



CIRMPA - Interuniversity Center for Research on the Genesis and Development of Prosocial and Antisocial Motivations

Doctorate in

Prosociality, innovation and collective efficacy in educational and organizational contexts XXV course

Doctoral Dissertation

"Should I stay (at home) or should I go (to work): individual and contextual antecedents of absenteeism and presenteeism.

Evidence from a privatized Italian organization."

by

Mariella Miraglia

Tutor Prof. Laura Borgogni

March 2013

To my parents

TABLE OF CONTENTS

INTRODUCTION

CHAPTER 1. The role of self-efficacy and job satisfaction on absences from	
work in different tenured employees	» 7
1. Introduction	» 8
2. From self-efficacy to absences from work	» 11
2.1 The direct link between efficacy beliefs and absences	» 11
2.2 How self-efficacy shapes job satisfaction	» 12
2.3 The role of organizational tenure in the relationship between job	
satisfaction and absences	» 13
2.4 From self-efficacy to absences: the indirect link through job	
satisfaction	» 15
2.5 Gender as a control variable	» 16
3. Method	» 17
3.1 Organizational context	» 17
3.2 Participants and procedure	» 17
3.3 Measures	» 18
3.4 Statistical analyses	» 19
4. Results	» 21
4.1 Measurement models	» 21
4.2 Measurement invariance	» 22
4.3 Multi-group structural model	» 22
5. Discussion	» 24
6. Limitations and future research	» 27
7. Practical implications	» 29
References	» 30

CHAPTER 2. Absenteeism over time: the role of organizational tenure and	
perceptions of social context in predicting employee absenteeism changes	Page 41
1. Introduction	» 42
2. Absenteeism over time and organizational tenure	» 45
3. Absenteeism and context: the role of perceptions of social context	» 49
4. Method	» 53
4.1 Organizational Context	» 53
4.2 Participants and procedure	» 54
4.3 Measures	» 55
4.4 Statistical analyses	» 57
5. Results	» 59
6. Discussion	» 63
7. Limitations and future research	» 66
8. Practical implications	» 67
References	» 69

CHAPTER 3. Why are you working while ill? The role of self-efficacy and job

crafting in predicting presenteeism at work	» 80
1. Introduction: studying presenteeism from a psychological view	» 81
2. Why are you working when ill: the role of self-efficacy and job crafting	» 86
2.1 Job crafting: definition of the construct and the antecedent role of self-	
efficacy	» 86
2.2 Crafting a job may lead to presenteeism?	» 89
2.3 Self-efficacy and presenteeism: should we hypothesize a positive	
relationship?	» 91
3. How does presenteeism affect performance evaluation?	» 92
4. Method	» 94
4.1 Participants and procedure	» 94
4.2 Measures	» 95
4.3 Statistical analyses	» 98
5. Results	» 99
5.1 Preliminary analyses: the job crafting scale	» 99

5.2 Descriptive statistics	Page 102
5.3 Measurement model	» 102
5.4 Structural model	» 103
5.5 Alternative model	» 104
6. Discussion	» 105
7. Limitations and future research	» 109
8. Practical implications	» 111
References	» 112
GENERAL CONCLUSIONS	» 122

» 127

Acknowledgements

INTRODUCTION

Employee absenteeism is one of the most investigated topics in the field of organizational behavior and human resource management (Patton & Johns, 2012), due to its relevance for labor and training costs and organizational profit (Burton, Lee, & Holtom, 2002).

Absenteeism indicates a broad and multifaceted phenomenon that incorporates different individual behaviors, related to the various reasons why people do not attend work. Moreover, absence behaviors reflect an involuntary component (e.g., absences due to illness, family emergencies, transportation problems) and a voluntary one (e.g., absence related to job dissatisfaction, withdrawal behaviors, psychological contract breach) (March & Simon, 1958). In addition, absences from work may vary according to employee's personal characteristics and to his or her stage in organizational life (Hill & Trist, 1985; Schmidt, 2002), in line with the socialization process within the organization and the social and role learning. As a result, the challenge consists in deeper understanding the nature, determinants and dynamics of absenteeism over time (Avey, Patera, & West, 2006; Harrison & Martocchio, 1998).

Researchers have looked at absenteeism not only as an individual-level phenomenon, concerning the employee and his or her organization, but also as a construct depending on the organizational context (Chadwick-Jones, Nicholson, & Brown, 1982; Markham & McKee, 1995; Xie & Johns, 2000). It is well recognized that social influence mechanisms, organizational or work-unit absenteeism culture and norms, interpersonal relationships at work strongly influence absence decisions (Biron & Bamberger, 2012; Xie & Johns, 2000).

From a further perspective, absenteeism is highly variable over time (Harrison & Martocchio, 1998; Mason & Griffin, 2003), stressing the relevance of studying it at multiple

time intervals in order to draw stable conclusions about possible reasons for absence behaviors. Nevertheless, it has been treated as a static variable in the vast majority of studies.

More recently, organizations, scholars in management and medical consultants have showed increasing interest in a relatively novel construct, related to absenteeism as the other side of the coin: presenteeism, that is attending work when ill (Aronsson, Gustafsson, & Dallner, 2000). Presenteeism has become more and more common in modern organizations. In fact, the global changes in the marketplace and the financial crisis have increased a feeling of job insecurity and competitive pressure, forcing the employee to remain in his or her occupation even if it is no longer desirable or to go to work even if ill, reducing sickness absences (Bergström, Bodin, Hagberg, Lindh, Aronsson, & Josephson, 2009; Caverley, Cunningham, & MacGregor, 2007). As a new construct, the study of presenteeism antecedents and effects is still at an early stage. More important, the predominant medical perspective have conceptualized presenteeism as a mere reduction in productivity because of health-related ailments, rather than as an individual behavior, without directly explored the role of psychological factors in predicting the phenomenon and its consequences for job performance (Johns, 2010; 2011).

In this scenario, the present work contributes to the study of attendance behaviors by analyzing the agentic and proactive components of individual behaviors, strongly required in the today's work situation in order to facilitate people in handling competition, actively shaping changes and taking advantages from it. In fact, rooted in the social-cognitive theory (Bandura, 1986), the current work stresses the role of self-efficacy in directly and indirectly impacting the decision to take a day-off or to attend work despite unhealthy medical conditions. Additionally, in line with the importance of adopting a longitudinal approach (Mason & Griffin, 2003) and including social dynamics (Johns, 1997) in the study of absenteeism, the current work explores temporal variations in absences and tests how social context can explain changes across time.

For this latter purpose, social context has been conceptualized through the perceptions of social context (PoSC; Borgogni, Dello Russo, Di Tecco, Alessandri, & Vecchione, 2011), operationalized as the individuals' perceptions of the most relevant social constituencies of the organization (i.e., immediate supervisor, colleagues and top management) and of their behaviors. Finally, according to a psychological view of presenteeism (Johns, 2011), the present work investigates whether and how self-initiated change behaviors model the tendency to work if ill, measuring a relatively new construct, job crafting, which designs the physical, cognitive and relational changes that people make in some aspects of their work (Tims, Bakker, & Derks, 2012; Wrzesniewski & Dutton, 2001).

Specifically, three studies were designed, presented as follows.

The first study, consistent with social-cognitive theory (Bandura, 1986), aimed to deepen the concurrent role of self-efficacy and job satisfaction in predicting absenteeism, testing both a direct and indirect relation in two different groups of employees, based on their length of service within the organization.

The second contribution intended to study the dynamic and accrual over time of absence behaviors. It analyzed different absenteeism trajectories over four years of employees who differed in years of organizational tenure. Moreover, it investigated the impact of social influence on these changes, testing the effect of perceptions of social context (i.e., perceptions of colleagues, immediate supervisor and top management) on absenteeism trajectories.

Finally, the third study focused on presenteeism. It explored the role of self-efficacy and job crafting in shaping the phenomenon and it investigated its consequences on job performance, as rated by supervisors. Moreover, as job crafting is a rather new construct, it explored the relation between efficacy beliefs and crafting behaviors.

3

References

- Aronsson, G., Gustafsson, K., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. *Journal of Epidemiology and Community Health*, 54, 502–509.
- Avey, J. B., Patera, J. L., & West, B. J. (2006). The implications of positive psychological capital on employee absenteeism. *Journal of Leadership & Organizational Studies*, 13(2), 42-60.
- Bandura, A. (1986). Social foundations of thought and action: A Social Cognitive Theory.Englewood Cliffs, NJ: Prentice-Hall.
- Bergström, G., Bodin, L., Hagberg, J., Lindh, T., Aronsson, G., & Josephson, M. (2009). Does sickness presenteeism have an impact on future general health? *International Archives of Occupational and Environmental Health*, 82, 1179–1190.
- Biron, M., & Bamberger, P. (2012). Aversive workplace conditions and absenteeism: Taking referent group norms and supervisor support into account. *Journal of Applied Psychology*, 97, 901–912.
- Borgogni, L., Dello Russo, S., Di Tecco, C., Alessandri, G., & Vecchione, M. (2011, August).Social cognitive theory as reference frame for perceptions of context. Paper presented at the Annual Meeting of the Academy of Management, San Antonio, Texas.
- Burton, J. P., Lee, T. W., & Holtom, B. C. (2002). The influence of motivation to attend, ability to attend, and organizational commitment on different types of absence behaviors. *Journal of Managerial Issues, 14*, 181-197.
- Caverley, N., Cunningham, J. B., & MacGregor, J. N. (2007). Sickness presenteeism, sickness absenteeism and health following restructuring in a public service organization. *Journal of Management Studies*, 44, 304–319.

- Chadwick-Jones, J. K., Nicholson, N., & Brown, G. (1982). Social psychology of absenteeism. New York: Praeger.
- Harrison, D., & Martocchio, J. J. (1998). Time for absenteeism: A 20-year review of origins, offshoots, and outcomes. *Journal of Management, 24*, 305-350.
- Hill, J. M. M., & Trist, E. L. (1955). Changes in accidents and other absences with length of service: A further study of their incidence and relation to each other in an iron and steel works. *Human Relations*, 8, 121–152.
- Johns, G. (1997). Contemporary research on absence from work: Correlates, causes, and consequences. *International Review of Industrial and Organizational Psychology, 12*, 115-174.
- Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, *31*, 519-542.
- Johns, G. (2011). Attendance dynamics at work: The antecedents and correlates of presenteeism, absenteeism, and productivity loss. *Journal of Occupational Health Psychology*, *16*, 483-500.
- March, J. G., & Simon, H. A. (1958). Organizations. Oxford, UK: John Wiley.
- Markham, S. E., & McKee, G. H. (1995). Group absence behavior and standards: A multilevel analysis. *Academy of Management Journal, 38*, 1174–1190.
- Mason, C. M., & Griffin, M. A. (2003). Group absenteeism and positive affective tone: A longitudinal study. *Journal of Organizational Behavior*, 24, 667–687.
- Patton, E., & Johns, G. (2012). Context and the social representation of absenteeism: Absence in the popular press and in academic research. *Human Relations*, *65*, 217-240.
- Schmidt, K-H. (2002). Organisationales und individuelles abwesenheitsverhalten: Ein crosslevel studie. Zeitschrift für Arbeits-und Organisationpsychologie, 46, 69-77.

- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, *80*(1), 173–186.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*(2), 179–201.
- Xie, J. L., & Johns, G. (2000). Interactive effects of absence culture salience and group cohesiveness: A multi-level and cross-level analysis of work absenteeism in the Chinese context. *Journal of Occupational and Organizational Psychology*, 73(1), 31-52.

CHAPTER 1

The role of self-efficacy and job satisfaction on absences from work in different tenured employees

Abstract

With regard to the antecedents of employee absenteeism, the present study aimed to deepen the concurrent role - which has been rarely investigated in predicting absence behaviors - of self-efficacy and job satisfaction, testing both a direct as well as an indirect relation in two different groups of employees, based on their organizational tenure. A total of 816 white-collars from the main delivery Italian company was administrated a self-report questionnaire, matched with objective data on absences (i.e., the total days lost at work over 12 months). The results of multi-group structural equation modeling revealed that self-efficacy was directly and negatively associated with absences from work only for low-tenured employees, whereas it is indirectly related to absenteeism via job satisfaction for high-tenured individuals. Moreover, as expected, a significant and negative link between job satisfaction and absences was detected only for high-tenured workers. These findings open the way to further research and have implications for training and talent management, as the authors discuss.

Keywords: Absenteeism, self-efficacy, job satisfaction, organizational tenure

1. Introduction

Employee absenteeism is a relevant personnel issue that has traditionally raised the attention of scholars and practitioners concerned with its spiraling labor costs and deteriorating profit (Gründemann & van Vuuren, 1997). The fifth European Survey on Working Conditions conducted in 2012 revealed that more than two-fifths (43%) of European workers, on average, reports at least one day-off from work because of "health problems" in the 12 months prior to the survey, and the 23% reports more than five days (Eurofound, 2012). This is probably due to the fact that under times of economic recession, like the ones that many European countries are currently living, there is a paucity of job opportunities that reduces turnover. Thus, given these external circumstances, if individuals experience a misfit with their job they are less inclined to leave the organization (i.e., less turnover), but they are more likely to take a leave from work, increasing the absenteeism rate. In addition, the economic recession and the consequent unemployment rate represent psychological stressors that negatively impact employees' wellbeing, further increasing absenteeism – this is known as the Catalano and Dooly (1983) economic stress hypothesis (Shoss & Penney, 2012).

Absenteeism is a broad and multi-faceted construct, which incorporates different absence behaviors under the same umbrella, making challenging to completely understand its nature and antecedents (Avey, Patera, & West, 2006; Harrison & Martocchio, 1998). In fact, there are many reasons why people do not attend work (e.g., illness, family emergencies, psychological contract breach, employee deviance, vacations) and these reasons may vary according to different and personal factors of employees.

In the literature, the most investigated predictors of absenteeism are individual characteristics and work attitudes. The individual factors include personality traits, such as Conscientiousness and Openness (Darviri & Woods, 2006; Furnham & Bramwell, 2006; Judge,

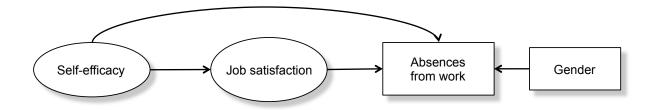
Martocchio, & Thoresen, 1997), and demographic variables, such as gender and organizational tenure (Côté & Haccoun, 1991; Hackett, 1990; Patton & Johns, 2012). Particularly, organizational tenure is a well-recognized antecedent of absence behaviors (Hackett, 1990; Nicholson, Brown, & Chadwick-Jones, 1977; Thomson, Griffiths, & Davison, 2000), although empirical findings are still controversial. In fact, some studies have reported a negative relation between tenure and absenteeism (Knox, 1961; Nicholson et al., 1977; Rhodes & Steers, 1990), hypothesizing that higher-tenured employees would have a better person-organization (P-O) fit and would find a more satisfactory position in the organization (Harrison & Martocchio, 1998); moreover, organizations usually dismiss those who tend to be frequently absent. However, a few studies have also reported a non-significant association between the two variables, because the association was explained by age (Hackett, 1990), or a curvilinear, rather than linear, link (Hill & Trist, 1955; Thomson et al., 2000).

Additionally, organizational tenure affects job attitudes, such as job satisfaction, which vary across career stages (Cron & Slocum, 1986; Mehta, Anderson, & Dubinsky, 2000; Van Maanen & Schein, 1977) and which has been broadly studied in relation with attendance behavior (Hackett, 1989; Lambert, Edwards, Camp, & Saylor, 2005), under the theoretical assumptions that the more the individuals are satisfied with their job, the more they would attend work (Steers & Rhodes, 1978). A long-standing tradition in Industrial/Organizational (I/O) psychology has considered job satisfaction as a "mid-term" psychological process that would turn more stable variables into actual behaviors (Harrison & Martocchio, 1998). However, few studies have explicitly explored the mediating role played by job satisfaction and they have shown inconsistent results, focusing on demographic and contextual variables as predictors more than on psychological characteristics (Goldberg & Waldman, 2000; Steel, Rentsch, & van Scotter, 2007).

Among psychological characteristics, self-efficacy represents an important predictor of absenteeism as well as of other organizational behaviors (Vancouver & Day, 2005), because it is a key self-regulatory process that influences behavior directly and through its impact on other factors, such as affective dispositions, perceptions of obstacles and relationships. Moreover, research has also shown that self-efficacy is positively related to job satisfaction (Bandura, 1997; Judge & Bono, 2001) which, in turn, is a mediator of the relationship between relevant individual variables and counterproductive behaviors (Mount, Ilies, & Johnson, 2006), including absence behaviors (Viswesvaran, 2002). Thus, job satisfaction is likely to act as a mediating process between self-efficacy and absences from work.

Nevertheless, there is a lack of research investigating the concurrent role of self-efficacy and job satisfaction in relation to absences from work. Consequently, our contribution aims to test a conceptual model (Figure 1) in two different groups of employees, based on their organizational tenure, of the former Italian Ministry of Telegraph and Communication in order to: a) investigate the role of self-efficacy in directly predicting absences from work; b) corroborate the relationship between self-efficacy and job satisfaction; c) examine the role of job satisfaction in predicting absences from work; d) test the mediating role of job satisfaction between self-efficacy and absences from work, controlling for gender.

Figure 1. The conceptual model



In order to investigate the different paths among the variables, due to differing tenure within the organization, the study included two groups of employees: 1) "NAL", that includes newly hired and short tenured employees, holding a degree; and 2) longer tenured employees, hired before the important privatization process of the organization, occurred in 1998.

2. From self-efficacy to absences from work

2.1 The direct link between efficacy beliefs and absences

Self efficacy is defined as the confidence of being able to organize and execute the courses of action required to produce given attainments; it refers to people' beliefs to exercise control over the quality and direction of their life (Bandura, 1997).

Self-efficacy is known in the literature as the strongest predictor not only of job performance, but also of wellbeing and withdrawal behavior (e.g., turnover, lateness; Heuven, Bakker, Schaufeli, & Huisman, 2006; Stajkovic & Luthans, 1998). Few studies, in which self-efficacy was broadly conceptualized as a relatively stable personal characteristic, have found a non-significant relationship between self-efficacy and absenteeism (Avey et al., 2006; Punnett, Greenidge, & Ramsey, 2007). On the contrary, the majority of studies have conceptualized self-efficacy as a malleable personal characteristic enabling an individual to attend work, and have observed a significant negative association between those two variables (Busch, Göransson, & Melin, 2007; Labriola, Lund, Christensen, Albertsen, Bültmann, Jensen, & Villadsen, 2007). Thus, low self-efficacy was positively associated with prolonged sickness absences while high self-efficacy was related to more rapid recovery from diseases.

The self-regulatory perspective on human behavior (Vancouver & Day, 2005) and some preliminary empirical findings (Latham & Frayne, 1989) show how training in self-management decreases employees' absenteeism. In particular, the self-regulatory skills (e.g., anticipation, self-regulation, self-reflection), that underlie self-efficacy, allow employees to: anticipate positive outcomes for their action, in terms of external incentives and internal self-reactions; act according to high goals and personal standards; and analyze their experience in order to capitalize on it. Thus, the self-regulatory processes support employees in managing problematic situations and effectively responding to personal and social obstacles, which, in turn, increase job attendance (Frayne & Latham, 1987; Latham & Frayne, 1989).

Thus, self-efficacious employees would not withdraw even in problematic situations at work, due to their confidence in generating effective action-plans, figuring out ways to exercise control, and to handle difficult tasks and relationships in the workplace, managing their emotions, stress and anxiety, keeping calm and in a good mood (Bandura, 2012).

Given this theoretical framework, we assume that self-efficacy, a state-like characteristic, is critical for absences from work and we believe that self-efficacious employees, independently from their organizational tenure, would attend more than employees low in self-efficacy who are less confident to handle difficult situations and less resistant to stress (Jex & Bliese, 1999). Accordingly, we set forth the first hypothesis:

Hypothesis 1: Self-efficacy will be directly and negatively related to absences from work in both groups of employees ("NAL" and "longer tenured employees").

2.2 How self-efficacy shapes job satisfaction

The literature has already shown that self-efficacy is consistently related to job satisfaction (Judge & Bono, 2001; Perdue, Reardon, & Peterson, 2007). Self-efficacy affects job satisfaction through its association with practical success on the job (Judge & Bono, 2001). In fact, people high in self-efficacy deal more effectively with difficulties, persisting in the face of failure (Gist

& Mitchell, 1992), and they are more likely to attain valued outcomes according to their personal standards, from which they derive more satisfaction with the job. Moreover, the regulatory skills underlying self-efficacy make employees confident to solve conflicts that may occur with colleagues, to overcome frustrations, to remain calm and in a good mood, deriving more satisfaction from their work (Bandura, 1997). Thus, individuals who are confident in their abilities and competences to perform a job will be more satisfied with it, independently from their length of service within the organization:

Hypothesis 2: Self-efficacy will be positively related to job satisfaction in both groups of employees ("NAL" and "longer tenured employees").

