work

In the analysis were considered the following factors: - Gender. It is known that the working conditions of men and women is considerably different, and therefore have different experiences and emotions; - The type of contract which the worker is engaged to: typical (or permanent contract) or atypical (other kind of contract).

5. Research method

A total of 40 participants, chosen through a random selection process, completed an anonymous self-report questionnaires. The participants were Italian employees (45.0 males, 55.0 females), aged ranging from 28 to 59 years ($M=41.68$; $SD=7.39$). Schooling: high school (72.5%) and graduate (27.5%). Twenty-two subjects belonged to the traditional contract and eighteen were atypical workers. On average the workers have a good experience (14 years at work; $SD=8.00$) but with a large range from few month of work up to 35 years. In general 21.1% of workers have 5 or less years of experience. They work on average for 7 hours per day ($SD=1.81$). The respondents are mostly employees (60%) only 7.5% are in managerial position. The others are blue collars (12.5%) and consultants (20%) (see below, Table 1.).

Table 1. Other descriptive statistics of subjects' characteristics.

	Mean	SD
Level of Autonomy	4.0	1.45
Permanent Contract	22	55.0%
Atypical Contract	18	45.0%
Public Sector	5	12.5%
Private Sector	35	87.5%
Industry area	8	20.0%
Education area	5	12.5%
Services	15	37.5%
Health-care	12	30.0%

For the research we used the following measures:

a) MSP - The Psychological Stress Measure (Lemyre & Tessier, 1988, ad. it. Di Nuovo, Rispoli, & Genta, 2000), an instrument designed to measure stress by evaluating subjective feelings of stress without referring to "stress" or "stressors." It is designed using 49 items drawn from descriptors generated by focus groups on stress. Respondent checks the answer that best indicates the degree to which each statement has applied to him/her recently. The choice of answer is made on a scale (like Likert) and result in a range from 1 (null) to 4 (much). A final comprehensive score was generated by a dedicated software. Coefficient alpha reliabilities for scales was .95.

b) UWES - Utrecht Work Engagement Scale of Schaufeli and Bakker (Seppälä, Mauno, Feldt, Hakanen, Kinnunen, Tolvanen, & Schaufeli, 2008, ad.it. Balducci, Fraccaroli, & Schaufeli, 2010). It is an instrument designed to measure the engagement such as psychological condition associated with the job, positive and satisfactory. Work engagement Scale is an instrument consisting of 17 items, to seven points, as ever (=0) for each day (= 6)., which measure the three basic dimensions of work commitment : vigor, dedication and absorption. Scores were obtained by averaging the responses of the participants, the highest average scores reflect higher levels of engagement. Coefficient alpha reliabilities for scale was .94.

c) The Personal Efficacy Scale (EPOP) and Collective Efficacy Scale (ECOP) at work (Caprara, 2001). Two scales, each one consist of six items that measure the perception as individual (EPOP) and as team (ECOP) to successfully master the critical demands from work situations. The subjects are asked to indicate their level of agreement on a scale of 7 positions (1= strongly disagree, 7 = strongly agree). Coefficient alpha reliabilities for scales was .75 and .89.

d) Job satisfaction subscale (as referred to in the OSI) - Occupational Stress Indicator (Cooper, Sloan, & Williams, ad. it. Sirigatti & Stefanile, 2002) is a test to detect a broad spectrum of psychosocial stress in the organization. The section refers what do they think, how they feel towards their work: measuring job satisfaction and welfare at work. Each item (22) was rated on a 6-point response scale, from strongly satisfaction (= 0) to strong dissatisfaction (= 6). Coefficient alpha reliabilities for scale was .96.

e) Socio-demographic and school achievement of employees were obtained as well. In the last part of the questionnaire, participants provided information on the usual socio-demographic characteristics, such as gender (a dummy variable, 1= male and 2= female); age; work contract, organizational tenure (six categories, from one year to over sixteen years). For practical purpose the global score will be considered in the result section and discussion. Differences between workers are analysed using Students' t tests, Manova (Multivariate Analysis of Variance) and Spearman correlation matrix.