2.3 The role of organizational tenure in the relationship between job satisfaction and absences

Similarly, the relationship between job satisfaction and absences from work is well established in the literature (Hackett, 1989). A substantial body of research has shown that overall job satisfaction is negatively associated with absenteeism (Hardy, Woods, & Wall, 2003; Mohren, Swaen, Kant, van Schayck, & Galama, 2005; Sagie, 1998) and the magnitude of this relationship is moderate. This link can be explained by the withdrawal model of absenteeism that considers absences from work as an individual and voluntary behavioral response of withdrawal, caused by dissatisfaction with adverse work conditions (Johns, 1997). Consistent with the seminal contribution by Steers and Rhodes (1978), job dissatisfaction leads to lower motivation to attend work, culminating in absenteeism.

However, according to the job experience models (Katz, 1980), job satisfaction is a time dependent variable and, more specifically, it is a function of employee's tenure (Bedeian, Ferris, & Kacmar, 1992; Cooper-Thomas & Anderson, 2005; Jones, 1986). Empirical studies have

showed that job satisfaction is likely to vary across career stage (Mehta, Anderson, & Dubinsky, 2000; Van Maann & Schein, 1979), developing in line with organizational socialization process and social and role learning (Cooper-Thomas & Anderson, 2005; Rowden & Conine, 2005; Schmidt, 2007). An important implication of these results is that job satisfaction may be significantly related to absenteeism only at particular level of organizational tenure. Thus, we hypothesized different relationship between job satisfaction and absences from work in the two tenured groups.

First, we assume that new hired and short tenured employees' job satisfaction will not affect absence behaviors. Consistent with uncertainty reduction and sense-making theories (Falcione & Wilson, 1988; Louis, 1980; Morrison, 1993), newcomers are strongly concerned with understanding the organization, learning about their role, colleagues, and supervisors, interpreting accurately events, in order to reduce the uncertainty and the stress associated with the new context and job. Moreover, they are more focused on exhibiting appropriate behaviors and attitudes and on proving their ability to successfully achieve the goal and to perform the tasks (Anderson & Cooper-Thomas, 1996; Louis, 1980; Schein, 1971). For this reason, they are more willing to attend work despite their level of job satisfaction.

Conversely, for longer tenured workers the relationship with the job and the organization is changed as a consequence of the socialization process through successive level of organizational tenure (Wanous, 1980). Indeed, the completion of organizational socialization should have led the employee to a better fit with the organization and to a lower level of anxiety (Jones, 1986; Van Maanen & Schein, 1977), so that their job focus has changed. In fact, they become less interested in learning and understanding the work or in demonstrating their competencies whereas they begin to seek for satisfaction with job, social relationship, working conditions, status and organizational policies (Wanous, 1980). Hence, at this stage of employment job satisfaction plays a central role in influencing organizational behaviors (Norris & Niebhur, 1984), such as absenteeism.

According to the aforementioned arguments, we tested the following hypotheses:

Hypothesis 3a: Job satisfaction will not be significantly related to absences from work for "NAL" group.

Hypothesis 3b: Job satisfaction will be significantly and negatively related to absences from work for "longer tenured employees" group.

2.4 From self-efficacy to absences: the indirect link through job satisfaction

As anticipated, the research on the link between self-efficacy and absences from work has been relatively overlooked, and, as a consequence, little is known also with regard to the processes that connect these two variables. Here we argue that an indirect effect may operate through job satisfaction for longer tenured employees group.

Consistent with social cognitive theory (Bandura, 1997), highly efficacious employees act trasformatively on their organizational context and they are more able to regulate their emotions and behaviors, even in the face of interpersonal conflicts or difficulties, and to manage problematic situations at work (Bandura, 1997; Gist & Mitchell, 1992). This results in more successful work experiences and in more positive perceptions of the work environment that, in turn, increase job satisfaction (Borgogni, Dello Russo, Petitta, & Vecchione, 2010; Borgogni, Petitta, & Mastrorilli, 2010; Judge & Bono, 2001). Furthermore, self-efficacious employees construe a better fit with the organization, because they contribute to shape and adjust the context to their preferences and characteristics. According to person-organization (P-O) fit theory (Kristof, 1996), when a fit is engendered, job satisfaction will increase (Caldwell &

O'Reilly, 1990; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003).

In turn, longer tenured satisfied employees exhibit more extra-role behaviors and reduce withdrawal behaviors (Vilela, González, & Ferrín, 2008), namely turnover (Chen, Chang, & Yeh, 2004; Freund, 2005) or absenteeism, when alternative employments are lacking as in the Italian context (Punnett et al., 2007).

For this reason, we set the following hypothesis:

Hypothesis 4: Self-efficacy will be indirectly related to absences from work via job satisfaction only for "longer tenured employees" group.

2.5 Gender as a control variable

Gender and organizational tenure are two of the most common characteristics reported in the absenteeism literature (Hackett, 1990; Harrison & Martocchio, 1998; Lambert et al., 2005).

Generally, absenteeism is higher among women than men (Dellve, Eriksson, & Vilhelmsson, 2007; Kivimaki, Vahtera, Thompson, Griffiths, Cox, & Pentti, 1997). There are several explanations for this finding: first, it may depend on pregnancy-related issues and on the double role that women play in society (Mastekaasa, 2000). Family responsibilities, above all caring after children, contribute to explain greater absences among female employees (Lambert et al., 2005; Leigh, 1991). In fact, it has been observed that female absenteeism increases with the enlargement of the family size and decreases when children grow up (Rhodes & Steers, 1990). Furthermore, women tend to be more concerned about their health, to visit physicians more often (Gijsbers van Wijk & Kolk, 1997) and to suffer of more physical symptoms, such as migraine and depression that are associated with absences from work (Johns, 1997).

3. Method

3.1 Organizational context

The research was conducted in the main Italian mail delivery company, which is one of the largest service companies in Italy, with about 150,000 people employed in the 14,000 offices throughout the country and very different job positions, ranging from mail carriers to top managers.

The organization had been part of the Ministry of Telegraph and Communications and was privatized in 1998, leading to important changes in work procedures, standards, organizational culture and HR management practices. One of the most important modifications introduces a three-year structured socialization program within the organization. Now, new hired employees are required to rotate over different job positions, organizational functions and geographical area in order to deeply understand and learn how this large organization works.

Moreover, moving away from a bureaucratic culture, the HR Department is more and more engaged in reducing the costs associated with absenteeism and in valuing the employees' contribution to organizational effectiveness and development. Therefore, they are more interested in understanding the drivers of job satisfaction and absenteeism, in order to obtain a greater comprehension of the casual relationship among personal characteristics, organizational features and absenteeism.

3.2 Participants and procedure

Participants were 816 white-collars of the main mail delivery company in Italy (the response set of the research was 70%). The respondents were balanced among men (51%) and women (49%) and their age ranged between 26 and 64 years old (M = 42.3, SD = 9.1).

Organizational tenure oscillated between 1 and 36 years and the mean was 12.7 years (SD = 11.1).

Regarding the two groups, 332 employees (41% of the sample) have an organizational tenure of 3 or fewer years ("NAL" group); they were new hired and short tenured employees with a degree, involved in the organizational socialization program. The second group, named "longer tenured employees" group, is composed by 484 employees (59% of the sample) who had been hired before the privatization process occurred in the organization and with a length of service higher than 9 years.

Employees were administered a paper and pencil questionnaire in collective meetings organized during normal working hours. In order to match individuals' answers with the absenteeism data and to respect employees' privacy, the HR Department assigned a code to each participant and administered the questionnaires, which were collected back by the research team. In this way, the organization knew the name of the employee, the code and the absence data, but did not know each individual's answers to the questionnaire; instead, the researchers knew the code, the answers to the questionnaire and the absenteeism measures provided by the company, but not the name of the employee. This was done in order to match each questionnaire with the objective data concerning individual absences from work, while respecting the privacy law.

3.3 Measures

Self-efficacy. A 5-item scale, previously validated in the same organization (Borgogni et al., 2010a), was used to measure the individual's ability to self-regulate at work, especially in the face of obstacles, conflicts and problematic events. The items were framed as statements of beliefs of being able to regulate one's emotions, especially in tense and difficult events, to restore one's energies after a period of intense activity, to handle problematic situations with

colleagues. Some sample items are "I am confident to defend my rights when treated unfairly" or "I am confident to keep in a good mood, even in tense situations". The statements were measured on a 7-point Likert-type scale (from 1 = "Cannot do to" to 7 = "Highly certain can do"). The Cronbach's alpha reliability coefficient of the scale was .78.

Job satisfaction. Three items adapted from the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) and previously used in the Italian context (Borgogni et al., 2010b) measured job satisfaction with regard to different facets, namely supervisor, work context and the overall job. A sample item is "I am satisfied with my job". For each statement respondents rated their agreement on a 7-point Likert scale ranging from 1 ("Strongly disagree") to 7 ("Strongly agree"). The Cronbach's alpha reliability coefficient of the scale was .83.

Absences from work. The organization provided us the absenteeism measures operationalized as the total time lost, namely the sum of days of absences from work. It included sickness absences, either accompanied or not by a medical certificate. The data were drawn from personnel records and referred to an overall period of 12 months (6 before and 6 after the administration of the questionnaire).

Demographic variables. Gender and organizational tenure were made available to researchers by the HR Department. Gender was coded 1 for men and 2 for women. Organizational tenure was measured in years.

3.4 Statistical analyses

Analyses were carried within the framework of structural equation modeling (SEM), using

the Mplus software (Muthén & Muthén, 1998), and proceeded in three phases.

Preliminarily, we tested the measurement models separately for the two groups in order to determine whether the observed variables served as adequate indicators of the latent variables (i.e., self-efficacy and job satisfaction) and supported the construct validity of the measures (Anderson & Gerbing, 1988).

Subsequently, we tested measurement invariance for the latent variables (i.e., self-efficacy and job satisfaction) in order to verify the prerequisite assumptions of measurement equivalence across groups for valid comparison in multi-group research (Vandenberg, 2002; Vandenberg & Lance, 2000). More specifically, we compared a series of CFA nested models, using the difference in the Comparative Fit Index (Δ CFI, Cheung & Rensvold, 1999; 2002), because of the large size of our sample. Firstly, in order to test the equivalence of factor structures for the two groups, a configural invariance model (Model 1) was specified in which two correlated factors (i.e., self-efficacy and job satisfaction) were estimated for each group. For further specifications, the first indicator's loading of each factor was fixed to 1 and its intercept was fixed to 0 to identify the model; all factor variances, covariances, and means were freely estimated; unique variances were freely estimated; covariances between like items' uniquenesses were estimated across groups. The following measurement invariance model was a test of metric invariance (Model 2), in which like items' factor loadings were constrained to be equal across the two groups. The next model (Model 3) was identical to Model 2, except for the additional constraint of invariant intercepts imposed for like items across groups. This was a test of scalar invariance. Lastly, Model 4 introduced the additional constraint of invariant residual variances for like items across groups (test of invariant uniquenesses).

Finally, we specified a multi-group structural model to examine the posited paths among variables represented in Figure 1. Because the number of absence days had a non normal

distribution, with extremely large skewness and kurtosis (4.66 and 28.59 respectively), we estimated parameters using the Mean and Variance adjusted Maximum Likelihood (MLMV, Muthén & Muthén, 1998). The MLMV produces a mean and variance adjusted chi-square test of model fit that is especially suitable for models with non-normal data and large sample. In this model, gender was included as covariates because of their expected relationship with absences from work.

4. Results

Table 1 shows means, standard deviations, and the correlation matrix among the study variables.

Variable	Μ	DS	1	2	3	4
1. Self-efficacy	4.93	.74				
2. Job satisfation	5.17	1.09	.479**			
3. Absenteeism	4.56	9.05	012	061*		
4. Gender	-	-	067*	.007	.095**	
5. Tenure	12.74	11.11	012	.012	.048	.097**

Note. ** p < .01, * p < .05. Gender was coded as 1 for males and 2 for females. Tenure was measured in years.

4.1 Measurement models

For each group of employees a two-factor model was specified where the latent factors of self-efficacy and job satisfaction were allowed to correlate. Both confirmatory models satisfied multiple goodness of fit tests: "NAL" group, $\chi^2(19) = 28.497$, p = .07, TLI = .980, CFI = .986, RMSEA = .039, SRMR = .041; "longer tenured employees" group, $\chi^2(28) = 1083.1587$, p < .001, TLI = .951, CFI = .967, RMSEA = .061, SRMR = .036. In fact, all indices fell in cut-off ranges (Hu & Bentler, 1998) with the exception of the chi-square significance for "longer

tenured employees" group, likely due to the large sample size (Bollen & Long, 1993; Mulaik, James, & Van Alstine, 1989). Each observed indicator was related to its respective latent factor and the factor loadings were all higher than .50 and significantly different from zero, providing support to the internal validity of the scales. The covariance between the latent self-efficacy and job satisfaction factors was .52 for the "NAL" group and .63 for the "longer tenured employees" group.

4.2 Measurement invariance

Table 2 shows tests of measurement invariance among groups for self-efficacy and job satisfaction. Acceptable models' fit, consistent with Hu & Bentler's criteria (1998; 1999), and the very small change in CFI (Δ CFI was minor than .01; Cheung & Rensvold, 1999; 2002) among the nested models confirmed that self-efficacy and job satisfaction items demonstrated invariance across the two groups with respect to every measurement property. Therefore, the viability of multi-group comparison was supported.

Table 2. Test of measurement invariance between the two groups.

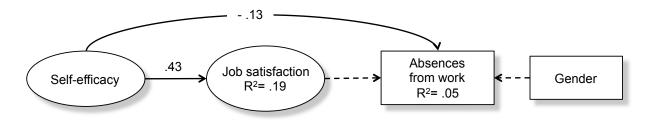
MODEL	df	χ^2	RMSEA	CFI	ΔCFI
M1. Configural invariance	38	77.423	.050	.977	-
M2. Metric invariance	44	91.145	.051	.973	
M1 vs M2	-	-	-	-	.00
M3. Scalar invariance	52	109.503	.057	.966	
M2 vs M3	-	-	-	-	.00
M4. Invariant uniquenesses	60	123.536	.050	.964	
M3 vs M4	-	-	-	-	.00

4.3 Multi-group structural model

The posited model fits the data well, $\chi^2(58) = 96.044$, p < .01, CFI = .963, TLI = .959, RMSEA = .040, SRMR = .046, and provides partial support to our hypotheses. Figure 2 presents

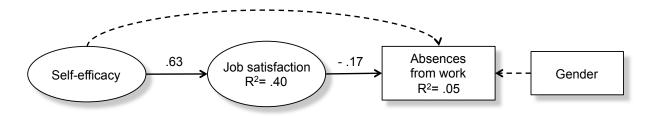
the parameter estimates of the structural model for "NAL" group and Figure 3 shows them for "longer tenured employees" group.

Figure 2. Results from the structural equation model for "NAL" group.



Note. Dotted lines indicate no-significant paths.

Figure 3. Results from the structural equation model for "longer tenured employees" group.



Note. Dotted lines indicate no-significant paths. The indirect effect of self-efficacy on absenteeism through job satisfaction is significant at p < .05, and equal in magnitude to - .11.

Self-efficacy was directly and negatively associated with absence from work only for the "NAL" group, whereas no direct link between these two variables was depicted for longer tenured employees, partially in contrast with our first hypothesis. As hypothesized, efficacy beliefs contributed positively to job satisfaction of both short and long tenured workers (H2) and job satisfaction, in turn, negatively predicted absences from work only for longer tenured employees (H3a and H3b). Finally, gender was non-significantly related to absenteeism in both groups of employees.

Overall, the explained variance in job satisfaction was 19% for "NAL" group and 40% for "longer tenured employees" group; regarding absences from work, the model explained the same amount of variance (5%) for each group.

Additional analyses were conducted to test the mediating hypothesis (H4) for "longer tenured employees" group, by using Sobel's (1982) approximate significance test. Findings revealed that the indirect link between self-efficacy and absences from work through job satisfaction was significant (total indirect effect: $\beta = -.11$, p < .05). According to MacKinnon, Fairchild and Fritz (2007), despite the non-significant direct relation between self-efficacy and absences from work for "longer tenured employees" group, since both variables had a statistically significant relationship with the mediation variable (i.e., job satisfaction), there is evidence of mediation and we can consider the significance of the indirect effect.

5. Discussion

The purpose of the present study was to investigate the relationship between self-efficacy and absences from work, both direct and indirect through job satisfaction, in two different groups of employees, based on their organizational tenure.

First of all, the study demonstrated that self-efficacy is an important predictor of absences from work especially for newcomers and short tenured employees ("NAL" group). In fact, individuals who are in the starting period of their employment are typically more preoccupied with proving themselves on the job, learning and understanding the organization in order to fulfill its expectations and job assignments (Schein, 1977). This may lead employees to experience stress, disappointment, surprise and concerns and to take a day-off to escape from this unpleasant situation (McNatt & Judge, 2008). Higher self-efficacious people feel better able to deal with difficulties at work, to self-regulate themselves, even in the face of stressful and

anxious circumstances, and to handle the challenges of the new work context (Bandura, 1997); thus, they are less stressed about being able to complete their job assignments (Ashfort & Saks, 2000), they have no need to withdraw and, so, they are less likely to be absent. Differently, for longer tenured employees and consistently with past researches (Avey et al., 2006; Punnett et al., 2007), we did not detect a direct relationship between self-efficacy and absences from work. Following our theoretical framework, this means that in this context self-efficacy per se does not suffice to increase the probability that long tenured employees attend work, encouraging the exploration of other potential intervening variables in the relation between self-efficacy and absenteeism, as we will explain below.

Furthermore, we corroborated the link between self-efficacy and job satisfaction, as attested by previous studies (e.g., Judge & Bono, 2001), for new-hired and short tenured employees as well as for workers with a higher length of service: people who are more confident to exercise control over their work and social context, and over their moods and reactions even in front of difficulties, are more satisfied.

Consistent with literature (Hackett, 1989; Harrison & Martocchio, 1998; Lambert et al., 2005) and according to the attitudinal response perspective (Johns, 1997), we found that job satisfaction negatively impacts absenteeism for longer tenured employees but not for newcomers and shorter tenured employees. This can be explained referring to the different stages in an individual's organizational life (Wanous, 1980). As aforementioned, new employees tend to be worried with learning their social and work role within the organization and to become a necessary part of work process (Hall, 1976; Schein, 1971). In addition, in this context, individuals with an organizational tenure less than three years ("NAL" group) are in a formal socialization program, after which they have the chance to get their temporary contract transformed into a permanent one. For all these reasons together, they are more willing to show

their abilities and skills and they are more absorbed in perform well at work; thus, they are more likely to attend work despite their level of job satisfaction. Conversely, longer tenured employees already know and are known by the organization and they are more focused on other aspects relating to the job, such as social environment, working conditions and, above all, their satisfaction with them (Wanous, 1980). Thus, job satisfaction becomes a central factor of their organizational life (Norris & Niebuhr, 1984) and the lack of it may lead to a voluntary withdrawal response (Sagie, 1998) and to a lower motivation to attend (Steers & Rhodes, 1978), conducting to absence behaviors. On the contrary, satisfied employees are willing to attend, because the job provides them with the opportunity to attain relevant personal values at work.

A final contribution of our study pertains to the finding of an indirect effect between selfefficacy and absences through job satisfaction for longer tenured employees, which supports the previous finding that self-efficacy per se does not increase the probability that individuals with high tenure would attend work; rather, it may operate via job satisfaction. Consistent with social cognitive theory (Bandura, 1986), we provided evidence that self-efficacy is likely to act as a factor that boosts job satisfaction. In fact, longer tenured people high in self-efficacy proactively shape their work environment, managing problematic situations with colleagues and dealing effectively with the emotions elicited in the workplace (Judge & Bono, 2001). In other words, they contribute to adjust the work environment and the relationships to their individual characteristics, and they are more likely to create the conditions for their needs, goals and preferences to be met over time. As postulated by the person-organization fit theory (Kristof, 1996), this results in a better fit and increases job satisfaction, impacting organizational behaviors (Caldwell & O'Reilly, 1990; Kristof-Brown et al., 2005; Verquer et al., 2003). Thus, these employees would be less absent. *Vice versa*, employees low in self-efficacy are less likely to succeed in creating a fit with the environment; a misfit between a person and his or her organization decreases job satisfaction (Wheeler, Buckley, Halbesleben, Brouer, & Ferris, 2005; Wheeler, Gallagher, Brouer, & Sablynski, 2007), which in turn increases absences.

Regarding the control variable, the finding of a non-significant relationship between gender and absence behavior did not support our expectations, indicating that in the two groups absence behaviors were not affected by the gender.

6. Limitations and future research

There are some limitations in our study.

One potential limitation concerns the fact that we measured absenteeism as the sum of days lost at work, because we had not access to the frequency index. In fact, with the privatization process, the organization has only recently evolved its system to measure absences from work, distinguishing between time-lost index and frequency index. However, at this stage our purpose was to start the investigation of psychological correlates of absences from work in a context that disregarded these aspects in the past. Moreover, the absence data referred to an overall period of 12 months, of which 6 spread before survey administration and 6 months after, because the organization provided the aggregated data on a yearly basis. This may affect the causality relationship between self-report construct (i.e., self-efficacy and job satisfaction) and absenteeism. However, some studies indicate high correlations between past and subsequent absences (Rentsch & Steel, 1998), and that attitudes toward work predict absenteeism over different time frames ranging between 3 and 60 months (Steel, Rentsch, & Van Scotter, 2007).

Another potential concern is related to the fact that self-efficacy and job satisfaction are self-report measures collected at the same point in time. However, these constructs are by definition aspects that only the employee can report, because they refer to personal beliefs and attitudes (Caprara & Cervone, 2000), and were shown to be empirically different, although they

are likely to activate a positive spiral of cross-lagged effects. Moreover, we collected an objective measure of absenteeism drawn from personnel records that refers to a different point in time; this may attenuate the risk of correlation inflation (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

One may argue that we did not measure the individual self-efficacy specifically set for "attending work". However, we adopted a measure of regulatory self-efficacy at work consistent with previous literature that attested the relation between self-regulatory skills and absenteeism (Frayne & Latham, 1987; Latham & Frayne, 1989).

Finally, the present research has not included the study of the organization's features. In the future, it would be interesting to deepen the role of self-efficacy in conjunction with higherlevel variables concerning the context, such as organizational climate, perceptions of social context (PoSC; Borgogni, Dello Russo, Di Tecco, Alessandri, & Vecchione, 2011) and absenteeism culture (Xie & Johns, 2000). In fact, including features of the organizational context would likely account for an additional portion of variance in job satisfaction, consistent with the P-O fit theory (Kristof, 1996), and indirectly in absence behavior, consistent with the withdrawal response approach (Johns, 1997).

Regarding the future perspectives, the direct link between self-efficacy and absenteeism warrants further investigation. It could be useful to include other likely explanatory mechanisms, such as health quality or symptoms and coping strategies, in order to test the assumption of self-efficacy as an enabling condition. Moreover, it would be worthwhile to investigate other facets of self-efficacy, for example work self-efficacy, social self-efficacy and emotional self-efficacy, in order to explore how they are differently related to absence behaviors.

Longitudinal research is also needed to understand the time frame in which self-efficacious employees shape their social context and how long it takes to develop high P-O fit and job satisfaction, as well as how long it takes to translate the positive effects of satisfaction into behavioral responses.

7. Practical implications

The present study holds implications for several HR practices.

First, taking into account self-efficacy in hiring and selection processes could be a good strategy to prevent the risk of absenteeism. According to an agentic view of the job, people are active agents who interpret and perform the job consistent with their personal characteristics (Sanchez & Levine, 2012). Thus, assessing the psychological capacities, such as anticipation, self-regulation and self-reflection that underlie self-efficacy and agency (Bandura, 1986), may serve to bring the candidates' personal vision of the job out and to explore their beliefs to cope with difficulties and stressful period. Moreover, with candidates who already have experience in the specific job position, directly evaluating self-efficacy would be possible.

Second, it is recommendable to pay great attention to the socialization process of the newly hired and short tenured employees in order to promote a better adjustment and P-O fit (Kim, Cable, & Kim, 2005), and to enhance their job satisfaction and attendance behavior from the beginning of their employment. During the socialization program, a training aimed at improving individual beliefs in one's own capabilities to exercise control over circumstances in the workplace could be included. Consistent with social cognitive theory (Bandura, 1997), this training could be focused on self-management in order to increase one's perceived self-efficacy with regard to responding effectively to job demands and managing personal and social obstacles (Frayne & Latham, 1987; Latham & Frayne, 1989). In particular, the intervention would be oriented to strengthen the self-regulation capabilities that underlie personal efficacy beliefs and that allow employees to keep calm in stressful situations, solve interpersonal conflicts, cope with

problematic situations, recover quickly after a period of intense activity. Furthermore, the training could aim at supporting job crafting on behalf of an employee (Wrzesniewski & Dutton, 2001) to facilitate the fit between his/her characteristics and the organizational context opportunities. Furthermore, the same training could be offered to tenured employees as well, in order to lead to a higher job satisfaction and, consequently, to reduce absences from work.

Finally, our research has implications for talent management. Employees high in selfefficacy show minor level of absenteeism and have stronger job satisfaction that, in turn, decreases absence behaviors. Therefore, HR development strategies may aim to identify selfefficacious employees, who can be considered the organization's key-people, at the very early stage of their career and to find the factors underlying their satisfaction with the job, in order to foster job attendance.

References

- Anderson, N., & Cooper-Thomas, H. D. (1996). Work group socialization. In M. A. West (Ed.), Handbook of work groups (pp. 423 –450). Chichester: Wiley.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in practice. A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Ashforth, B. E., & Saks, A. M. (2000). Personal control in organizations: A longitudinal investigation with newcomers. *Human Relations*, *53*, 311–39.
- Avey, J. B., Patera, J. L., & West, B. J. (2006). The implications of positive psychological capital on employee absenteeism. *Journal of Leadership & Organizational Studies*, 13(2), 42-60.
- Bandura, A. (1997). Self-Efficacy: The exercise of control. New York: Freeman.

- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38, 9-44.
- Bedeian, A. G., Ferris, G. R., & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of Vocational Behavior*, 40, 33–48.
- Bollen, K. A., & Long, J. S. (1993). Testing Structural Equation Models. Thousand Oaks, CA: Sage.
- Borgogni, L., Dello Russo, S., Di Tecco, C., Alessandri, G., & Vecchione, M. (2011, August). Social cognitive theory as reference frame for perceptions of context. Paper presented at the Annual Meeting of the Academy of Management, San Antonio, Texas.
- Borgogni, L., Dello Russo, S., Petitta, L., & Vecchione, M. (2010a). Predicting job satisfaction and job performance in a privatized organization. *International Public Management Journal, 13*, 275-296.
- Borgogni, L., Petitta, L., & Mastrorilli, A. (2010b). Correlates of collective efficacy in the Italian air force. *Applied Psychology: An International Review*, *59*, 515–537.
- Busch, H., Göransson, S., & Melin, B. (2007). Self-efficacy beliefs predict sustained long-term sick absenteeism in individuals with chronic musculoskeletal pain. *Pain practice: The* official journal of World Institute of Pain, 7, 234-240.
- Caldwell, D. F., & O' Reilly, C. A. (1990). Measuring person-job fit with a profile-comparison process. *Journal of Applied Psychology*, *75*, 648-657.
- Caprara, G. V., & Cervone, D. (2000). *Personality, Determinants, Dynamics, and Potential.* Cambridge, UK: Cambridge University Press.
- Catalano, R., & Dooley, D. (1983). Health effects of economic instability: A test of economic stress hypothesis. *Journal of Health and Social Behavior, 24*, 46–60.

- Chen, T., Chang, P., & Yeh, C. (2004). A study of career needs, career development programs, job satisfaction and the turnover intentions of R&D personnel. *Career Development International*, *9*, 424-437.
- Cheung, G. W., & Rensvold, R. B. (1999). What constitutes significant differences in evaluating measurement invariance? Paper presented at the Annual Meeting of the Academy of Mangement, Chicago, IL.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating Goodness-of-Fit Indexes for testing measurement invariance. *Structural Equation Modeling*, *9*, 233–255.
- Cooper-Thomas, H. D., & Anderson, N. (2005). Organizational socialization: A field study into socialization success and rate. *International Journal of Selection and Assessment*, 13, 116– 128.
- Côté, D., & Haccoun, R. R. (1991). L'absentéisme des femmes et des hommes: Une métaanalyse. *Canadian Journal of Administrative Sciences*, 8, 130-139.
- Cron, W. L., & Slocum, J. W. (1986). The influence of career stages on salespeople's job attitudes, work perceptions, and performance. *Journal of MarketingResearch, 23*, 119-129.
- Darviri, S., & Woods, S. (2006). Uncertified absence from work and the Big Five: An examination of absence records and future absence intentions. *Personality and Individual Differences*, *41*, 359-369.
- Dellve, L., Eriksson, J., & Vilhelmsson, R. (2007). Assessment of long-term work attendance within human service organisations. *Work, 29*(2), 71-80.
- Eurofound (2012). *Fifth European working conditions survey*. Luxembourg: Publications Office of the European Union.

- Falcione, R. L., & Wilson, C. E. (1988). Socialization processes in organizations. In G. M. G. G.A. Barnett (Ed.), *Handbook of organizational communication* (pp. 151–169). Norwood, NJ: Ablex.
- Frayne, C. A., & Latham, G. P. (1987). The application of social learning theory to employee self-management of attendance. *Journal of Applied Psychology*, *72*, 387–392.
- Freund, A. (2005). Commitment and job satisfaction as predictors of turnover intentions among welfare workers. *Administration in Social Work, 29*(2), 5-21.
- Furnham, A., & Bramwell, M. (2006). Personality factors predict absenteeism in the workplace. Individual Differences Research, 4(2), 68-77.
- Gijsbers van Wijk, C. M. T., & Kolk, A. M. (1997). Sex differences in physical symptoms: The contribution of symptom perception theory. *Social Science and Medicine*, *45*, 231-346.
- Gist, M. E., & Mitchell, T. R., (1992). Self-efficacy: A theoretical analysis of its deter- minants and malleability. *Academy of Management Review*, *17*, 183–211.
- Goldberg, C. B., & Waldman, D. A. (2000). Modeling employee absenteeism: Testing alternative measures and mediated effects based on job satisfaction. *Journal of Organizational Behavior*, 21(6), 665-676.
- Gründemann, R. W. M., & Vuuren van, C. V. (1997). Preventing absenteeism at the workplace (European Research Report). Dublin: European Foundation for the Improvement of Working and Living Conditions.
- Hackett, R. D. (1989). Work attitudes and employee absenteeism: A synthesis of the literature. *Journal of Occupational Psychology*, 62(3), 235-248.

Hackett, R. D. (1990). Age, tenure, and employee absenteeism. Human Relations, 43, 601-619.

Hall, D. T. (1976). Careers in organizations. Pacific Palisades, CA: Goodyear Publishing Co.

- Hardy, G. E., Woods, D., & Wall, T. D. (2003). The impact of psychological distress on absence from work. *Journal of Applied Psychology*, 88, 306–314.
- Harrison, D., & Martocchio, J. J. (1998). Time for absenteeism: A 20-year review of origins, offshoots, and outcomes. *Journal of Management, 24*, 305-350.
- Heuven, E., Bakker, A. B., Schaufeli, W. B., & Huisman, N. (2006). The role of self-efficacy in performing emotion work. *Journal of Vocational Behavior*, 69, 222–235.
- Hill, J. M. M., & Trist, E. L. (1955). Changes in accidents and other absences with length of service: A further study of their incidence and relation to each other in an iron and steel works. *Human Relations*, 8, 121–152.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424–453.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for Fit Indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Jex, S. M., & Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressor: A multilevel study. *Journal of Applied Psychology*, *84*(3), 349–361.
- Johns, G. (1997). Contemporary research on absence from work: Correlates, causes and consequences. *International Review of Industrial and Organizational Psychology*, *12*, 115–174.
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal, 29*, 262–79.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86,* 80–92.

- Judge, T. A., Martocchio, J. J., & Thoresen, C. J. (1997). Five-factor model of personality and employee absence. *Journal of Applied Psychology*, 82(5), 745-755.
- Katz, R. (1980). Time and work: Toward an integrative perspective. *Research in Organizational Behavior*, 2, 37-71.
- Kim, T., Cable, D. M., & Kim, S. (2005). Socialization tactics, Employee proactivity, and Person–Organization fit. *Journal of Applied Psychology*, *90*(2), 232–241.
- Kivimaki, M., Vahtera, V., Thompson, L., Griffiths, A., Cox, T., & Pentti, J. (1997). Psychosocial factors predicting employee sickness absence during economic decline. *Journal of Applied Psychology*, 82, 858–872.
- Knox, J. B. (1961). Absenteeism and turnover in an Argentine factory. *American Sociological Review, 26*, 424-428.
- Kristof, A. L. (1996). Person–Organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, *49*(1), 1-49.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person– group, and person–supervisor fit. *Personnel Psychology*, 58, 281-342.
- Labriola, M., Lund, T., Christensen, K. B., Albertsen, K., Bültmann, U., Jensen, J. N., & Villadsen, E. (2007). Does self-efficacy predict return-to-work after sickness absence? A prospective study among 930 employees with sickness absence for three weeks or more. *Work*, 29(3), 233-238.
- Lambert, E., Edwards, C., Camp, S., & Saylor, W. (2005). Here today, gone tomorrow, back again the next day: Antecedents of correctional absenteeism. *Journal of Criminal Justice*, *33*(2), 165-175.

- Latham, G. P., & Frayne, C. A. (1989). Self-management training for increasing job attendance: A follow-up and a replication. *Journal of Applied Psychology*, 74(3), 411-416.
- Leigh, J.P. (1991). Employee and job attributes as predictors of absenteeism in a national sample of workers: The importance of health and dangerous working conditions. *Social Science and Medicine*, *33*, 127–137.
- Louis, M. R. (1980). Surprise and sense making: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly*, 25, 226–251.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. Annual Review of Psychology, 58, 593-614.
- Mastekaasa, A. (2000). Parenthood, gender and sickness absence. *Social Science & Medicine*, 50, 1827–1842.
- McNatt, D. B., & Judge, T. A. (2008). Self-efficacy intervention, job attitudes, and turnover: A field experiment with employees in role transition. *Human Relations, 61*, 783–810.
- Mehta, R., Anderson, R. E., & Dubinsky, A. J. (2000). The perceived importance of sales managers' rewards: A career stage perspective. *Journal of Business & Industrial Marketing*, 15, 507–524.
- Mohren, D. C. L., Swaen, G. M. H., Kant, I. J., van Schayck, C. P., & Galama, J. M. D. (2005). Fatigue and job stress as predictors for sickness absence during common infections. *International Journal of Behavioral Medicine*, 12, 11–20.
- Morrison, E. W. (1993). Newcomer information-seeking Exploring types, modes, sources, and outcomes. *Academy of Management Journal, 36*, 557–589.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59, 591-622.

- Mulaik, S. A., James, L. R., & Van Alstine, J. (1989). Evaluation of Goodness-of-Fit Indices for Structural Equation Models. *Psychological Bulletin*, 105(3), 430–445.
- Muthén, L., & Muthén, B. O. (1998). *Mplus User's Guide*. Los Angeles, CA: Muthén and Muthén.
- Nicholson, N., Brown, C. A., & Chadwick-Jones, J. K. (1977). Absence from work and personal characteristics. *Journal of Applied Psychology*, 62(3), 319-327.
- Norris, D. R., & Niebuhr, R. E. (1984). Organization tenure as a moderator of the job satisfaction-job performance relationship. *Journal of Vocational Behavior, 24*, 169–178.
- Patton, E., & Johns, G. (2012). Context and the social representation of absenteeism: Absence in the popular press and in academic research. *Human Relations*, *65*, 217-240.
- Perdue, S. V., Reardon, R. C., & Peterson, G. W. (2007). Person-environment congruence, selfefficacy, and environmental identity in relation to job satisfaction: A career decision theory perspective. *Journal of Employment Counseling*, 44, 29-39.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Punnett, B. J., Greenidge, D., & Ramsey, J. (2007). Job attitudes and absenteeism: A study in the English speaking Caribbean. *Journal of World Business*, 42(2), 214-227.
- Rentsch, J. R., & Steel, R. P. (1998). Testing the durability of job characteristics as predictors of absenteeism over a six-period. *Personnel Psychology*, 51, 160-190.
- Rhodes, S. R., & Steers, R. M. (1990). *Managing employee absenteeism*. Reading, MA: Addison-Wesley.
- Rowden, R. W., & Conine, C. T. (2005). The impact of workplace learning on job satisfaction in small US commercial banks. *Journal of Workplace Learning*, 17, 215–230.

- Sanchez, J. I., & Levine, E. L. (2012). The rise and fall of job analysis and the future of work analysis. *Annual Review of Psychology*, 63, 397-425.
- Sagie, A. (1998). Employee absenteeism, organizational commitment, and job satisfaction: Another look. *Journal of Vocational Behavior*, *52*(2), 156-171.
- Schein, E. H. (1971). The individual, the organization, and the career: A conceptual scheme. Journal of Applied Behavioral Science, 7, 401-426.
- Schein, E. H. (1977). Career anchors and career paths: A panel study of management school graduates. In J. Van Maanen (Ed.), *Organizational careers: Some new perspectives*. Hoboken, NJ: John Wiley & Sons.
- Schmidt, S. W. (2007). The relationship between satisfaction with workplace training and overall job satisfaction. *Human Resource Development Quarterly*, *18*, 481–98.
- Shoss, M. K., & Penney, L. M. (2012). The economy and absenteeism: A macro-level study. Journal of Applied Psychology, 97, 881-889.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, *13*, 290–312.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A metaanalysis. *Psychological Bulletin*, 124, 240-261.
- Steel, R. P., Rentsch, J. R., & Van Scotter, J. R. (2007). Timeframes and absence frameworks: A test of Steers and Rhodes' (1978) model of attendance. *Journal of Management*, 33(2), 180-195.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. *Journal of Applied Psychology*, 63(4), 391-407.

- Thomson, L., Griffiths, A., & Davison, S. (2000). Employee absence, age and tenure. A study of nonlinear effects and trivariate models. *Work & Stress*, 14(1), 16-34.
- Vancouver, J. B., & Day, D. V. (2005). Industrial and organisation research on self-regulation: From constructs to applications. *Applied Psychology: An International Review*, 54(2), 155-185.
- Vandenberg, R. J. (2002). Toward a further understanding of and improvement in measurement invariance methods and procedures. *Organizational Research Methods*, *3*, 4–69.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. Organizational Research Methods, 5, 139–158.
- Van Maanen, J., & Schein. E. H. (1977). Improving the quality of work life: Career development. In J. R. Hackman & J. L. Suttle (Eds.), *Improving Life in Organizations* (pp. 30-95). Pacific Palisades, CA: Goodyear Publishing Co.
- Verquer, M., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person–organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3), 473-489.
- Vilela, B. B., González, J. A., & Ferrín, P. F. (2008). Person-organization fit, OCB and performance appraisal: Evidence from matched supervisor-salesperson data set in a Spanish context. *Industrial Marketing Management*, 37, 1005-1019.
- Viswesvaran, C. (2002). Absenteeism and measures of job performance: A Meta-Analysis. International Journal of Selection and Assessment, 10(1-2), 12-17.
- Wanous, J. P. (1980). Organizational Entry. Reading, Mass.: Addison-Wesley.
- Wheeler, A. R., Buckley, M. R., Halbesleben, J. R., Brouer, R. L., & Ferris, G. R. (2005). The elusive criterion of fit' revisited, toward an integrative theory of multidimensional fit. In J.

Martocchio (Ed.), *Research in Personnel and Human Resource Management* (pp. 265-304), Greenwich, CT: Elsevier/JAI Press.

- Wheeler, A. R., Gallagher, V. C., Brouer, R. L., & Sablynski, C. J. (2007). When personorganization (mis)fit and (dis)satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22, 203-219.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*(2), 179-201.
- Xie, J. L., & Johns, G. (2000). Interactive effects of absence culture salience and group cohesiveness: A multi-level and cross-level analysis of work absenteeism in the Chinese context. *Journal of Occupational and Organizational Psychology*, 73(1), 31-52.

CHAPTER 2

Absenteeism over time: the role of organizational tenure and perceptions of social context in predicting employee absenteeism changes

Abstract

Although absenteeism is an "over-investigated" topic, there is a lack in understanding its dynamic and accrual over time. The present study aimed to analyze temporal variations in absences from work and to investigate the impact of social influence on these changes. Latent growth modeling was used to trace absenteeism trajectories over four years for 744 employees who differed in years of organizational tenure. As expected, higher-tenured employees exhibited flat trajectories while those with lower tenure (1-3 years) gradually increased their absenteeism to conform to the dominant absenteeism norm of the organization. Moreover, as predicted by identification and social exchange mechanisms, perceptions of social context (i.e., perceptions of colleagues, immediate supervisor and top management) impacted the increasing trajectory of low-tenured workers. Specifically: a) the more positive an employee perceives the top management of the organization, the lower is his or her rate of increase in absenteeism; b) the more positive is the employee's perceptions of supervisors were not associated with the rate of change. The study illustrates how employees change their absence behaviors across time and how social context influences this change.