6. Findings

Descriptive statistics of Psychological Stress Measure (MSP), work satisfaction (OSI), work engagement (UWES) are presented in Table 2.

Table 2. Study variables: Descriptive statistics cluster dell'MSP, work satisfaction, UWES.

	Mean	SD
Cluster I – Lost control, Irritability	1.42	0.43
Cluster II – Psychopatological sensations	1.36	0.49
Cluster III – Effort and confusion	1.39	0.59
Cluster IV - Depressive Anxiety	1.43	0.56
Cluster V - Pain and physical problems	1.56	0.76
Cluster VI – Hyperactivity	1.93	0.68
SC Career	3.33	1.13
SJ Job	3.31	1.24
SS Structure	3.34	1.05
SP Process	3.11	1.12
SR Relationships	2.30	0.86
S-TOT	3.25	1.05
Vigor	4.23	1.25
Dedication	4.25	1.46
Absorption	3.96	1.25

Before analyzing the correlations between the levels of perceived stress and the evaluations of other organizational characteristics: engagement on the one hand, and satisfaction and efficacy to the other, let us take a quick look at what emerges. The subgroup of atypical workers shows lower MSP scores in all case, even if differences do not affect MSP significant response except for cluster *Psychophysiological sensations* ($p=0,046$ $t=-1,274$) and *Pain and physical problems* ($p=0.049$ $t=-1,028$). Gender shows statistical differences for cluster *Depressive Anxiety* ($p=0.006$ $t=-2,75$) and cluster *Pain and physical problems* ($p=0.002$ $t=-3,47$). The perception of MSP is not significant with job area (Industry, Education, Services and Health-care). *What do you think, how do you feel towards your work* (item 22) for the measurement of job satisfaction in 2 of 5 subscales: for the career (SC) ($p=0.030$ $t=-483$) and for interpersonal relationships (SR) results show statistically differences for gender. SS and SP for *structures* ($p=0.010$ $t=.299$) and *process* ($p=0.047$ $t=-.342$), reveal significant differences for the variable traditional or atypical contract. The results of the multivariate analysis of variance, using work autonomy and work contract as correlated independent variables and stress level as the dependent variable, yielded significant differences between workers on the omnibus multivariate test. In all cases autonomy increased on- the - job, stress decreased [MANOVA ($F(6, 25) = 5.21$ $p = 0.001$]. Follow-up univariate *F-tests* revealed that significant level differences were found on the clusters stress II [$F(6,25) = 3.339$, $p = 0.024$], III [$F(6,25) = 3.304$, $p = 0.025$], IV [$F(6,25) = 4.976$, $p = 0.004$] and V [$F(6,25) = 3.069$, $p = 0.033$].

The correlation analysis between the measures used for the study are presented in Table 3.

Table 3. Spearman correlation analyses.

	S-tot	VI	DE	AB	EPOP	ECOP
Lost control, irritability		-363*			-.441**	
Psychophysiological sensation					-.350*	
Effort and confusion		-			-.471**	
Depressive Anxiety		.338**				
Pain and physical problems					-.480*	
Hyperactivity		-.322*				

*Correlation is significant at the 0.01 level (2-tailed); ** Correlation is significant at the 0.05 level (2-tailed).