Keywords: Absenteeism, perceptions of social context, organizational tenure, latent growth model.

1. Introduction

Absenteeism is one of the most investigated topics in the field of organizational behavior and human resource management (Patton & Johns, 2012). This is not surprising considering the importance of absence behavior from an organizational perspective, due to its impact on labor and training costs (Burton, Lee, & Holtom, 2002), that calls for a deeper understanding of absenteeism development over time as well as of its contributing factors.

Traditionally, absence from work has been conceptualized as an individual-level phenomenon, concerning the employee in relationship with his or her organization (Patton & Johns, 2012). Consequently, literature has focused on how individual characteristics, such as demographics (Farrell & Stamm, 1988; Hackett, 1990; Harrison & Martocchio, 1998), personality (Darviri & Woods, 2006; Judge, Martocchio, & Thoresen, 1997), attitudes toward the work, mainly job satisfaction and organizational commitment (Hackett, 1989; Johns, 1997; Sagie, 1998; Steers & Rhodes, 1978), influence absence behavior. Among the demographic factors, organizational tenure is known as an important predictor of employee absenteeism (Thomson, Griffiths, & Davison, 2000). However, studies have displayed inconsistent results, showing a negative association (Baumgartel & Sobol, 1959; Knox, 1961) as well as a positive one (Lambert, Edwards, Camp, & Saylor, 2005), or reporting a curvilinear relationship or no link (Hackett, 1990; Nicholson, Brown, & Chadwick-Jones, 1977) between length of service and absences from work. These inconsistent results can be interpreted in the light of Hill and Trist's study (1955), which demonstrated that different stages in organizational tenure are characterized by different withdrawal behavior. Above all, their study has highlighted the importance of analyzing the relationship between organizational tenure and absence behavior over time (Hill & Trist, 1955).

However, although numerous researchers have suggested the importance of measuring absenteeism repeatedly in several years (Harrison & Martocchio, 1998; Martocchio & Harrison, 1993; Mason & Griffin, 2003), absenteeism has been treated as a static variable (i.e., one point in time) in the vast majority of studies. In fact, only few of them have covered a time-span longer than 16 weeks, probably because of the difficulty and cost of conducting field research and collecting multiple objective data on absences from work (Harrison & Martocchio, 1998). Nevertheless, preliminary research suggests that absenteeism varies significantly over time at both organizational (Dansereau, Alutto, & Markham, 1978; Harrison & Shaffer, 1994; Leonard, Dolan, & Arsenault, 1990) and group level (Mason & Griffin, 2003).

From a further perspective, several scholars have noted the limitations of focusing on absence as an individual disposition (Harrison, Johns, & Martocchio, 2000; Harrison & Martocchio, 1998; Johns, 1997; Johns & Nicholson, 1982), rather than as a phenomenon depending on the organizational context (Chadwick-Jones, Nicholson, & Brown, 1982; Harrison & Shaffer, 1994; Johns & Xie, 1998; Markham & McKee, 1995; Xie & Johns, 2000). Thus, social context has become an essential factor to take into account in order to deepen the social determinants of absenteeism (Patton & Johns, 2012). Cross-level and unit-level studies have proved the role of social influence and absence culture in determining individual absence behavior (John & Nicholson, 1982; Johns, 1997; Harrison et al., 2000), suggesting that absence decisions are strongly influenced by organizational or work-unit absenteeism norms (Bamberger & Biron, 2007; Gellatly, 1995; Markham & McKee, 1995), organizational and work group climate (Hemingway & Smith, 1999; Hiller & Vance, 2001), perceived supervisory support (Biron & Bamberger, 2012), and work-unit characteristics, such as group cohesiveness, positive tone, size, and shared attitudes (Dineen, Noe, Shaw, Duffy, & Wiethoff, 2007; George, 1990; Mason & Griffin, 2003; Xie & Johns, 2000).

Moving from the aforementioned literature and according to the importance of adopting a longitudinal approach in the study of absence behavior (Harrison & Martocchio, 1998; Mason & Griffin, 2003), this research is the first one that, to date, truly analyze change in absences from work over time. Indeed, we aim to investigate temporal variations in absences from work among three different groups of employees, identified on the basis of organizational tenure. Specifically, we are interested in examining the different trajectories of absenteeism at different stages of organizational life of an employee, comparing short, medium and long tenured workers over a four-year period.

In addition, the present study looks at how social context can explain change in absenteeism across time, exploring the role of perceptions of social context in influencing temporal variations in absence behavior. Particularly, perceptions of social context indicate the individual perceptions of positive behavior from each organizational social constituency, namely top management, immediate supervisor and colleagues (Borgogni, Dello Russo, Di Tecco, Alessandri, & Vecchione, 2011). Recent studies in different work settings have shown that positive perceptions of social context are related to work attitudes and job performance (Borgogni, Dello Russo, Petitta, & Vecchione, 2010a) and, similarly, they might affect other organizational behaviors, such as absenteeism.

To summarize, the purposes of the present study are: a) to investigate the different patterns of change in absenteeism over a four-year period among three groups of employees, based on their organizational tenure (i.e., short, medium and long tenured employees); b) to test the role of perceptions of context, namely perceptions of immediate supervisor, top management and colleagues, in predicting absenteeism change over time.

To meet these purposes, we use an innovative and powerful approach to the analysis of longitudinal change, that is latent growth modeling (LGM; Chan, 1998; Chan & Schmitt, 2000;

Lance, Vandenberg, & Self, 2000), in order to more accurately represent the evolution of variation in absenteeism and the influence that social context can have on this variation.

2. Absenteeism over time and organizational tenure

Absenteeism are highly variable over time, depending on different aspects (Dansereau et al., 1978; Leonard et al., 1990; Markham, 1985), which highlights the importance of measuring absences at multiple time intervals in order to draw stable conclusions about possible reasons for absence behavior (Harrison & Shaffer, 1994).

However, research has merely focused on change in absenteeism according to seasons (Harrison & Shaffer, 1994; Leonard et al., 1990), days of week (Dansereau et al., 1978; Markham, Dansereau, & Alutto, 1983) and years (Dansereau et al., 1978; Leonard et al., 1990; Markham et al., 1983). For instance, Leonard and colleagues (1990) have demonstrated that absenteeism rates were higher during the winter period and reached their minimum in the summer. Similarly, Mason and Griffin (2003) have hypothesized a quadratic trend in absenteeism data due to the seasonal effect, as absenteeism increases in the winter and decreases as the weather became warmer. Moreover, some researchers have attributed variation of absence behavior to the economic cycles and labor market conditions (Leonard et al., 1990; Markham, 1985), supporting the hypothesis that a downturn in the economy, and the consequent increase of unemployment rate, lead to a decrease in absenteeism (Markham, 1985). In fact, economic recession augments employees' anxiety about job security and future opportunities, encouraging a more assiduous attendance (Leonard et al., 1990).

In addition to the above-mentioned "macro" and objective variables, absenteeism has been studied also in relation with individual-level variables concerned with time, among which organizational tenure. Research has produced mixed results, reporting a negative (Baumgartel &

Sobol, 1959; Knox, 1961; Nicholson et al., 1977) or a positive (Lambert et al., 2005) or even a curvilinear relationship between organizational tenure and absenteeism (Hackett, 1990; Thomson et al., 2000). Scholars have interpreted the negative linear relationship as suggesting that tenure provides workers a better person-organization fit (Kristof, 1996), resulting in lower absence behavior (Keller, 1983; Martocchio, 1989). However, the negative association has been proved only with frequency/voluntary absences, while the link between involuntary absence and tenure only rarely attained statistical significance (Chadwick-Jones et al., 1982; Nicholson et al., 1977). On the other side, the positive relationship suggests that higher tenured employees may suffer from the long-term effects of working, such as burnout, boredom, emotional problems that would cause higher rates of absences from work (Kass, Vodanovich, & Callender, 2001; Lambert et al., 2005). Additionally, Hackett (1990) in his meta-analysis found a curvilinear relationship between tenure and absence and, more recently, Thomson and colleagues (2000) have shown that the relationship between absence and tenure was largely curvilinear and varied considerably with type of absence and work group. In fact, their study, conducted in the social service department of a local government organization in England, reported an inverse U-shaped relationship for administration and residential care workers and for certified absences; instead, it revealed an U-shaped relationship for homecare workers and for non-certified absences. These inconsistent results has been interpreted in the light of Hill and Trist's (1955) steelworks study, which offered the basis for a phasic model of employee learning of the organization absence culture. Their study revealed that different withdrawal behavior could characterize different stages in employment, indicating the importance of controlling for organizational tenure in absenteeism studies and the need to look for both linear and curvilinear relationships over time. Specifically, they found that over the first few weeks or months there was an explosion of turnover behavior. Then, there was an increase in absenteeism until the second and half year of service, that, from then on, remained constant. The authors have explained these results referring to the employees' progressive conformity to the absence culture of the organization. They conceptualized absence as a withdrawal behavior that serves to reduce the work-related stress; thus, they argued that the possibility to withdrawal by absence is a cultural mechanism that takes some time to be learnt and that is not known by newcomers. Accordingly, newcomers leave their job as a withdrawal response to stress situations at work, whereas the tendency to go voluntary absent increases with the length of organizational tenure and the subsequent learning of social norms regarding absenteeism (Hill & Trist, 1955).

Following this reasoning, we are interested in exploring whether different tenured groups show different patterns of absence rate, reflecting the progressive social learning of the institutional rule systems and the informal norms of conducts within an organization. It is wellrecognized, in fact, that the decision to attend or to be absent from work is affected by the occupational absence norms (Gellatly, 1995; Harrison & Shaffer, 1994; Johns, 1994; 1997), defined as a set of shared beliefs and perceptions concerning the acceptable rate of employee absenteeism (Chadwick-Jones et al., 1982; Johns & Nicholson, 1982), reflecting the organization's or unit's "absence culture" (Harrison et al., 2000; Xie & Johns, 2000).

We assume that short tenured employees will show an increasing trajectory in absenteeism, likely because they need time to internalize and conform to organizational norms of acceptable absenteeism conduct (Chadwick-Jones et al., 1982; Geurts, Schaufeli, & Buunk, 1993; Johns & Nicholson, 1982). Thus, short tenured employees will get closer to the absence behavior of longer tenured colleagues, but within the institutionalized rules that prescribe the maximum absences tolerated by the organization. On the contrary, no significant change will occur for medium and longer tenured workers, likely because they have reached a sort of equilibrium, based on the organization's or group's absence norms and the organizational rules.

Therefore, our hypotheses were the following:

Hypothesis 1: During the time period of the study, an increasing trajectory of absenteeism will characterize short tenured employees.

Hypothesis 2: During the time period of the study, no change in absenteeism (i.e., flat trajectory) will occur in medium and long tenured employees.

Finally, it is important to note that the majority of the studies have assessed change through traditional methods, such as via comparison of group means over time with analysis of variance, correlation and regression procedures (Bentein, Vandenbergh, Vandenberghe, & Stinglhamber, 2005; Chan & Schmitt, 2000). However, these methods are lacking and inadequate to conceptualize and empirically examine change over time, because they cannot fulfill some important questions concerning longitudinal changes (Chan & Schmitt, 2000). These questions are mainly related to: the functional form of change trajectories (i.e., linear or nonlinear, positive or negative); the systematic individual differences at initial status and in the rate of change; the antecedents of both an individual's initial status on the variable of interest and his or her rate of change across time (Bentein et al., 2005; Byrne, Lam, & Fielding, 2008; Chan & Smith, 2000). To address these questions and to deeply explore longitudinal change in absences, the current study adopts an innovative approach to the description, measurement and analysis of longitudinal change, namely latent growth modeling (LGM) (Lance et al., 2000), that is an advanced application of structural equation modeling, which analyses measures observed across multiple time points (McArdle & Anderson, 1990; McArdle & Hamagami, 1992; Raykov, 1994). LGM has been widespread recognized as a powerful method and has been increasingly applied in many disciplines and, recently, even in the area of industrial and organizational (I/O)

psychology (Bentein et al., 2005; Chan, 1998; Chan & Smith, 2000; Lance et al., 2000). In absenteeism field, very few studies (e.g., Hausknecht, Hiller, & Vance, 2008; Mason & Griffin, 2003) have examined different patterns of change over time using LGM, and typically at the group rather than the individual-level. Therefore, using LGM approach, we intend to explore the trajectories of change across time in levels of absenteeism among the three different groups of employees (i.e. short, medium, long tenured employees).

3. Absenteeism and context: the role of perceptions of social context

Scholars have well recognized that context is an important issue to take into account when studying organizational phenomena (Johns, 2006; Mowday & Sutton, 1993; Rousseau & Fried, 2001). The notion of context encompasses several aspects and facets that often have the potential to shape the meaning underling organizational behavior and outcomes (Johns, 2006).

The present study refers to the perceptions of the social context (PoSC) that has been defined as a set of perceptions by employees of the more relevant constituencies internal to the organization (e.g., top management, as well as one's immediate supervisor and colleagues), and of the behaviors that they enact at work (Borgogni et al., 2010a). The three components of PoSC have been consolidated through a meta-analytic procedures (Borgogni et al., 2011) and there is empirical evidence from different sectors (e.g. public and private organizations, schools, military sector) that members' perceptions of the social context positively impact job attitudes, such as job satisfaction and organizational commitment, and job performance (Borgogni, Dello Russo, Petitta, & Latham, 2009b; Borgogni et al., 2010a; Borgogni, Petitta, & Mastrorilli, 2010b).

Here, we focus on the role of PoSC in predicting absence behavior over time. In fact, social constituencies of context represent an important frame of reference for employees (Borgogni, Dello Russo, & Latham, 2009a; Borgogni et al., 2010a) that can impact their

acceptance and internalization of organization and group's absence norms. This is particularly true for short tenured employees, who are in the organizational socialization process and more concerned in understanding organizational policies and procedures, comprehending their role and showing the appropriated behaviors and attitudes (Ashfort, 1985). More specifically, we argue that positive perceptions of colleagues would positively affect the increasing absenteeism trajectory of short tenured employees over time, founding our reasoning on social learning (Bandura, 1997) and social identity theory (Ashfort & Mael, 1989; Tajfel & Turner, 1985). In fact, consistent with the social learning theory (Bandura, 1997), people engage in vicarious learning process, observing and modeling group's members, before adopting a particular behavior. This process allows employees to reduce errors, deal with uncertainty and resolve ambiguity in the work context, imitating group's behaviors. Moreover, according to the social identity theory (Tajfel & Turner, 1985), individuals identify with their group and internalize its values and norms, leading to homogeneity in attitudes towards the work and organizational behaviors (Ashfort & Mael, 1989). Social identification is particularly relevant in organizational socialization of new hired employees (Katz, 1980), because newcomers are more concerned with aligning their attitudes and behavior with the organizational policies and procedures (Ashfort, 1985). Thus, newcomers identify with their group and progressively accommodate to organizational values, beliefs and norms (Ashfort & Mael, 1989). Furthermore, group's and organization's norms have been demonstrated to play a key role in explaining employees' absenteeism (Bamberger & Biron, 2007; Biron & Bamberger, 2012; Xie & Johns, 2000). In fact, absence decisions are affected by the perception of the work group and the occupational absence norms that prescribes the tolerated rate of absenteeism (Gellatly, 1995; Harrison & Shaffer, 1994; Johns, 1994; 1997).

Moving from this literature, we assume that the higher are the positive perceptions of some crucial aspects characterizing peer relationships at work, namely reciprocal respect and trust, esteem of members' competencies, collaboration and support in front of difficulties, the greater is the social identification with the group. This because individuals identify with the group on the basis of trust (Tanis & Postmes, 2005), common experiences and shared goals (Ashfort & Mael, 1989). In addition, employees are more likely to identify themselves with the group if they perceive it as holding positive characteristics (i.e., competencies and respect), in order to ascribe these positive aspects to themselves (Mael & Ashforth, 1992) and, consequently, enhance their self-esteem (Hogg & Abrams, 1990; Hogg & Tumer, 1985; Tajfel, 1978). In turn, through social identification, employees will internalize group absence norms and they will imitate absence behaviors of their colleagues, adopting the prescription of the maximum rate of tolerated absences (Chadwick-Jones et al., 1982; Nicholson & Johns, 1982; Geurts et al., 1993). Consequently, in line with the hypothesized change trajectories of absence from work (H1 and H2), we hypothesized that:

Hypothesis 3: In the group of short tenured employees, positive perceptions of colleagues will be positively related to the increasing trajectory of change in absenteeism over the four-year period.

Regarding PoSC concerning leadership, we argue that when an employee positively perceives his immediate supervisor and the top management and their behaviors, in term of supporting co-workers, encouraging their involvement and growth, treating them fairly and equally, he or she would have a strong desire to come to work, reducing absences from work (Porter & Steers, 1973; Steers & Rhodes, 1978). This is rooted in previous studies, as

51

absenteeism, stress and work-related health problems are inversely associated with the perceived support from leadership (Cropanzano, Rupp, & Byrne, 2003; Stephens & Long, 2000). Indeed, viewing a supervisor as able to provide emotional and instrumental assistance in times of need may work as a "buffering mechanism", which alleviate the strain and some other negative outcomes associated with work difficulties that could determine absence behavior (Biron & Bamberger, 2012; Cohen & Willis, 1985; Väänänen, Toppinen-Tanner, Kalimo, Mutanen, Vahtera, & Peirò, 2003). In addition, absences are strongly affected by conflicts with superiors. Such conflicts, in fact, are associated with absenteeism both directly and indirectly via the changes in personal absence norms (Geurts et al., 1993). When employees are in conflict with superior, they adopt withdrawal behavior, either by reporting sick or by changing their personal norms in a more tolerant direction, that has been interpreted as a "psychological withdrawal" (Geurts et al., 1993). Thus, they will be more absent from work.

Furthermore, if workers perceive that the organization, embodied by top management, is treating them well, fairly, and positively, they would feel obligated to "pay back" by becoming more committed to the organization and showing more attendance behavior even in the face of obstacles (Biron & Bamberger, 2012; Wang & Walumbwa, 2007). In fact, because of the reciprocity norms underlying social exchange (Blau, 1964), employees seek to reciprocate that positive treatment and, in turn, they avoid to be absent in order to reduce the direct and indirect costs and the potential adverse effects of absenteeism on supervisors, top management and the overall organization (Bacharach, Bamberger, & Biron, 2010; Bamberger & Biron, 2012). On the other side, a few studies have found a positive relationship between employees' perceptions of inequity and subsequent absenteeism (Geurts, Buunk, & Schaufeli, 1994; Hendrix & Spencer, 1989; Oldham, Kulik, Ambrose, Stepina, & Brand, 1986). According to equity theory (Adams, 1965), if employees perceive an unfair treatment by the supervisor or the top management in

comparison with their colleagues, they are likely to increase their rate of absenteeism for two major reasons. First, staying away from work alleviates resentment and negative feelings caused by the work situation (Geurts et al., 1993). Second, a day-off from work represents an attempt to restore an equitable exchange relationship with the organization, through the reduction of input and investment in their work (Geurts et al., 1994).

Considering all these elements together, we hypothesized that:

Hypothesis 4: In the group of short tenured employees, positive perceptions of (a) immediate supervisor and (b) top management will be negatively related to an increasing trajectory of change in absenteeism over the four-year period.

4. Method

4.1 Organizational context

The present study was part of a broader longitudinal project aimed at investigating the determinants of successful behaviors in an organization that has gone through deep changes in the past decade. The organization is one of the largest companies in Italy, with about 14,000 offices and a staff of 150,000 employees working throughout the country. It includes a large range of job positions, from operative/back-office workers to top managers. The organization has been privatized in 1998, leading to important technological and organizational transformations as well as a renewal in the range of products and services offered to customers. Moreover, relevant changes in the domain of Human Resource (HR) management and development have occurred as well. First, newly hired and graduated employees has been included in a three-year socialization program, which provides them the chance to go through different job positions, organizational functions and geographical areas, in order to deeper know and understand the

organizational context. After this three-year period their performance is assessed and their temporary contract is converted into a permanent one. Secondly, the organization has become more interested in reducing absenteeism, understanding its individual and contextual determinants and looking for concrete actions that can cut absence costs. In this regard, HR Department has adopted new absence policies and practices that are worth for the present study. Specifically, it has institutionalized a maximum rate of tolerated absences, namely six days-off per year, beyond which employees can incur in disciplinary actions and can be interviewed in order to find out the causes of the absence behavior.