The results show positive linear correlation, statistically significant, between engagement, stress and the Personal Efficacy Scale at work (EPOP). In fact, our findings obtained show different values: personal self-efficacy relates negatively to stress, which in turn relates negatively to engagement (VI=Vigor and DE=Dedication). More specifically: Lost control-irritability, Depressive Anxiety and Pain and Physical problems are correlate with significant level (.05) with VI; effort and confusion level highly significant (.01). The last one relates negatively to DE (.05). Data indicates also a negative correlation with highly significant level between EPOP and Lost control, irritability and Effort and confusion (.01); same direction but not highly significant (.05) Psychophysiological sensation, Depressive Anxiety, Pain and physical problems. No significant correlation is found between MSP vs Satisfaction global score and The Collective Efficacy Scale (ECOP) at work. Last, the perception of stress levels (cluster Depressive Anxiety and Pain and physical problems) is positively correlated with gender (.05); and negatively with type of contract only for cluster IV (.05). In general, the study confirmed the main hypotheses I, II, which stated that there is direct correlation between Stress and self-efficacy and negatively to Organizational engagement. In summary, our third hypothesis is not confirmed for the level of stress correlate and experiences of satisfaction at work.

Conclusions

Traditionally, positive emotions, satisfaction, efficacy and autonomy have been seen as the cornerstones of psychological health. The research aimed to explore the influence of "work contract" on the increment of the frequency of levels of stress in temporary workers. In all cases the obtained results show significant differences in order to the measurement of job satisfaction, work engagement, psychological stress and the self and team perception, to successfully master the critical demands from work situations. In fact, our findings show different values: self-efficacy relates negatively to stress, which in turn relates negatively to work commitment. The results also indicate that *autonomy at work* is conditioned by job contract (although statistical significance is not high), and support the conclusion that there are stronger job characteristics than other background variables, which have influence on

satisfaction and on stress levels; and in this sense, autonomy seems to be generalized through these features. The present study must be considered as a preliminary assessment for a study of broader intervention to increase quality of life at work. Research findings provide insight into the nature, correlates, and consequences of psychological flexibility and applied research provides details on promising interventions. Throughout, we consider a good practice a periodical repetition of the research in order to alleviate amount of stress and to increase the efficacy at work aims to re-balance, when necessary, a condition of psycho- physical well-being.

References

- Argentero, P., Dal Corso, F. & Vidotto, G. (2006). Soddifazione professionale e lavoro temporaneo. In: L., Ferrari, O., Veglio, (eds.), *Donne e uomini nel mercato del lavoro atipico*. Milano: FrancoAngeli, 41-55.
- Aronsson, G. & Göransson, S. (1999). Permanent employment but not in a preferred occupation: psychological and medical aspects, research implications. *Journal of Occupational Health Psychology*, 4(2), 152-163.
- Bakker, A. B. & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22 (3), 309-328.
- Bakker, A. B., Demerouti, E. & Schaufeli, W. B. (2003). The socially induced burnout model. In S. P. Shokov (Ed.), *Advances in psychologyresearch* (Vol. 25) (pp. 35-48). New York: Nova Science Publishers.
- Bakker, A. B., Demerouti, E. & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *HumanResource Management*, 43, 83-104.
- Bardasi, E. & Francesconi, M., (2004). The impact of atypical employment on individual wellbeing: evidence from a panel of British workers. *Social Science & Medicine*; 58, 1671-1688.
- Barling, J., Weber, T. & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and fiscal outcomes: A field experiment. *Journal of Applied Psychology*, 81, 827–832.
- Bellini, D., Ramaci, T. & Bonaiuto, M. (2015). The Restorative Effect of the Environment on Organizational Cynicism and Work Engagement. *Journal of Human Resource and Sustainability Studies*, 3 (3) 124-135. DOI: 10.4236/jhrss.2015.33017.
- Blandini, M., Fecarotta, P., Buscemi B., Ramaci, T. & Buscemi, A. (2015). Anti stress protocol based on the Psychological Functional Model. *International Journal of Education and Research*. Vol. 3(3) 459-468. [ISSN: 2201-6333 (Print), ISSN: 2201-6740 (Online)]
- Britt, T. W., Castro, C. A. & Adler, A. B. (2005). Self-engagement, stressors, and health: A longitudinal study. *Personality and Social Psychology Bulletin*, 31, 1475–1486.
- Brunetti, G. J. (2001). Why do they teach? A study of job satisfaction among long-term high school teachers. *Teacher Education Quarterly*, 28(3), 49-74.
- Caprara, G. (2001). *La valutazione dell'autoefficacia*. Costrutti e strumenti. Trento: Erikson.
- Connelly, C.E. & Gallagher, D.G.(2004). Emerging trends in contingent work research. *J. Manage* 2004; 30 (6): 959-983.
- Cooper, C.L., Sloan, S.J. & Williams, S. (1988). OSI. *Occupational Stress Indicator management Guide*. Windsor: NFER-Nelson, Windsor, UK.. In S. Sirigatti & C. Stefanile, C. (eds), Firenze: Os.
- Craparo, G., Gori, A., Mazzola, E., Petruccioli, I., Pellerone, M. & Rotondo, G. (2014). Posttraumatic stress symptoms, dissociation, and alexithymia in an Italian sample of flood victims. *Neuropsychiatric Disease and Treatment*, 10, 2281-2284. doi: <http://dx.doi.org/10.2147/NDT.S74317>
- Danna, K. & Griffin, R.W. (1999). Health and Well-Being in the Workplace: A Review and Synthesis of the Literature. *Journal of Management*, 25(3), 357-384.
- De Cuyper, N. & De Witte, H. (2010). Impress to become employable. The case of temporary workers. *Journal of Career Development*, 37, 635-652.

- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8 (2), 155-177.
- De Witte, H. & Näswall, K. (2003). Objective versus subjective job insecurity: Consequences of temporary work for job satisfaction and organizational commitment in four European countries. *Economic and Industrial Democracy*, 24 (2), 149-188.
- Di Nuovo, S., Rispoli, L. & Genta, E. (2000). *Misurare lo stress. Il test M.S.P e altri strumenti per una valutazione integrata*. Milano: Franco Angeli.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Ferrari, L. & Veglio, O. (2006), *Donne e uomini nel mercato del lavoro atipico*. Milano: FrancoAngeli.
- Gowing, M.K., Kraft, J.D. & Campbell Quick, J. (1998) (Eds.). *The New Organizational Reality: Downsizing, Restructuring, and Revitalization*. Washington, DC: American Psychological Association.
- Guglielmi, D., Paplomatas, Simbula, S. & Depolo, M., (2007). *Psychosocial Factors, Organizational Wellbeing and Health*. XIII European Congress of Work and Organizational Psychology Sustainable Work: Promoting Human and Organizational Vitality, EAWOP, Stockholm, 9-12 maggio 2007.
- Hesselink, D.J.K. & Van Vuuren, T. (1999). Job Flexibility and Job Insecurity: The Dutch Case, *European Journal of Work and Organizational Psychology*, 8 (2), 273-293.
- Ilies, R., Schwind, K. & Heller, D. (2007). Employee well-being: A multi-level model linking work and non-work domains. *European Journal of Work and Organizational Psychology*, 16, 326-341.
- Isaksson, K.S. & Bellagh, K. (2002). Health problems and quitting among female “temps”. *European Journal of Work and Organizational Psychology*, 11 (1), 27-45.
- Kinnunen, U., Mauno S., Nanetti, J. & Happonem, M. (1999). Perceived job insecurity: A longitudinal study among Finish employees, *European Journal of Work and Organizational Psychology*, 8(2), 243-260.
- Lemyre, L. & Tessier, R. (1988). Mesure de stress psychologique (MSP): se sentir stressé(e). *Revue Canadienne des Sciences du Comportement*, 20, 302-321.
- Locke, E. A. (1976), The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*, 1297-1349. Chicago: Rand McNally.
- Lozza, E., Graffigna & Bosio, A.C (2009). Job insecurity: extraorganizational antecedents and consequents. *Risorsa Uomo*, 15(4), 401-414.
- Mohr, G. (2000). The changing significance of different stressors after the announcement of bankruptcy: A longitudinal investigation with special emphasis on job insecurity, *Journal of Organizational Behaviour*, 21, 337-359.
- Parasuraman, S., Purohit, Y. S., Godshalk, V. M. & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior*, 48, 275-300.
- Pellerone, M., Craparo, G. & Tornabuoni, Y. (2016). Relationship between parenting and cognitive schemas in a group of male adult offenders. *Frontiers in Psychology*, 7, 302. doi: 10.3389/fpsyg.2016.00302.
- Pellerone, M., Passanisi, A. & Bellomo, M.F.P. (2015). Identity development, intelligence structure, and interests: a cross-sectional study in a group of Italian adolescents during the decision-making process. *Journal of Psychology Research and Behavior Management*, 8, 239-249. doi: <http://dx.doi.org/10.2147/PRBM.S88631>.
- Platania, S., Santisi, G., Magnano, P. & Ramaci, T., (2014). Job satisfaction and organizational well-being queried: a comparison between the two companies. *Procedia - Social and Behavioral Sciences* 191, 1436 – 1441 [ISSN: 1877-0428] [doi:10.1016/j.sbspro.2015.04.406].
- Ramaci, T., Alario, M. & Santisi, G. (2014). Il cambiamento organizzativo tra comunità di lavoro e ‘boundaryless learning’. *Annali della facoltà di Scienze della Formazione*, 13(2014).
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.
- Salmieri, L. (2009). 2009 Job Insecurity, Flexibility and Home-Work Balance for Italian Couples in Non-standard Work: The Effect of Social Class, *European Review* 17, 1-27.