4.2 Participants and procedure

The sample for our analyses consists of 744 subjects who responded to the first survey (2007) of the longitudinal project and for whom it was possible to match four years of absence data. The response rate for the first survey was 70% (n = 1660).

Respondents worked in the headquarters of the organization located in Rome, and the majority of them were Professional (85%). Participants were enough balanced among men and women (55% and 45%, respectively) and their age ranged from 26 to 60 years old (M = 41.7, SD = 8.6). The mean for organizational tenure was 11.8 (SD = 10.4). Moreover, the 32% of employees had an organizational tenure lower than 3 years (n = 236), the 35% of them had a length of service ranging from 4 to 18 years (n = 260), and the 33% of employees worked in the company from more than 19 years (n = 248).

They were administered an anonymous paper-and-pencil questionnaire in collective meetings during normal working hours. Participation was voluntary and each respondent was assigned a code by the HR Department, corresponding to his or her questionnaire. This was done in order to match the employee's answers with his or her absenteeism rate and, at the same time, to guarantee respondent's privacy. In fact, an HR representative delivered each coded questionnaire to the employee, but the questionnaires were collected back by the research team. Thus, the HR department knew the name of the employee, the corresponding code, and the absenteeism rate, but did not know the answers to the questionnaire. Instead, the research team knew the code, the answers to the questionnaire, and the objective measures provided by the company, but not the name of the employee. Then, the organization provided us the absenteeism data.

4.3 Measures

The measures included: (a) self-reports from the questionnaire of perceptions of social context, administered in 2007, and (b) respondents' absenteeism data.

Perceptions of social context (PoSC). Participants' perceptions of three organizational social constituencies, namely (a) colleagues, (b) immediate supervisor, and (c) top management, were assessed using a 15-item scale previously validated in the same organizational context (Borgogni et al., 2010a). For each statement respondents rated their agreement on a 7-point Likert scale ranging from 1 ("Strongly disagree") to 7 ("Strongly agree").

a) *Perceptions of colleagues*. Five items measured the perception of relationships among colleagues with regard to their social cohesion, reciprocal trust and respect, mutual support and cooperation in facing obstacles, integration of each other's competences to complete efforts (e.g., "In my office people trust each other"; "In my group there is a good collaboration, even during periods of difficulty and overload"). The Cronbach's alpha reliability coefficient of the scale was .89.

b) *Perceptions of immediate supervisor*. Five items assessed the perception of the immediate supervisor in assigning goals, supporting co-workers, encouraging their involvement, treating them equally (e.g., "My immediate supervisor guarantees all the assistance I need in order to best carry-out my job"; "My immediate supervisor takes care of my professional growth"). The Cronbach's alpha reliability coefficient of the scale was .91.

c) *Perceptions of top management*. Five items measured the perception of top management's actions in terms of: orientation toward employee development and growth; communication of organizational goals, procedures and policies; integration of different units; fair treatment of workers (e.g., "Top management provides clear guidelines"; "Top management treats all employees fairly"). The Cronbach's alpha reliability coefficient of the scale was .90.

A confirmatory factor analyses (CFA) was tested for the three latent factors of perceptions of colleagues, perceptions of immediate supervisor and perceptions of top management, which were allowed to correlate. The model showed a good fit, $\chi^2(86) = 338.451$, p < .001, CFI = .964, TLI = .956, RMSEA = .063, SRMR = .038, as all indices fell in cut-off ranges (Hu & Bentler, 1998) with the exception of the chi-square significance, likely due to the large sample size (Bollen & Long, 1993; Mulaik, James, & Van Alstine, 1989). The factor loadings were all significantly different from zero and greater than .60, ranging from .67 to .90.

Absences from work. The organization provided the absenteeism data concerning four consecutive years (2006-2009). These data were drawn from personnel records and included the total time lost index, namely the sum of days of absences from work. Because the absenteeism

data were positively skewed, as typical, we used a square root transformation to approximate normality.

Demographic variables. Data on organizational tenure, age and gender were made available by the HR department.

4.4 Statistical analysis

As anticipated, we adopted a latent growth modeling (LGM) method that requires to measure the variables at three occasions at least and develops a trajectory of change over time along each of the variables of interest for each individual, aside from the individual's initial status on the variable, in order to capture variability. Specifically, through LGM, the variable of interest (i.e., absenteeism at different time) display a separate loading on higher order latent constructs, namely the intercept and the slope, one defining the initial status (i.e., intercept) and the other defining the rate of change (i.e., slope) along the variables of interest.

First, we calculated percentiles of organizational tenure in order to create three different groups for analyses: short, medium and long tenured employees. Specifically, the group below the 33th percentile referred to the so-called short tenured employees that is employees with an organizational tenure of 3 years or less; this group corresponded to the newly hired and graduated employees of the organization, going through the socialization program. The group between the 33th and the 66th percentile included employees with a length of service comprised between 4 and 18 years (medium tenured employees); finally, the group above the 66th percentile contained employees working in the organizational from 19 years or more (long tenured employees).

Then, the analyses proceeded in two phases: (a) development and evaluation of latent growth measurement models for absenteeism, and (b) augmentation of the LGM measurement model with predictors of absenteeism to evaluate the hypothesized structural relationships. All analyses were conducted with the Mplus software (Muthén & Muthén, 1998). In order to compare the three different tenured groups, we adopted a multi-group approach in LGM. In fact, multi-group analysis is a well-established and commonly accepted method for detecting group-differences in structural equation model (Eggert, Hogreve, Ulaga, & Muenkhoff, 2011; Homburg, Droll, & Totzek, 2008; Palmatier, Scheer, & Steenkamp, 2007).

In the first phase, to establish the final model that most adequately depicted the change trajectory, two nested multi-group LGM models were fitted to the absences data (Chan, 1998; Chan & Smith, 2000; Lance et al., 2000). These models tested the functional form of longitudinal change as captured by the change variable for each of the three different tenured groups. Indeed, the functional form of longitudinal change may be strictly linear, which is obtained by fixing the slope factor loadings at -1, 0, 1 and 2, in order to obtain a straight-line growth over the four measurement occasions. Alternatively, it can be optimally estimated, with the first two factor loadings of the slope factor being fixed at -1 and 0 and the last two factor loadings being freely estimated. The relative goodness of fit of the strictly linear versus the estimated optimal change functions is testable by comparing the nested models. The intercept of the LGM was fixed in 2007, which was identified with zero, because our research was conducted in 2007 and, thus, the predictors (i.e., PoSC) were measured in that year.

Once a satisfactory latent growth measurement model was determined and significant variability of intercept and slope was demonstrated, in the second phase we augmented the multi-group LGM with predictors of absences from work, namely perceptions of colleagues, immediate supervisor and top management. Consistent with theoretical hypotheses presented earlier (H3, H4a and H4b), in this augmented model the paths from the three components of PoSC to the intercept and the slope of absenteeism were freely estimated. Moreover, we control for age and gender of employees, because they are well-known variables that can affect absenteeism (Côté & Haccoun, 1991; Hackett, 1990).

5. Results

The descriptive statistics and correlations for the study variables are presented in Table 1.

Variable	М	SD	1	2	3	4	5	6	7	8	9
1. Abs.T1 (2006)	4.86	12.06									
2. Abs.T2 (2007)	5.25	10.36	.41**								
3. Abs.T3 (2008)	5.04	10.28	.20**	.28**							
4. Abs.T4 (2009)	5.55	12.59	.25**	.27**	.30**						
5. PoSC colleagues	5.14	.99	06	05	01	05					
6. PoSC supervisor	4.88	1.27	09*	12**	03	10**	.58**				
7. PoSC top manag.	3.99	1.11	10**	11**	04	14**	.42**	.59**			
8. Age	41.68	8.56	.16**	.035	.01	.01	06	.01	.08*		
9. Gender	-	-	.16**	.15**	.15**	.14**	10**	03	02	08*	
10. Tenure	-	-	.19**	.09*	.04	.04	10**	01	.02	.78**	.08*

Table 1. Descriptive statistics and correlations among the study variables.

Note. Abs. = absenteeism; PoSC = perception of social context. Gender was coded as 1 for males and 2 for females. Tenure was coded as 1 for short tenured employees, 2 for medium tenured employees and 3 for long tenured employees. Absenteeism means and standard deviations are raw, but correlation coefficients reflect the square root transformation.

** p < .01, * p < .05.

Table 2 shows the results of the analyses that tested alternative multi-group LGM models including strictly linear versus optimal latent change functions. Results indicated that the optimal change function had to be preferred over the strictly linear function, as it improved model fit

significantly (cf. chi square contrasts between Model 1 vs. Model 2; see Table 2). Thus, the optimal change function was retained for following analyses.

Model	Change function	χ ²	df	CFI	TLI	RMSEA	SRMR	Test of ΔX^2	Δdf
Model 1 (M1)	Linear	39.913***	13	.888	.871	.091	.067		
Model 2 (M2)	Free	5.403 (p = .942)	12	1.000	1.134	.000	.022		
M1 vs M2								28.614***	2

Table 2. Tests of alternative LGM specifications.

Note. Both models were run with MLMV estimator that required a specific test for a chi-square difference (reported in ΔX^2 column), rather than traditionally calculating the differences between the chi-squared statistics for Model 2 and Model 1.

*** p < .001

In order to understand the form of the growth trajectories within the three different groups, namely short, medium and long tenured employees, we examined the LGM parameter estimates (factor means, variances, and covariances) in the selected model (see Table 3). The three groups demonstrated differential growth trajectories over time, plotted in Figure 1.

	Initial stat	tus (Intercept - I)	Chang		
Groups	Mean	Variance	Mean	Variance	Cov. I - S
Short tenured employees	1.239***	.523***	.941***	1.788**	.166
Medium tenured employees	1.574***	.697***	341	1.737	592
Long tenured employees	1.647***	1.688***	031	1.075	851

Table 3. Growth parameter estimates.

Note. Cov. = Covariance. The table reports the unstandardized estimates, as typical in this type of research. The intercept and slope means are calculated with square root transformed absenteeism.

** p < .01; *** p < .001.

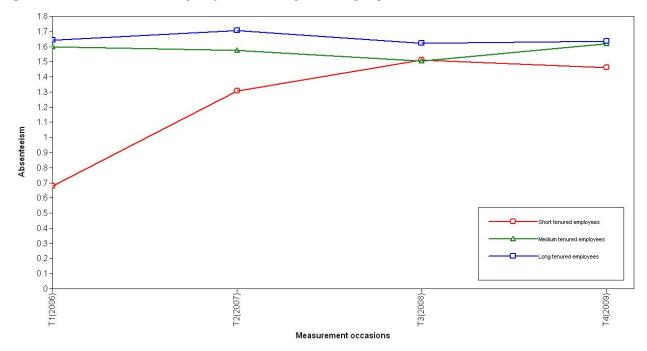


Figure 1. Absenteeism mean change trajectories among the three groups.

Note. Absenteeism means reflect the square root transformation.

In support of Hypothesis 1, the slope (i.e., change) factor mean of absenteeism in the short tenured group was positive and statistically significant; that is, short tenured employees' rate of absences from work increased significantly over the time period of this study (from 2006 to 2009). The slope factor variance was also statistically significant, indicating that there was meaningful inter-individual variability in this increase. Furthermore, both the intercept (i.e., initial status) factor mean and the variance were positive and statistically significant, revealing that significant inter-individual differences in absences existed at initial status, that is some employees had higher mean levels than others at time 2 (2007). However, the factor covariance between the intercept and slope was non-significant. This means that no matter what an individual's initial status was on time 2, he or she experienced an increase in absences from work over the four-year period of the study.

With respect to the other two groups (i.e., medium and long tenured employees), the slope (i.e., change) factor means and variances were not statistically significant, as reported in Table 3, indicating that absenteeism had a flat trajectory and, thus, remained stable over the considered period. Both intercept (i.e., initial status) factor mean and variance were significant for the two groups, showing that there were significant individual differences in absenteeism both in medium and long tenured employees at time 2 (2007). These findings together supported Hypothesis 2.

The last LGM model tested the relationship between antecedents (i.e., perceptions of colleagues, immediate supervisor, and top management) and change in absenteeism, controlling for age and gender, for short tenured employees group, that is the only one reporting a significant change. Results from these analyses were relevant to evaluate Hypotheses 3 and 4. The model showed an excellent fit to the data, $\chi^2(33) = 39.598$, p = .199, CFI = .971, TLI = .952, RMSEA = .028, SRMR = .030. Table 4 presents the standardized structural parameter estimates of the direct effects from this augmented model.

Relationship	Path coefficient (β) ^a			
Main variables				
PoSC colleagues \rightarrow abs. change (S)	.26*			
PoSC colleagues \rightarrow abs. initial status (I)	.10			
PoSC supervisor \rightarrow abs. change (S)	12			
PoSC supervisor \rightarrow abs. initial status (I)	11			
PoSC top management \rightarrow abs. change (S)	18*			
PoSC top management \rightarrow abs. initial status (I)	25*			
Control variables				
Age \rightarrow abs. change (S)	07			
Age \rightarrow abs. initial status (I)	04			
Gender \rightarrow abs. change (S)	.13			
Gender \rightarrow abs. initial status (I)	.17			

Table 4. Structural parameter estimates of the augmented LGM model for short tenured employees group.

Note. Abs. = absenteeism. ^a β represents the standardized path coefficient.

* p < .05

In support of Hypothesis 3, perceptions of colleagues showed a significant positive relationship with absenteeism change (i.e., slope), indicating that the greater were the positive perceptions of colleagues at the starting point of our observation, the higher was the rate of increase in absenteeism. Moreover, perceptions of colleagues had a non-significant effect upon initial status (i.e., intercept) in absenteeism. In support of Hypothesis 4b, perceptions of top management had a significant negative association whit change (i.e., slope) in absences from work, as well as with its initial status (i.e., intercept). That is, employees who perceived more positively the top management of the organization at the starting point of our observation experienced a lower rate of increase in absenteeism. Less supportive of expectations were the findings regarding perceptions of immediate supervisor (H4a). As shown in Table 4, positive perceptions of immediate supervisor were not significantly associated with change (i.e., slope) and initial status (i.e., intercept) in absenteeism. Finally, regarding the control variables, neither age nor gender reported significant effects on change (i.e., slope) and initial status (i.e., intercept) in absences from work.

As additional analyses, in order to exclude the possibility that the different trajectories of the three tenured groups may be spurious due to the effect of age, which is an important predictor of absenteeism (Hackett, 1990), we tested an augmented LGM model in which the absenteeism intercept and slope were regressed only on age. The findings showed that in none of the three tenured groups age predicted the starting mean level of absenteeism neither its change over time.

6. Discussion

The primary purpose of the present study was to model longitudinal change in absenteeism among three different groups of employees, categorized on the basis of their organizational tenure, namely short, medium and long tenured employees. In addition, the study aimed at specifying the antecedents of change in absences from work, considering positive perceptions of social context (i.e., perceptions of colleagues, immediate supervisor, and top management).

We met our purposes by examining absences from work over a time period of four years among over 700 individuals at various stages in their organizational life. Most importantly, we used an innovative and powerful approach to the study of longitudinal data, namely latent growth modeling (LGM; Chan, 1998; Chan & Schmitt, 2000; Lance et al., 2000), which allowed us to model various functional forms of change in the three different tenured groups and to directly model important predictors of longitudinal change.

First of all, the present study shed light on the time variation in absences from work and on the social dynamics that shape absence behaviors. Moreover, it provided a dynamical perspective on the development of the absence conduct of shorter tenured employees, extended the Hill and Trist's model (1955), which used cross-sectional descriptive statistics and group comparisons. Indeed, our findings demonstrated that only employees with an organizational tenure of three years or less (i.e., short tenured employees) showed a significant increase in absenteeism over time whereas medium and long tenured employees maintained a stable trajectory over the fouryear period. Moreover, this increase was independent from individual differences in absenteeism at the initial status, indicating that regardless of whether an individual had lower or higher mean levels than others at starting point, he or she experienced an increase in absences from work over the four-year period of the study. According with Hill & Trist (1955), the increasing trajectory of short tenure employees might reflect their internalization of institutional rule systems and informal norms and conducts within the organization about absenteeism, which they likely have had time to learn from 2006 to 2009. In fact, short tenured employees started with lower levels of absences from work (mean = 1.93), but gradually adopted the absence behavior of medium tenured employees (i.e., about five days per year), without exceeding the absenteeism threshold for the specific organization (i.e., six days-off per years). Hence, their absenteeism trajectory increases gradually over time because they need a period of time to know the norms and culture of the organization, including how many absences are acceptable. Conversely, longer tenured employees had reached equilibrium in their absences behavior, grounded in the organizational absenteeism norms and culture; thus, they did not experience a significant change in absences over the four-year period of the study.

With regard to the second purpose of the study, we used an important and key extension of the basic LGM (Lance et al., 2000) in order to test the relationships between perceptions of social context and change in absences from work. First, according to our expectations, we detected a positive link between perceptions of colleagues and change in absence behavior, revealing that short tenured employees who perceived their colleagues more positively experienced a higher increase in absences from work in the four-year period of the study. This finding can be explained referring to the group-based sense making processes that shape employees' absence behavior (Bamberger & Biron, 2007; Biron & Bamberger, 2012). More specifically, short tenured employees who view more positively their work group, who trust and respect their colleagues, who mutually cooperate in the face of difficulties, are more likely to identify with their work group and to internalize group norms, even related to absenteeism, in order to reduce uncertainty and satisfy their needs (Xie & Johns, 2000). Consequently, these employees increase their rate of absenteeism over time and get close to the absence behavior of longer tenured colleagues, consistent with the concept of group absence norm and organizational absence culture (Harrison et al., 2000; Xie & Johns, 2000) that prescribes how many absences are accepted by the organization (Chadwick-Jones et al., 1982; Geurts et al., 1993; Johns & Nicholson, 1982).

Second, the study provided evidence that positive perceptions of top management had a negative effect not only on the initial absence mean, but also on absenteeism change of short tenured employees, indicating that the more positive an employee perceived the organizational top management, the lower was his or her rate of increase in absenteeism. Consistent with the literature about perceived organizational support (Biron & Bamberger, 2012; Cropanzano et al., 2003), this finding suggests that the perception of a top management as being more supportive, in term of encouraging employees' personal and professional development, enhancing integration and collaboration among work-units, and providing clear procedure and practices, is more likely to reinforce attendance behavior over time. According to the social exchange theory (Blau, 1964; Cropanzano, Rupp, Mohler, & Schminke, 2001), this is likely because employees who feel that top management is treating them well, fairly and positively show a lower increase in absenteeism trajectory over time in order to reciprocate the positive treatment and to avoid the high cost of absenteeism for the organization (Bacharach et al., 2010; Biron & Bamberger, 2012; Wang & Walumbwa, 2007).

Finally, we did not find a significant relationship between positive perceptions of immediate supervisor and change in absences from work over time, revealing that in the present sample top management had a greater impact on absences behavior than immediate supervisor. This is likely because top management exercises a more direct control on defining and communicating procedures and policies, also with regard to absenteeism (e.g., the setting of the absence threshold, namely 6 days per year) and, throughout this control, top management might have a deeper effect on the rate of absenteeism across time.

7. Limitations and future research

There are some limitations in our study that provides avenue for future research.

One potential limitation concerns the fact that, although absenteeism was measured longitudinally, its predictors were assessed cross-sectionally, because we collected data on perceptions of social context at only one point in time. Therefore, we were not able to detect whether and how these perceptions changed in the four-year period of the study, together with the increase in absence behavior. Further studies are needed to understand how perceptions of social context develop over time, especially among short tenured employees, and to investigate, through LGM analysis, how potential change in perceptions of social context are associated with change in absences from work.

Another possible concern is related to the fact that we have not directly measured absence group norms and absence culture that that may function as explaining mechanisms of the relationship between PoSC and absences. In the future, it would be worth to more fully explore the group dynamics of absence (Johns, 1994), including the study of absence culture salience (Xie & Johns, 2000) and group absence-related norms (Bamberger & Biron, 2006; Biron & Bamberger, 2012).

Finally, some caution must be taken in generalizing the results of the present research to employees in other organizations and contexts. In this regard, we founded our analyses on a considerable sample of one of the largest Italian organizations, which has recently undergone a major privatization process and a significant cultural change. Consequently, it would be needed to replicate the study in other organizations and sectors in order to deeply understand longitudinal change in absenteeism and its associations with perceptions of social context.

8. Practical implications

In terms of practical implications, the study of the development and evolution of absenteeism is a fundamental premise to enhance long-term organizational productivity. In fact, understanding how employees at different stages of their organizational life change their absence behavior over time and exploring the determinants of this variability represents the key for interventions to control the phenomenon.

First, the present study suggests that reducing absenteeism must be a sustained effort over time and that preventing absences gradual increase would yield substantial cost savings for organization (Hausknecht et al., 2008). Thus, organizations should avoid occasional and isolated actions to lower the phenomenon; rather, they might realize considerable financial benefit if they adopt a long-term plan to control absence behavior.

Second, the present study calls for more attention to newly hired and short tenured employees with the aim of preventing and managing the risk of absenteeism over time. Thus, organizations might focus on effective organizational socialization practices that can help the adjustment of newcomers (Allen, 2006; Saks & Ashforth, 1997) and, at the same time, can promote attendance behavior at very early stages.

Third, given the negative relationship between positive perceptions of top management and increasing trajectory in absences from work, our findings suggest to take into account the effect of perceptions of top management's behavior in terms of clearly communicating organizational goals, procedures and policies, taking care of employees' development and growth, and treating workers fairly. Therefore, organizations might find useful to encourage the top management to be more oriented toward professional and personal growth of personnel, and to develop their communication procedures, for example giving regular and formal meetings to new hired and short tenured employees in order to explicitly share organizational procedures and policies. In formal meetings, short tenured employees can discuss not only work problems and doubts, but also feelings of inequity (Geurts et al., 1994) that may be a possible cause of dissatisfaction and distress conducive to the decision of being absent at work; through this communicative process,

the positive perceptions of top management would be strengthened, hindering the increase of absenteeism rate. Hence, organizations might provide top management with the resources, such us training, necessary to develop a more effective communication process, as well as a more positive and fair relationship with employees (Biron & Bamberger, 2012).

Finally, given the positive association between perceptions of colleagues and increasing trajectory in absences from work, our results suggest that organizations need to monitor not only the organization's explicit norms but also the group's informal norms about absences, and to develop policies that facilitate an "attendance-oriented culture" among employees (Johns & Nicholson, 1982; Xie & Johns, 2000).

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 267-299). New York: Academic Press.
- Allen, D. G. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? *Journal of Management*, *32*, 237–256.
- Ashforth, B. E. (1985). Climate formation: Issues and extensions. *Academy of Management Review*, 10, 837-847.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20-39.
- Bacharach, S. B., Bamberger, P., & Biron, M. (2010). Alcohol consumption and workplace absenteeism: The moderating effect of social support. *Journal of Applied Psychology*, 95, 334–348.
- Bamberger, P., & Biron, M. (2007). Group norms and excessive absenteeism: The role of peer referent others. *Organizational Behavior and Human Decision Processes*, *103*, 179–196.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.

- Baumgartel, H., & Sobol, R. (1959). Background and organizational factors in absenteeism. Personnel Psychology, 12, 431-444.
- Bentein, K., Vandenberg, R., Vandenberghe, C., & Stinglhamber, F. (2005). The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology*, 90, 468–482.
- Biron, M., & Bamberger, P. (2012). Aversive workplace conditions and absenteeism: Taking referent group norms and supervisor support into account. *Journal of Applied Psychology*, 97, 901–912.

Blau, P. (1964). Exchange and power in social life. New York: Wiley.

- Bollen, K. A., & Long, J. S. (1993). *Testing structural equation models*. Thousand Oaks, CA: Sage.
- Borgogni, L., Dello Russo, S., Di Tecco, C., Alessandri, G., & Vecchione, M. (2011, August). Social cognitive theory as reference frame for perceptions of context. Paper presented at the Annual Meeting of the Academy of Management, San Antonio, Texas.
- Borgogni, L., Dello Russo, S., & Latham, G. (2009a). The relationship of employee perceptions of the immediate supervisor and top management with collective efficacy. *Journal of Leadership & Organizational Studies*, *18*, 5-13.
- Borgogni, L., Dello Russo, S., Petitta, L., & Latham, G. (2009b). Collective efficacy and organizational commitment in an Italian city hall. *European Psychologist*, *14*, 363-371.
- Borgogni, L., Dello Russo, S., Petitta, L., & Vecchione, M. (2010a). Predicting job satisfaction and job performance in a privatized organization. *International Public Management Journal*, 13, 275-296.

- Borgogni, L., Petitta, L., & Mastrorilli, A. (2010b). Correlates of collective efficacy in the Italian Air Force. *Applied Psychology: An International Review*, *59*, 515–537.
- Byrne, B. M., Lam, W. W. T., & Fielding, R. (2008). Measuring patterns of change in personality assessments: An annotated application of latent growth curve modeling. *Journal* of Personality Assessment, 90, 536–546.
- Burton, J. P., Lee, T. W., & Holtom, B. C. (2002). The influence of motivation to attend, ability to attend, and orga- nizational commitment on different types of absence behaviors. *Journal of Managerial Issues, 14*, 181-197.
- Chadwick-Jones, J. K., Nicholson, N., & Brown, G. (1982). Social psychology of absenteeism. New York: Praeger.
- Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). *Organizational Research Methods*, *1*, 421–483.
- Chan, D., & Schmitt, N. (2000). Interindividual differences in intraindividual changes in proactivity during organizational entry: A latent growth modeling approach to understanding newcomer adaptation. *Journal of Applied Psychology*, 85, 190–210.
- Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.
- Côté, D., & Haccoun, R. R. (1991). L'absentéisme des femmes et des hommes: Une métaanalyse. *Canadian Journal of Administrative Sciences*, *8*, 130-139.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to job performance ratings and organizational citizenship behavior. *Journal of Applied Psychology*, 88, 160-169.

- Cropanzano, R., Rupp, D. E., Mohler, C. J., & Schminke, M. (2001). Three roads to organizational justice. *Research in Personnel and Human Resource Management, 20*, 1-113.
- Dansereau, F., Alutto, J. A., & Markham, S. (1978). An initial investigation into the suitability of absenteeism rates as measures of performance. In D. T. Bryant & R. J. Niehaus (Eds.), *Manpower planning and organization design* (pp. 721–731). New York: Plenum Press.
- Darviri, S., & Woods, S. (2006). Uncertified absence from work and the Big Five: An examination of absence records and future absence intentions. *Personality and Individual Differences*, *41*(2), 359-369.
- Dineen, B. R., Noe, R. A., Shaw, J. D., Duffy, M. K., & Wiethoff, C. (2007). Level and dispersion of satisfaction in teams: Satisfaction-absenteeism relationship. Academy of Management Journal, 50, 623–643.
- Eggert, A., Hogreve, J., Ulaga, W., & Muenkhoff, E. (2011). Industrial services, product innovations, and firm profitability: A multiple-group latent growth curve analysis. *Industrial Marketing Management, 40*, 661-670.
- Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. *Human Relations, 41*, 211–227.
- Gellatly, I. R. (1995). Individual and group determinants of employee absenteeism: Test of a causal model. *Journal of Organizational Behavior*, *16*, 469–485.
- George, J. M. (1990). Personality, affect, and behavior in groups. *Journal of Applied Psychology*, 75, 107–116.
- Geurts, S. A. E., Buunk, A. P., & Schaufeli, W. B. (1994). Health complaints, social comparisons, and absenteeism. *Work & Stress, 8*, 220-234.

- Geurts, S. A. E., Schaufeli, W. B., & Buunk, A. P. (1993). Social comparison, inequity and absenteeism among bus drivers. *The European Work and Organizational Psychologist*, 3, 191-203.
- Hackett, R. D. (1989). Work attitudes and employee absenteeism: A synthesis of the literature. *Journal of Occupational Psychology*, 62(3), 235-248.

Hackett, R. D. (1990). Age, tenure, and employee absenteeism. Human Relations, 43, 610-619.

- Harrison, D. A., Johns, G., & Martocchio, J. J. (2000). Changes in technology, teamwork, and diversity: New directions for a new century of absenteeism research. *Research in Personnel and Human Resources Management, 18*, 43-91.
- Harrison, D. A., & Martocchio, J. J. (1998). Time for absenteeism: A 20-year review of origins, offshoots, and outcomes. *Journal of Management, 24*, 305-350.
- Harrison, D. A., & Shaffer, M. A. (1994). Comparative examinations of self-reports and perceived absenteeism norms: Wading through Lake Wobegon. *Journal of Applied Psychology*, 79, 240-251.
- Hausknecht, J. P., Hiller, N. J., & Vance, R. J. (2008). Work-unit absenteeism: Effects of satisfaction, commitment, labor market conditions, and time. *Academy of Management Journal*, 51, 1223–1245.
- Hemingway, M. A., & Smith, C. S. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational and Organizational Psychology*, 72, 285-299.
- Hendrix, W. H., & Spencer, B. A. (1989). Development and test of a multivariate model of absenteeism. *Psychological Reports*, *64*, 923–938.

- Hill, J. M. M., & Trist, E. L. (1955). Changes in accidents and other absences with length of service: A further study of their incidence and relation to each other in an iron and steel works. *Human Relations*, 8, 121–152.
- Hiller, N. J., & Vance, R. J. (2001, April). *Linking work unit climates to absenteeism*. Paper presented at the Society for Industrial and Organizational Psychology, San Diego, CA.
- Hogg, M. A., & Abrams, D. (1990). Social motivation, self-esteem and social identity. In D.
 Abrams & M. A. Hogg (Eds.). *Social identity theory: Constructive and critical Advances* (pp. 28–47). New York: Springer-Verlag.
- Hogg, M. A., & Tumer, J. C. (1985). Interpersonal attraction, social identification and psychological group formation. *European Journal of Social Psychology*, 15, 51-66.
- Homburg, C., Droll, M., & Totzek, D. (2008). Customer prioritization: Does it pay off and how should it be implemented?. *Journal of Marketing*, *72*, 110-130.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424–453.
- Johns, G. (1994). How often were you absent? A review of the use of self-reported absence. Journal of Applied Psychology, 79, 574-591.
- Johns, G. (1997). Contemporary research on absence from work: Correlates, causes, and consequences. *International Review of Industrial and Organizational Psychology*, *12*, 115-174.
- Johns, G. (2006). The essential impact of context on organizational behavior. Academy of Management Review, 31, 386-408.
- Johns, G., & Nicholson, N. (1982). The meanings of absence: New strategies for theory and research. *Research in Organizational Behavior*, *4*, 127-172.

- Johns, G., & Xie, J. L. (1998). Perceptions of absence from work: People's Republic of China versus Canada. *Journal of Applied Psychology*, *83*, 515-530.
- Judge, T. A., Martocchio, J. J., & Thoresen, C. J. (1997). Five-factor model of personality and employee absence. *Journal of Applied Psychology*, 82(5), 745-755.
- Kass, S. J., Vodanovich, S. J., & Callender, A. (2001). State-trait boredom: Relationship to absenteeism, tenure, and job satisfaction. *Journal of Business and Psychology*, 16(2), 317-327.
- Katz, R. (1980) Time and work: Toward an integrative per-spective. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 2, pp. 81-127). Greenwich, CT: JAI Press.
- Keller, R. T. (1983). Predicting absenteeism from prior absenteeism, attitudinal factors, and non attitudinal factors. *Journal of Applied Psychology*, *68*, 536-540.
- Knox, J. B. (1961). Absenteeism and turnover in an Argentine factory. American Sociological Review, 26, 424-428.
- Kristof, A. L. (1996). Person–Organization Fit: An integrative review of its conceptualizations, Measurement, and Implications. *Personnel Psychology*, 49(1), 1-49.
- Lambert, E., Edwards, C., Camp, S., & Saylor, W. (2005). Here today, gone tomorrow, back again the next day: Antecedents of correctional absenteeism. *Journal of Criminal Justice*, *33*(2), 165-175.
- Lance, C., Vandenberg, R., & Self, R. (2000). Latent growth models of individual change: The case of newcomer adjustment. Organizational Behavior and Human Decision Processes, 83, 107–140.

- Leonard, C., Dolan, S. L., & Arsenault, A. (1990) Longitudinal examination of the stability and variability of two common measures of absence. *Journal of Occupational Psychology*, 63, 309-316.
- Mael, F. A., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103–123.
- Markham, S. E. (1985). An investigation of the relationship between unemployment and absenteeism: a multi- level approach. *Academy of Management Journal, 28*, 228–234.
- Markham, S. E., Dansereau, F., & Alutto, J. (1983). Absenteeism rates as measures in organizational experiments: Hidden cyclical and structural variations. *Review of Business* and Economic Research, 18(3), 21-31.
- Markham, S. E., & McKee, G. H. (1995). Group absence behavior and standards: A multilevel analysis. *Academy of Management Journal, 38*, 1174–1190.
- Martocchio, J. J. (1989). Age-related differences in employee absenteeism: A meta-analysis. *Psychology and Aging*, *4*, 409-414.
- Martocchio, J. J., & Harrison, D. A. (1993). To be there or not to be there? Questions, theories, and methods in absenteeism research. *Research in Personnel and Human Resources Management*, 11, 259-328.
- Mason, C. M., & Griffin, M. A. (2003). Group absenteeism and positive affective tone: A longitudinal study. *Journal of Organizational Behavior*, *24*, 667–687.
- McArdle, J. J., & Anderson, E. (1990). Latent growth models for research on aging. In J. E.Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (3rd ed., pp. 21–44).San Diego, CA: Academic Press.

- McArdle, J. J., & Hamagami, F. (1992). Modeling incomplete longitudinal and cross-sectional data using latent growth structural models. *Experimental Aging Research*, *17*, 29–52.
- Mowday, R. T., & Sutton, R. I. (1993). Organizational behavior: Linking individuals and groups to organizational contexts. *Annual Review of Psychology*, *44*, 195–229.
- Mulaik, S. A., James, L. R., & Van Alstine, J. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105, 430–445.
- Muthén, L., & Muthén, B. O. (1998). *Mplus user's guide*. Los Angeles, CA: Muthén and Muthén.
- Nicholson, N., Brown, C. A., & Chadwick-Jones, J. K. (1977). Absence from work and personal characteristics. *Journal of Applied Psychology*, 62(3), 319-327.
- Oldham, G. R., Kulik, C. T., Ambroise, M. L., Stepina, L. P., & Brand, J. F. (1986). Relations between job facet comparison and employee reactions. *Organizational Behavior and Human Decision Processes*, 38, 28-47.
- Palmatier, R. W., Scheer, L. K., & Steenkamp, J. B. (2007). Customer loyalty to whom? Managing the benefits and risks of salesperson-owned loyalty. *Journal of Marketing Research*, 44, 185-199.
- Patton, E., & Johns, G. (2012). Context and the social representation of absenteeism: Absence in the popular press and in academic research. *Human Relations, 65*, 217-240.
- Porter, L. W., & Steers, R. M. (1973). Organizational, work and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, *80*, 151–176.
- Raykov, T. (1994). Studying correlates and predictors of longitudinal change using structural equation modeling. *Applied Psychological Measurement*, *18*, 63–77.
- Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22, 1-13.

- Sagie, A. (1998). Employee Absenteeism, Organizational Commitment, and Job Satisfaction: Another Look. *Journal of Vocational Behavior*, *52*(2), 156-171.
- Saks, A. M., & Ashforth, B. E. (1997). Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior*, *51*, 234–279.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. *Journal of Applied Psychology*, 63(4), 391-407.
- Stephens, C., & Long, N. (2000). Communication with police supervisors and peers as a buffer of work-related traumatic stress. *Journal of Organizational Behavior*, *21*, 407–424.
- Tajfel, H. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London: Academic Press.
- Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S.Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7-24).Chicago: Nelson-Hall.
- Tanis, M., & Postmes, T. (2005). A social identity approach to trust: Interpersonal Perception, group membership and trusting behavior. *European Journal of Social Psychology*, 35, 413–424.
- Thomson, L., Griffiths, A., & Davison, S. (2000). Employee absence, age and tenure. A study of nonlinear effects and trivariate models. *Work & Stress*, 14(1), 16-34.
- Väänänen, A., Toppinen-Tanner, S., Kalimo, R., Mutanen, P., Vahtera, J., & Peiró, J. M. (2003).
 Job characteristics, physical and psychological symptoms, and social support as antecedents of sickness absence among men and women in the private industrial sector. *Social Science & Medicine*, *57*, 807–824.

- Wang, P., & Walumbwa, F. O. (2007). Family-friendly programs, organizational commitment, and work withdrawal: The role of transformational leadership. *Personnel Psychology*, 60, 397–427.
- Xie, J. L., & Johns, G. (2000). Interactive effects of absence culture salience and group cohesiveness: A multi-level and cross-level analysis of work absenteeism in the Chinese context. *Journal of Occupational and Organizational Psychology*, 73, 31–52.

CHAPTER 3

Why are you working while ill? The role of self-efficacy and job crafting in predicting presenteeism at work

Abstract

Although the phenomenon of attending work while ill, named presenteeism, has become more and more common and studied in today's organizations, there is a lack in understanding its psychological antecedents and its costs for objective performance. The present study aimed to explore the role of self-efficacy and job crafting in shaping presenteeism and to investigate its consequences on job performance, as rated by supervisors. Moreover, as job crafting is a rather new construct, the current study intended to deepen the link between efficacy beliefs and crafting behaviors. White-collars (n = 273), who reported health or emotional problems in the previous six months, participated in the study, filling-in an on-line questionnaire matched with their job performance. Structural equation model revealed that: a) self-efficacy was related to crafting components; b) the job crafting's dimension of developing activities (i.e., extending the amount of activities, chances and challenges) positively impacted presenteeism; c) self-efficacy was not directly related to presenteeism; rather, it exercises its influence throughout job crafting; d) presenteeism was positively associated with positive performance ratings from supervisors. These findings shed light on the relevance of psychological variables in investigating presenteeism and call attention to the possibility that managers underestimate the negative risks of presenteeism for employees' future health and long-term productivity.

Keywords: Presenteeism, self-efficacy, job crafting, job performance.

1. Introduction: studying presenteeism from a psychological view

In the last twenty years several changes have occurred in the global marketplace. The main transformations regard merging and restructuring, privatization of public structures, downsizing, modifications in employment contracts' regulation and increasing of the unemployment rate due to the financial crisis. As a consequence, work demands have deeply changed and job insecurity has been amplified, altering employees' attendance behaviors (Aronsson, Gustafsson, & Dallner, 2000). In fact, during uncertain period at work, people experience more difficulties in changing their job or in being absent at work, and they are more likely to remain in their occupation even if it is no longer desirable (Aronsson et al., 2000) or to go to work even if ill (Bergström, Bodin, Hagberg, Lindh, Aronsson, & Josephson, 2009b; Caverley, Cunningham, & MacGregor, 2007), reducing absenteeism. On the other hand, the unsure economic situation of the today's global marketplace brings an increasing feeling of pressure and competition (Chapman, 2005). As a consequence, individuals are encouraged to take the challenges and seize the opportunities for development that this changing situation can reserve; hence, self-confidence and proactivity become central characteristics. Moreover, in order to attain these results and the higher organizational expectations, employees can hold higher job involvement and organizational commitment and they may be more prone to work intensively and to attend work even if in a poor health state (Baker-McClearn, Greasley, Dale, & Griffith, 2010).

In this scenario, the phenomenon of attending work even if ill, defined as presenteeism (Aronsson et al., 2000; Johns, 2010), has become more and more common. In fact, the fifth European working conditions survey reported that the 39% of employees works when sick, of which the 62% have worked while ill for 6 days or fewer, the 33% between 6 and 20 days, and the 5% more than 20 days (Eurofound, 2012). Presenteeism has been studied since the early 1990's, when Cary Cooper used the term to indicate the growing propensity for individuals to

spend more time at work when their employment or jobs were in jeopardy (Chapman, 2005). Here, we refer to presenteeism as the tendency of people to be present at work, in spite of medical conditions and health status that should request an absence from work for sickness (Aronsson et al., 2000).

Research on presenteeism has analyzed its spread in different occupational groups, the antecedents and the consequence on productivity and health (Aronsson et al., 2000; Bergström, Bodin, Hagberg, Aronsson & Josephson, 2009a; Hansen & Andersen, 2008). Among the drivers of the phenomenon, the majority of the studies has focused on work-related factors, such as the type of organization, the characteristics of the tasks, the nature of employment contract, the quality of interpersonal work relationships, and replaceability (Aronsson & Gustafsson, 2005; Aronsson et al., 2000; Böckerman & Laukkanen, 2009; Caverley et al., 2007; Grinyer & Singleton, 2000; Hansen & Andersen, 2008; Johns, 2011). Also, at an organizational and group level, companies' policies, aiming at encouraging individuals' attendance and reducing absenteeism (Baker-McClearn et al., 2010; Chatterji & Tilley, 2002; Grinyer & Singleton, 2000; Hansson, Bostrom, & Harms-Ringdahl, 2006), and the workplace culture regarding presenteeism may force individuals to attend work when ill or to return before fully recovered (Dew, Keefe, & Small, 2005; Johns, 2010). For example, in her study about British managers who were experiencing organizational restructuring, Simpson (1998) used the expression "competitive presenteeism" to depict a male-dominated culture promoting the tendency to stay at work until late and even while unwell in order to exhibit visible commitment and have access to promotion opportunities.