- Santisi, G. & Ramaci, T. (2012). Benessere e sicurezza nei lavoratori della Sanità: una ricerca sull'efficacia personale e l'engagement. In N. A. De Carlo e M. Nonnis (a cura di) *Nuovi codici del lavoro. Contributi per la salute e il benessere nelle organizzazioni*. (pp. 207-217). TPM Edizioni [ISBN 978-88-97598-05-3S doi:10.4473/TPMed.10.2012]
- Santisi, G., Patanè, A. & Ramaci, T. (2010). Flessibilità sicurezza e strategie di adattamento personali: ciclo di vita e benessere individuale nei lavoratori atipici (pp 59-79). In Rete degli Psicologi del lavoro accademici per lo studio del lavoro atipico- Rete delle Consigliere di pari opportunità (a cura di), *Vita. Identità, genere in equilibrio precario. Ricerche psicologiche sul mercato del lavoro in Italia*. Milano: Edizioni Unicopli .
- Schaufeli, W. B. & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B. & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Schaufeli, W. B., Leiter, M. P., Maslach, C. & Jackson, S. E. (1996). Maslach Burnout Inventory-General Survey (MBI-GS). In C. Maslach, S.E. Jackson, & M. P. Leiter, *MBI Manual* (3d ed.). Palo Alto, CA: Consulting Psychologist Press.
- Schaufeli, W. B., Salanova, M., González-Romá, V. & Bakker, A. B. (2002). The measurement of Engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W. & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationships with efficacy beliefs. *Anxiety, Stress, & Coping*, 20(2), 177-196.
- Selye, H. (1956) *The stress of life*. New York: McGraw-Hill.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A. & Schaufeli, W. (2008). The Construct Validity of the Utrecht Work Engagement Scale: Multisample and Longitudinal Evidence. *Journal of Happiness Studies*, 10(4), 459-481.
- Sheldon KM, Cummins R. & Khambale S. Life-balance and well-being: Testing a novel conceptual and measurement approach. *Journal of Personality (in press)*.
- Silla, I., De Cuper, N., Gracia, F.J., Peiro´ J.M. & De Witte, H. (2009). Job Insecurity and Well-Being: Moderation by Employability. *Journal of Happiness Studies*, 10, 739-751.
- Sverke M. & Hellgren, J. (2002), The nature of Job insecurity: Understanding Employment Uncertainty on the Brink of the new millennium, *Applied Psychology: An International Review*, 51(1), 23-42.