Following Johns' (2010) dynamic model of attendance behaviors, work context factors interact with personal aspects, such as attitudes, personality and gender, in influencing the employee's choice between absenteeism and presenteeism. However, few studies have explored

the role of personal factors in predicting presenteeism. Aronsson and Gustafsson (2005) introduced the concept of "individual boundarylessness", a personality characteristic that makes difficult for people to set limits to others' demands and whishes and that represents a risk factor for sickness presenteeism. Johns (2010, p. 535) affirmed that presenteeism "connotes perseverance in the face of adversity" and proved evidence that neuroticism, internal health locus of control, perception of the legitimacy of absenteeism were negatively associated with presenteeism (Johns, 2011). Instead, no link was showed for another Big Five personality trait, conscientiousness, which was expected to be positively related to presenteeism because responsible and reliable employee might have been more prone to come to work if ill (Johns, 2011). Finally, among individual attitudes towards the job, over-commitment to the organization, to the work-team and to clients increases the likelihood of presenteeism (Baker-McClearn et al., 2010; Hansen & Anderson, 2008; Siegrist, 1996).

According to a psychological view of presenteeism, aiming at stressing the role of psychosocial factors in predicting the phenomenon (Johns, 2011), the present study intends to investigate two personal variables never studied in relation with presenteeism: self-efficacy, which refers to people' beliefs to exercise control over their life (Bandura, 1997); and job crafting, a relatively new construct indicating self-initiated change behaviors with the purpose of aligning the job with personal goals, preferences and values (Wrzesniewski & Dutton, 2001). We focused on these dimensions because they catch the agentic and proactive component of individual behaviors (Bandura, 1997; Tims, Bakker, & Derks, 2012) that, as aforementioned, are strongly required in the today's work situation to allow individuals to handle competition and to actively shape and take advantage from changes, attaining a good performance (Chapman, 2005; Del Líbano, Llorens, Salanova, & Schaufeli, 2012). Thus, our purpose is to understand whether and how these proactive characteristics can model employees' attendance behaviors, affecting

the decision to come to work while ill. More specifically, we may expect that high selfefficacious employees are more inclined not only to work a greater number of hours (Burke, Matthiesen, & Pallesen, 2006; Del Líbano et al., 2012; Ng, Sorensen, & Feldman, 2007), but also to work in an unwell status of health. Similarly, individuals who assume crafting behaviors may experience higher level of work engagement, commitment and responsibility to the job (Demerouti, Le Blanc, Bakker, Schaufeli, & Hox, 2009; Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012), which may lead to presenteeism (Dew et al., 2005).

Furthermore, because job crafting is a rather new construct, we aim to deepen its antecedents, considering self-efficacy as a trigger variable for crafting acts. In fact, if people believe that they can control and influence their job and work context throughout their actions, they will exercise their control and proactively modify their work and environment (Bandura, 2000). In other words, they are more likely to engage in crafting behaviors.

Such emphasis on the predictors of presenteeism is justified by the relevant consequences associated with it. From a health and individual perspective, attending work while ill may increases the danger of future sickness absences (Bergström et al., 2009a; Hansen & Andersen, 2009) and of poor general health (Bergström et al., 2009b; Kivimäki, Head, Ferrie, Hemingway, Shipley, Vahtera, & Marmot, 2005). From an organizational view, presenteeism represents a costly issue that can have significant economic implications for the entire society (Chapman, 2005). In fact, it may strongly reduce productivity, cutting individual outcomes by one-third or more (Hemp, 2004). The relevance of productivity loss due to presenteeism and the awareness of the magnitude of this economic loss (Chapman, 2005) have fostered the appearance of research conducted by medical scholars and occupational health consultants (Johns, 2011), who have considered presenteeism as a mere reduction in productivity because of health-related ailments (Schultz & Edington, 2007). Consistent with Johns' standpoint (Johns, 2010; 2011), this medical

conceptualization can produce confusion because it assimilates productivity loss to presenteeism, without measuring presenteeism directly, as an individual behavior, and without specifically analyzing its consequence on performance. In line with this argument, the present study operationalizes presenteeism as the act to come to work while ill and explore the effect of presenteeism on job performance, as rated by supervisors.

To sum up, moving from the aforementioned literature, the current contribution aims to test a conceptual model (Figure 1) in order to: a) explore whether self-efficacy represents an antecedent of job crafting; b) investigate the role of self-efficacy and job crafting in directly predicting presenteeism; c) examine the link between presenteeism and job performance, as rated by supervisor; d) control presenteeism for gender and age, in a sample that declared to have had health or emotional problems in the last work year. Furthermore, the study verifies the psychometric characteristics of the job crafting scale, used, to date, for the first time in an Italian organizational context.

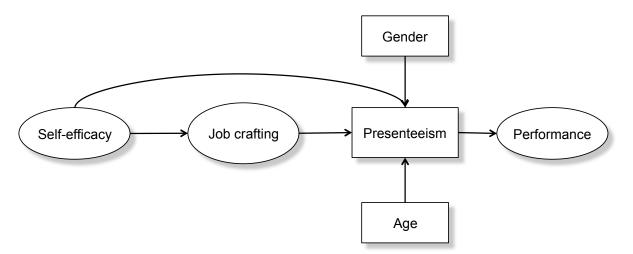


Figure 1. The conceptual model

2. Why are you working when ill: the role of self-efficacy and job crafting

2.1 Job crafting: definition of the construct and the antecedent role of self-efficacy

Based on the assumptions of social constructionism (Gergen, 1994), which highlight how people psychologically construe their experiential world, the construct of job crafting emphasizes how employees can influence and shape the essence of their work. Job crafting essentially describes an action, indicating the physical, cognitive and relational changes that people make in some aspects of their work (Wrzesniewski & Dutton, 2001). In fact, an employee can alter the physical boundaries of his or her job, for example modifying the form or the number of tasks and activities, or he or she can change the cognitive task boundaries, redefining his or her personal view of the job, or, more, he or she can change the interactions with others (e.g., colleagues, supervisor, clients), transforming the relational boundaries of the job (Wrzesniewski & Dutton, 2001). An important feature of job crafting is that it is self-starting: workers engage in crafting behaviors on their own initiative and according with their preferences, skills and values (Tims et al., 2012).

Tims and colleagues (Tims & Bakker, 2010; Tims et al., 2012) inscribe job crafting in the theoretical frame of job demands-resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). JD-R model classifies the job characteristics in two broad categories: job demands, referring to all the aspects of the job requiring physical and psychological effort and skills; and job resources, designing those aspects that support the person in achieving work goals, reducing job demands and its costs, realizing personal and professional development. Consistent with this perspective, job crafting has been defined as self-initiated behaviors undertaken by employees to change the level of job demands and resources and to balance them with their skills and needs (Tims & Bakker, 2010; Tims et al., 2012). Moreover, Tims and colleagues' (2012) work has showed a multi-dimension structure of

the construct, composed by four factors: 1) increasing structural job resources; 2) increasing social job resources; 3) increasing challenging job demands; 4) decreasing hindering job demands. The first two dimensions concern crafting actions aimed at extending the level of task autonomy, job control and opportunities of development (i.e., structural job resources), and the extent of support, feedback and supervisor coaching (i.e., social job resources). The third factor pertains to increasing the level of challenging job demands under the assumptions that individuals seek for stimulating and inspiring activities in order to reinforce their work motivation and develop new knowledge and skills. Finally, the last dimension denotes a negative side of job crafting: it indicates that employees can craft their job also cutting tasks, relationships and interactions in order to avoid heavy or unpleasant situations and lower workload and time pressure.

Being a quite new construct, few studies have explored what drives an employee to craft his or her job and these studies are mostly theoretical or qualitative (Berg, Wrzesniewski, & Dutton, 2010; Lyons, 2008; Wrzesniewski & Dutton, 2001). The motivation to job crafting seem to be affected by situational conditions, such as the perceived opportunity to modify the job, and dispositional factors. Among the latter, the need for personal control over the job, the need for positive self-image, the need for connections to others, the readiness to change are positively and significantly associated with crafting behaviors (Lyons, 2008; Wrzesniewski & Dutton, 2001). Particularly, the need for control is an intrinsic necessity for people' life (Adler, 1930) and modifying some factor and aspects of the job, even in small parts, allows employees to take the control over their job and work environment (Wrzesniewski & Dutton, 2001).

Related to the need for control, the concept of self-efficacy, defined as the "beliefs in one's own capabilities to organize and execute the courses of action required to produce certain achievements or results" (Bandura, 1997, p. 3), may play an antecedent role with regard to job

crafting. Framed in the social cognitive theory (Bandura, 1986), self-efficacy is the fundament of human agency, which affirms the intentional influence of individuals over their functioning and the course of events by their actions (Bandura, 2006). Thus, self-efficacy is concerned with personal beliefs to have the control over own life and to shape events, situations and relationships (Bandura, 1997). Accordingly with the theoretical study of Tims and Bakker (2010), we assume that self-efficacy might enhance crafting behaviors, because if people believe that they can master the diverse aspects of their job, they are more likely to redefine and mold their tasks, activities and social relationships on the job. More specifically, self-efficacious employees seek for opportunities to test and prove their abilities and for mastery experience that can guarantee their personal and professional development (Bandura, 1997). For this reason, they are more prone to increase their job resources. In fact, a higher level of structural job resources implies a greater degree of autonomy, knowledge and capabilities, while a higher level of social job resource means more feedback, advices and support from colleagues and supervisor. As a consequence, personal and professional growth is ensured. Furthermore, selfefficacious people set higher standards and goals for themselves and undertake more stimulating activities, interpreting demands as challenges rather than threats (Bandura, 1997). Hence, they are more likely to join new and interesting projects and to regularly take on extra tasks on the job. In addition, people with strong efficacy beliefs show more persistence in front of obstacle and difficulties, are more successful in their problem solving, put more effort in their activities and are more commitment to reach their purposes (Bandura, 1997; 2012). This results in a lower tendency to reduce challenging demands, decreasing emotionally, mentally, or physically workload, concentration and important decisions.

Accordingly, we set the following hypotheses:

Hypothesis 1: Self-efficacy will be positively related to increasing structural job resources, increasing social job resources, increasing challenging job demands.

Hypothesis 2: Self-efficacy will be negatively related to decreasing hindering job demands.

2.2 Crafting a job may lead to presenteeism?

With regard to the consequences of job crafting, at the individual level job crafting can produce positive effects (Wrzesniewski & Dutton, 2001): it has been associated positively with higher level of job satisfaction, organizational commitment, job effectiveness (Dew et al., 2005), resilience, enjoyment (Berg et al., 2010), work engagement (Petrou et al., 2012), and negatively with absenteeism (Ghitulescu, 2006). Furthermore, the work of Tims and colleagues (2012) reported that the dimensions of job crafting regarding increasing job resources, both structural and social, and challenging job demands drove employees to feel more engaged in their work, to become more employable, fostering their advancement in career, and to better perform their job. Differently, the dimension called decreasing hindering job demands showed non-significant, even if negative, correlations with work engagement, employability and job performance.

In line with the conceptualization of job crafting of Tims and colleagues (2010; 2012), we intend to explore how these four dimensions of job crafting are related to presenteeism.

According to the JD-R model, job resources play a motivational role, because they enhance individuals' growth, learning and development, and they promote the willingness to dedicate energy and capabilities to the work activities, fostering work engagement (Bakker & Demerouti, 2007; Hackman & Oldham, 1980; Halbesleben, 2010). Thus, increasing job resources, through extending feedback, task significance, autonomy and control, may conduct the employee to feel more responsible for his or her work and, consequently, may induce him or her to invest more effort in the tasks (Parker & Ohly, 2008; Tims et al., 2012) and to attend work even if unwell.

Moreover, the higher level of autonomy and control, deriving from the enlarged job resources, might lead to presenteeism. Indeed, Johansson and Lundberg (2004) have showed that the construct of adjustment latitude, which design the employees' possibilities to modify the procedures and the outcomes of their work, is positively associated with presenteeism and Aronsson and Gustafsson (2005) hypothesized that individuals with a greater degree of job control, in term of choosing work tasks and managing work pace, would be more inclined to be present while sick. In addition, an employee with a strong control and autonomy in its work is more difficult to replace (Böckerman & Laukkanen, 2010) and the difficulty in replaceability is a trigger factor for presenteeism (Aronsson & Gustafsson, 2005; Aronsson et al., 2000; Caverley et al., 2007).

Literature has provided evidence that high level of job demands are related to health problems (Bakker & Demerouti, 2007; Demerouti et al., 2000) and presenteeism (Demerouti et al., 2009). Anyway, challenge demands, such as attractive tasks and project groups, do not damage energy and health (LePine, Podsakoff, & LePine, 2005), but they have been associated to goal attainment and work motivation (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). This implies that increasing challenging job demands, throughout seeking for interesting and innovative projects, learning the latest developments and taking on extra tasks, can result in a more stimulating job (LePine et al., 2005; Podsakoff, LePine, & LePine, 2007) and in a stronger motivation and engagement at work (Petrou et al., 2012). This may increase the effort by the employee (Cavanaugh et al., 2000) and also the job pressure, that in turn would lead to be at work even if ill in order to attain the challenging goal (Baker-McClearn et al., 2010; Widera, Chang, & Chen, 2010). At the same time, the accumulation of extra challenges can alter the meaning of work, making it more meaningful and worthwhile (Wrzesniewski & Dutton, 2001),

and increase the task significance that, in turn, is positively linked to presenteeism (Aronsson et al., 2000; McKevitt, Morgan, Dundas, & Holland, 1997; Johns, 2011).

Regarding the last aspect of job crafting, decreasing hindering job demands, it has been found to be uncorrelated with the other "increasing" dimensions of the construct and it has showed a different pattern of relationships with organizational outcomes, denoting its independence and diversity from the other factors (Tims et al., 2012). Hence, decreasing job demands should have a different role also in influencing presenteeism. Reducing demands might reflect insufficient capabilities and skills of the employee to deal with job requests, such as difficult decisions, prolonged concentration, emotionally intensive interactions, and might cause low performance (Tims et al., 2012). Furthermore, those who are more inclined to decrease job demands are described as more disengaged from work and more prone to withdrawal behaviors (Tims et al., 2012). Therefore, especially if in a non-good state of health, employees would not attend work, reporting lower level of presenteeism.

According with these assumptions, we formulated the following hypotheses:

Hypothesis 3a: Increasing structural job resources, increasing social job resources, increasing challenging job demands will be positively related to presenteeism.

Hypothesis 3b: Decreasing hindering job demands will be negatively related to presenteeism.

2.3 Self-efficacy and presenteeism: should we hypothesize a positive relationship?

Self-efficacy is directly and positively related to job performance (Stajkovic & Luthans, 1998). In fact, efficacy beliefs are the more proximal antecedents of actions, determining how much effort an individual will put in his or her activity and how long he or she would persist,

91

even in the face of adversities, exercising a motivational role throughout self-regulatory mechanisms (Bandura, 1986). Thus, employees with a strong sense of personal efficacy activate more effort and resilience, attaining more satisfaction and successful outcomes (Bandura, 1986; 1997; Latham, 2005; Stajkovic & Luthans, 1998). Persistence and commitment to the goal make the individual more inclined to spend more time at work, working excessively (Del Líbano et al., 2012), and, similarly, they could encourage the employee to continue to work even if unwell, in order to complete the tasks and attain the goals, deriving a personal sense of fulfillment (Hackman & Oldham, 1980) and fostering presenteeism. Indeed, presenteeism always involves perseverance in front of difficulties (Johns, 2010).

Moreover, self-efficacious employees perceive a higher degree of control over their work and find more ways to exercise this control (Bandura, 2000). So, they might figure out more opportunities to alter their task and effort when feeling ill at work, through lowering the work pace, cutting the working day or choosing among diverse activities. As a result, their sickness attendance is fostered, as suggested by the concept of Johansson & Lundberg (2004) of adjustment latitude.

Hence, we hypothesized that:

Hypothesis 4: Self-efficacy will be positively related to presenteeism

3. How does presenteeism affect performance evaluation?

As absenteeism, presenteeism is a common and costly problem for organizations. Some studies revealed that the costs of productivity loss because of presenteeism are higher than the costs of sickness absenteeism (Cooper & Dewe, 2008; Hemp, 2004; van den Heuvel, Ijmker, Blatter, & de Korte, 2007). For example, the study of Goetzel and colleagues (Goetzel, Long, Ozminkowski, Hawkins, Wang, & Lynch, 2004) showed that the estimated cost of presenteeism accounted for 18% to 60% of the total costs for the most common health conditions.

However, the influence of being at work while ill on job performance is hard to estimate, especially in the today's jobs, in which the outcomes of employees' activities can be difficulty counted (Hemp, 2004). As a consequence, the relationship between presenteeism and performance has been examined by self-report instruments, aimed at measuring the amount of productivity loss in performing work tasks and in attaining goals because of bad health conditions, and there is a lack in understanding the consequences of presenteeism with regard to objective performance (Baker-McClearn et al., 2010; Johns, 2010; Pauly, Nicholson, Polsk, Berger, & Sharda, 2008). Consistent with the conviction that empirical evidence is needed to understand the effect of illness at work, the present study intends to examine the link between presenteeism and performance, as rated by supervisors.

Although the existing literature reported that presenteeism decreases productivity (Dixon, 2005; Hemp, 2004; Ramsey, 2006), the study of Pauly et al. (2008) about the managers' perception of presenteeism impact on work outcomes has showed that some managers think that illness at work little damage performance, underestimating the negative consequences for the organization. In line with this, we assume that supervisors might view attending work while sick as an expression of commitment and loyalty to the organization and the work-group, especially during periods of financial crisis, as the Italian one, and of firm's reorganization, as the one that the organization concerned is going through. In fact, presenteeism can be perceived by the management as an employee's effort to contribute to the organizational productivity and to support the activities of the team, becoming a sort of extra-role performance or organizational citizenship behaviors (Johns, 2010). Consequently, supervisors might reward it assessing more positively the employees' competencies.

According to these reasons, we hypothesized that:

Hypothesis 5: Presenteeism will be positively related to employees' rating of job performance by supervisors.

4. Method

4.1 Participants and procedure

The study was conducted in the principal mail delivery company in Italy, which is one of the biggest Italian organizations, with about 14,000 offices throughout the country and a staff of 150,000 employees. The organization was privatized in 1998, leading to a large reorganization, and some important changes are still in course. It is interesting to note that privatization introduced the performance appraisal system and for the first time supervisors evaluated their coworkers, setting also new criteria for reward system and career development.

A total of 1,493 white-collar employees was invited to participate to the research project, aimed at investigating the individual determinants of wellbeing and success at work. Employees received an e-mail from the HR Department, announcing the research, and another one from the researchers, explaining the project and the web-based survey. Participation was voluntary. Moreover, in order to match the self-reported data with the performance data from the performance appraisal process, each questionnaire enclosed a code. This allowed also assuring the privacy of the respondents, because it was not possible to connect their names and their answers to the survey. In fact, the HR Department assigned the code to each participant and administered the questionnaires, which were collected back by the research team. In this way, the organization knew the name of the employee, the code and the performance data, but did not know each individual's answers to the questionnaire; instead, the researchers knew the code, the

answers to the questionnaire and the performance measures provided by the company, but not the name of the employee.

Of the 935 persons who filled-in the on-line questionnaire (the response rate was 63%), the present study selected those respondents who indicated to have had health or emotional problems in the past six months. This was done according with the necessity of taking into account that poor health is a prerequisite for sickness presenteeism (Bergström et al., 2009b; Böckerman & Laukkanen, 2010) and in order to focus on the behaviors of those attending work even if ill. In total, 273 employees participated in this study. The majority of participants was male (55%) and possessed an educational level relatively high: in fact, the 60% of them had at least a bachelor's degree. Their age ranged between 26 and 63 years with a mean of 43.6 years (SD = 9.81). On average, they worked in the organization from 15.2 years (SD = 11.35).

4.2 Measures

Self-efficacy. A 7-item scale, already validated in the same organizational context (Borgogni, Dello Russo, & Latham, 2011), was used to measure individuals' beliefs to deal with contextual requests, to successfully solve any problem at work and to carry on all the job assignments. Consistent with Bandura's (2006) recommendation for construct specificity, the items were specifically related to the work domains of employees of the study. Some sample items are "I am confident I can generate new ideas to deal with requests" or "I am confident I can express my opinion during meetings even when I have divergent ideas from the others". The statements were measured on a 7-point Likert-type scale (from 1 = "Cannot do to" to 7 = "Highly certain can do"). The Cronbach's alpha coefficient was .91.

Job crafting. Participants' crafting behaviors were assessed using the job crafting scale of Tims, Bakker and Derks (2012). All items were answered using a 7-point frequency scale (from 1 = ``Never'' to 7 = ``Always''). The scale includes four different factors:

Increasing structural job resources. Five items referring to employees' behaviors aiming at enlarging opportunities for development, task variety and autonomy (e.g., "I try to learn new things at work"; "I decide on my own how I do thing").

Increasing challenging job demands. Six items measuring those behaviors that would lead to additional and challenging demands, such as interesting projects, stimulating tasks and innovative activities (e.g., "If there are new developments, I am one of the first to learn about them and try them out"; "When an interesting project comes along, I offer myself proactively as project co-worker").

Increasing social job resources. Five items assessing those actions that point at increasing social support, supervisor coaching and feedback (e.g., "I ask others for feedback on my performance"; "I ask whether my supervisor is satisfied with my work").

Decreasing hindering job demands. Five items regarding individuals' actions aiming at lowering the level of emotional and mental job demands (e.g., "I try to ensure that my work is emotionally less intense"; "I organize my work in such a way to make sure that I do not have to concentrate for too long a period at once").

Presenteeism. Presenteeism was measured by the average of responses to two items, which asked persons to indicate how frequently they show up at work even if ill, using a 6-month recall period and a 7-point Likert format (from 1 = ``Never'' to 7 ''Always'') response scale. The two items were modeled by Johns (2011) on Aronsson et al. (2000) and on McKevitt et al. (1997), and stated "Over the past six months I have gone to work despite feeling that I really should have

taken sick leave due to my state of health" and "Over the past six months I have continued to work when it might have been better to take sick leave". The Cronbach's alpha coefficient was .87.

Job performance. Data were drawn from the performance ratings and referred to the same year of the survey. Supervisors evaluated their employees once a year, using the company's performance appraisal instrument that includes five core organizational competencies. More specifically, the five behavioral domains are "problem solving" (i.e., to identify problems correctly and find an appropriate solution), "integration" (i.e., to build up and maintain effective relationships in order to attain a common goal), "innovation" (i.e., to think up and develop innovative solutions), "customer focus" (i.e., to understand and anticipate clients' needs, dealing effectively with their requests) and "openness" (i.e., to explore new opportunities and work procedures, according to the environmental modifications, in order to positively contribute to change management). These domains are assessed on a 10-point scale (from 1 = "Adequate" to 10 = "Beyond the expectations"). Ratings showed a normal distribution, with the skewness and kurtosis values never higher than 1 in absolute value. In order to verify the factorial structure of the scale, a principal factor analysis was performed (PFA) with SPSS. The results supported the one-factor structure, indicating that the five competencies are components of the same performance factor. The factor solution explained the 81.73% of the total variance and the loadings of the five indicators on the factor were higher than .80. The Cronbach's alpha coefficient for the overall performance dimension was .96.

Control variables. Gender and age were included as control variables because they are the most frequent correlates of attendance behaviors (Côté & Haccoun, 1991; Hackett, 1990; Johns,

2010). Data were made available to researchers by the HR Department throughout the personal code on each questionnaire. Gender was coded 1 for men and 2 for women whereas age was measured in years.

4.3 Statistical analyses

As preliminary analyses, we conducted a principal factor analysis (PFA) with Promax oblique rotation in SPSS in order to test the factorial structure of the job crafting scale, as suggested by Bandalos and Boehm-Kaufman (2009). The PFA was conducted on a sample of 658 employees, who participated to the research but who were not included in the present study (see paragraph 3.1). In order to confirm the factorial structure of the job crafting scale as resulted from the PFA, we performed a confirmative factor analysis (CFA) with the sample of the study presented here (so, a different sample from the PFA; n = 273), using the Mplus software (Muthén & Muthén, 1998). We tested and confronted a three-factor correlated model with: a) a one-factor model; and b) the original four-factor model. To evaluate the model fit, we used the following indices: chi-square, the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), the Comparative Fit Index (CFI; Bentler, 1990), the Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980), and the Standardized Root Mean Square Residual (SRMR; Jöreskog & Sörbom, 1996). We also test the change in chi-square across models, in order to compare the three-factor model with the alternative ones.

In order to test the posited relationships among the variables, analyses were run within the framework of structural equation modeling (SEM), using the Mplus software (Muthén & Muthén, 1998). Parameters were estimated with Maximum Likelihood estimation and a two steps approach was followed (Anderson & Gerbing, 1988). Preliminarily, we tested a measurement model to determine whether the observed variables served as adequate indicators

of the latent variables and supported the construct validity of the measures (Anderson & Gerbing, 1988). A six-factor model was specified based on the assumption that self-efficacy, the components of job crafting, presenteeism, and job performance were six distinct, albeit correlated, constructs. Self-efficacy and the job crafting dimensions were included in the model as latent variables, defined by the items of the corresponding scales. Presenteeism was entered as an observed variable, calculated as the mean of the two related items. Finally, job performance was incorporated as a latent variable, defined by five manifest indicators referring to the five behavioral competences of the organization. Afterward, we specified the structural model to examine the posited paths among variables (McDonald, 1999), as represented in Figure 1. In this model, gender and age were included as covariates in order to control their relationship with presenteeism.

At last, in order to further test the appropriateness of the posited model, we compared the hypothesized model with an alternative model with a reverse relationship between self-efficacy and job crafting dimensions.

5. Results

5.1 Preliminary analyses: the job crafting scale

The principal factor analysis (PFA), conducted on the job crafting scale, lead to the elimination of two items (i.e., one pertaining to increasing structural job resources dimension and the other one to decreasing hindering job demands dimension) because they loaded on two different factors simultaneously. Therefore, a second PFA was performed. The results distinguished three dimensions of job crafting, instead of the proposed four dimensions (Tims et al., 2012). Two of these factors were identical to the hypothesized dimensions (i.e., increasing social job resources and decreasing hindering demands). The third factor aggregated the

hypothesized factors increasing structural job resources and increasing challenging job demands. A content analysis revealed that both factors (i.e., increasing structural job resources and increasing challenging job demands) had in common an individual tendency toward the development of activities and skills; this can explain the aggregation. Thus, we labeled this third factor as "developing activities", indicating the employees' behaviors that aim at extending challenging and stimulating activities, increasing resources, task variety, job autonomy, and opportunities for learning and development.

Table 1 presents the item means, standard deviations, Cronbach's alpha, and factor loadings.

	М	SD	α	FACTOR			
ITEM				1	2	3	
Developing activities			.860				
ITEM81	5.71	.966		.798			
ITEM90	5.56	1.172		.791			
ITEM98	5.95	1.015		.753			
ITEM84	5.70	1.170		.687			
ITEM86	5.08	1.219		.632			
ITEM93	6.03	1.041		.604			
ITEM97	4.81	1.285		.525			
ITEM101	5.49	1.178		.511			
ITEM89	5.08	1.307		.471			
Decreasing hindering job demands			.712				
ITEM87	3.46	1.689			.628		
ITEM95	3.46	1.689			.625		
ITEM91	3.36	1.441			.601		
ITEM82	3.60	1.668			.598		
ITEM102	3.15	1.500			.547		
Increasing social job resources			.736				
ITEM92	3.68	1.379				.678	
ITEM88	3.47	1.502				.618	
ITEM83	3.84	1.517				.617	
ITEM96	4.41	1.444				.517	
ITEM100	4.78	1.050				.429	

Table 1. Item means, item standard deviations, Cronbach's alpha, and factor loadings from the PFA.

Together, the three factors explained the 48.72% of the total variance and the loadings of the items on the respective factor were all higher than .40. The first factor, explaining 25% of the variance after the rotation, is formed by the items for increasing structural job resources and increasing challenging job demands (9 items). The second factor, which explained 14% of the variance after the rotation, is composed by the items for decreasing hindering job demands (5 items). The third factor, explaining 10% of the variance after the rotation, is formed by the items for decreasing hindering job demands (5 items). The third factor, explaining 10% of the variance after the rotation, is formed by the items for increasing social job resources (5 items). Finally, the three factors showed a good reliability, with all the Cronbach's alphas above .70 and ranging from .71 to .86 (Nunnally & Bernstein, 1994), in line with the results found by Tims et al. (2012).

Table 2 reports the results from the confirmative factor analysis conducted on the threefactor model (emerged from the PFA), compared with a) a one-factor model; and b) the original four-factor model (Tims et al., 2010). The three-factor model provided a better fit than the others (all p's < .001) and all fit indices were within the recommended criteria. In fact, TLI and CFI were over .90 (Bentler & Bonett, 1980) and RMSEA and SRMR were, respectively, lower that .06 and .08 (Hu & Bentler, 1999). Moreover, all items loaded significantly on the respective latent variables, with coefficients ranging from .41 to .81. The covariance between developing activities and increasing social job resources was high and positive (.41, p < .001). The factor decreasing hindering job demands reported a negative covariance with developing activities (-.32, p < .001) and no significant covariance with increasing social job resources.

Table 2. Fit indices of alternative job crafting models for CFA

Model	χ^2	df	CFI	TLI	RMSEA	SRMR
M1. Three-factor model	264.779	149	0.919	0.904	0.055	.058
M2. One -factor model	750.229	152	0.594	0.543	0.120	.109
M3. Four-factor model	373.020	146	0.846	0.820	0.075	.066

In conclusion, the three-factor structure adequately represented the data. Thus, to test the study's hypotheses, we operationalized the job crafting scale as composed by three factors, namely *developing activities, increasing social job resources, decreasing hindering job demands*.

5.2 Descriptive statistics

Means, standard deviations and correlation matrix among the variables of the present study are reported in Table 3.

Variable	Μ	DS	1	2	3	4	5	6	7
1. Self-efficacy	5.30	.86							
2. Developing activities (JC)	5.28	.78	.527**						
3. Increasing social job resources (JC)	3.87	.95	.047	.307**					
4. Decreasing hindering job demands (JC)	3.48	.99	249**	248**	.026				
5. Presenteeism	5.42	1.45	.174**	.266**	024	050			
6. Job Performance	7.37	1.24	.064	.157*	.141*	147*	.119*		
7. Age	43.56	9.81	139*	051	165**	.125*	.004	163*	
8. Gender	-	-	046	.014	.163**	.047	076	049	068

Table 3. Descriptive statistics and correlations among the study variables

Note. ** p < .01, * p < .05. Gender was coded as 1 for males and 2 for females. JC = Job crafting.

5.3 Measurement model

The measurement model fitted the data well: χ^2 (388) = 572.329, p = .00; CFI = .945; TLI = .938; RMSEA = .044; SRMR = .056. All indices felt in cut-off ranges (Hu & Bentler, 1998) except for the significance of the chi-square, likely due to the large sample size (Bollen & Long, 1993; Mulaik, James, & Van Alstine, 1989). Each observed indicator was related to the

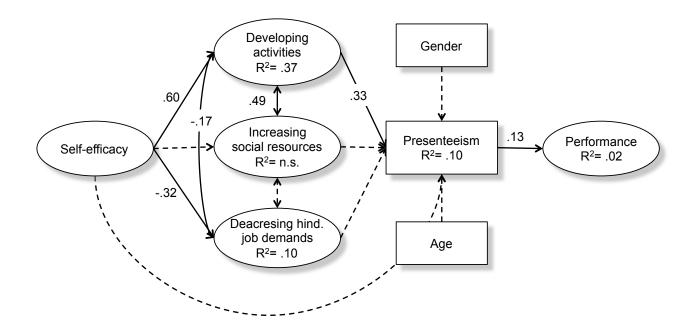
hypothesized latent factor and the factor loadings were all significantly different from zero and greater than .35, ranging from .37 to .92.

5.4 Structural model

The posited model fitted the data adequately: χ^2 (449) = 678.077, p = .00; CFI= .932; TLI = .925; RMSEA = .043; SRMR = .066. The parameter estimates of the structural model are presented in Figure 2. As expected (H1), self-efficacy confirmed its significant and positive relationship with two dimensions of job crafting, namely developing activities and decreasing hindering job demands, but it was not significantly related to the third component of job crafting, increasing social job resources (H2). In turn, developing activities was significantly and positively associated with presenteeism, confirming our Hypothesis 3a, whereas increasing social job resources (H3a) and decreasing hindering job demands (H3b) reported no significant links with presenteeism. Moreover, the direct link between self-efficacy and presenteeism was not significant, contrary to our Hypothesis 4. The relationship between presenteeism and job performance (H5) was significant and positive. Finally, control variables (i.e., gender and age) were both not significantly related to presenteeism. Overall, the model explained the 10% of the variance in presenteeism and the 2% of the variance in job performance.

Additional analyses were conducted to test the indirect link between self-efficacy and presenteeism via job crafting components, using Sobel's (1982) approximate significance test. The findings showed that only the indirect link between self-efficacy and presenteeism through developing activities was significant and positive ($\beta = .20, p < .01$).

Figure 2. The structural model



Note. Dotted lines indicate no-significant paths. The indirect effect of self-efficacy on presenteeism through developing activities is significant at p < .01, and equal in magnitude to .20.

5.5 Alternative model

The alternative model posited a reverse association between self-efficacy and job crafting, specifying a direct path from each of the three job crafting components to self-efficacy, as well as an indirect link, mediated by self-efficacy, between job crafting dimensions and presenteeism. This model provided a worse fit to the data than the hypothesized model: χ^2 (452) = 807.404, p = .00; CFI= .896; TLI = .887; RMSEA = .053; SRMR = .071. Moreover, the percentage of explained variance in presenteeism was not significant, indicating that job crafting contributes to explain presenteeism. Hence, these findings suggest that the network of influences posited in the hypothesized model represents a better balance between goodness of fit and explanatory power than the alternative model.

6. Discussion

The main purpose of the present study was to investigate whether efficacy beliefs and selfinitiated behaviors that employees adopt to craft their job influence presenteeism, which, in turn, impacts job performance.

Moreover, the study intended to analyze the factorial structure of the relatively new construct of job crafting for the first time in an Italian sample and to explore its relationship with self-efficacy. In this regard, rather than the four-factor posited structure of the job crafting scale (Tims et al., 2012), our results showed a three-factor structure that was confirmed to be the model which best fitted the data. The factors "increasing social job resources" and "decreasing hindering job demands" were equal to the theoretical dimensions and referred to those crafting actions aiming respectively at seeking for feedback, coaching and social support and at reducing emotional and mental workload. Instead, a new factor emerged from the aggregation of the originally hypothesized dimensions "increasing structural job resources" and "increasing challenging job demands". The new factor was labeled as "developing activities" and denote the behavioral tendency of developing capabilities, opportunities for professional learning and growth, stimulating and challenging activities.

Regarding the link between these three components and self-efficacy, the results from the structural equation model confirmed the influence of work efficacy beliefs on two of the job crafting dimensions, namely developing activities and decreasing hindering job demands. Employees who believe to control their job and, more specifically, to efficiently carry all the job tasks out and to handle important projects, successfully solving any problems and generating new ideas to deal with job requests, are more likely to alter the task boundaries of their work. Especially, they engage more frequently in behaviors pointing at increasing activities, skills, learning and challenges, because they continuously look for opportunities to prove and

strengthen their abilities and they establish challenging goals for themselves in order to achieve personal and professional development (Bandura, 1997). Furthermore, high self-efficacious individuals proceed less often to lower the level of job assignments, the cognitive intensity of work and the number of interactions with demanding colleagues and clients, because they are confident in their capabilities in succeeding in problem solving and persisting in the face of obstacles (Bandura, 1997). Finally, self-efficacy does not impact the dimension increasing social job resources of job crafting. In this regard, it is worth noting that we used a measure of specific work self-efficacy related to tasks; perhaps a broad self-efficacy measure, referring also to the social aspects of work, might have been more able to depict the link between the social component of crafting behaviors and efficacy beliefs.

More important, the present study contributed to presenteeism literature, exploring the role of job crafting in predicting the phenomenon. We found that developing activities is the only component of crafting behaviors that significantly impacts presenteeism: the more the individuals extend the amount of activities, chances and challenges, the more they would come to work even if ill. The motivational role played by increasing job resources and challenge demands (Bakker & Demerouti, 2007; Petrou et al., 2012; Salanova & Schaufeli, 2008), merged into the developing activities dimension, may explain our positive link. In fact, mobilizing job resources, volunteering for innovative projects and extra tasks, modifying activities in order to use all the skills on the job would result in an increased control over the job and task significance. Thus, the employee will put more effort in his or her work, feel more responsible for its outcomes (Parker & Ohly, 2008; Tims & Bakker, 2010; Tims et al., 2012) and, in turn, he or she would spend more time at work and show up even if not in a good state of health. It is interesting to note that the positive link between developing activities and presenteeism may reveal a negative side of job crafting, in line with those theoretical studies wondering about its dysfunctional consequences (Wrzesniewski & Dutton, 2001; Oldham & Hackman, 2010). Indeed, our results attest that at least an aspect of job crafting may foster the individuals' undesirable tendency to come to work while sick, which could lead to more serious and long term health problems (Bergström et al., 2009b; Hansen & Andersen, 2009; Kivimäki et al., 2005).

Despite the latter result, we did not detect a direct link between self-efficacy and presenteeism. Rather, self-efficacy indirectly impacts presenteeism, through the developing activities dimension of job crafting. This means that strong confidence in own capabilities encourages employees to modify the amount and the nature of work activities and tasks, that, in turn, lead to higher level of presenteeism. Thus, on one hand, self-efficacy conducts to proactive behaviors that allow individuals to make their job more stimulating, challenging and innovative and align it with their preferences and goal; on the other hand, via crafting actions, efficacy beliefs may enhance attending work when ill. The finding calls for future research investigating the relationship of efficacy beliefs and presenteeism and further exploring some possible dark sides of self-efficacy.

Another contribution of the present research regards the study of the relationship between presenteeism and job performance, as rated by supervisors. We found a significant and positive association between the two variables, in contrast with previous studies that highlight the loss of overall productivity due to presenteeism (Caverley et al., 2007; Dixon, 2005; Grinyer & Singleton, 2000). However, these researches have been based on self-report estimation of the impact of illness on productivity (Johns, 2010; Pauly et al., 2008) while, to the best of our knowledge, the present study is the only one using employees' ratings from performance appraisal. Therefore, our positive path means that the more individuals attend work in unhealthy medical conditions, the more they receive high and positive performance evaluation from their

supervisor at the end of the work-year. It supports the idea that, from a supervisor perspective, presenteeism could be assimilated to an organizational citizenship behavior (Organ, 1988), to a sort of extra-role performance, to a kind of devotion to the organization, because the individual is working, persisting and putting effort in the job despite his or her poor health conditions. This is particularly true for the present organization that is going through a complex process of privatization and reorganization in a period of general economic crisis, asking greater effort and dedication to each employee in order to contribute to organizational development and success. Moreover, following Johns' (2010) observation, the act of the employee to be present at work even if ill may be view not as a loss of productivity, but rather as a gain compared to the possible sick-day that the person should have taken. Therefore, supervisors may reward presenteeism behaviors with more positive performance ratings. In addition, this finding seems to depict an organizational culture regarding presenteeism that is oriented to promote and support working while ill (Dew et al., 2005; Johns, 2010). It is crucial to remind that presenteeism could lead to negative consequences: it can drive to serious health problems on the long-term (Bergström et al., 2009b; Hansen & Andersen, 2009; Kivimäki et al., 2005); it can impair colleagues and coworkers' health, through the spread of contagious and infective diseases (Ramsey, 2006; Vingard, Alexanderson, & Norlund, 2004); it can harm objective productivity, affecting both the quantity and the quality of the work, inducing individuals to repeat tasks and to lower the pace of work or making more and more serious mistakes (Hemp, 2004); it can damage the work-life balance and the general quality of life. In this light, it is necessary to verify the effect of presenteeism on the long term and to inform managers about its adverse outcomes, in order to avoid both underestimating the phenomenon and supporting an organizational culture that encourages it (Pauly et al., 2008).

Finally, control variables, namely gender and age, showed no significant paths with presenteeism.

7. Limitations and future research

Our study holds some limitations, providing avenues for future research.

First of all, except for job performance, all variables were self-reported and, consequently, might suffer from common method variance (Conway, 2002). Nevertheless, self-efficacy, job crafting and presenteeism are by definition constructs that only the individual can report, referring to beliefs, predispositions and evaluations related to individual self-system (Caprara & Cervone, 2000). Furthermore, we collected the supervisors' ratings of employees' performance from the performance appraisal system; this may attenuate the risk for correlation inflation (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Another potential limitation is that all variables were measured at the same point in time. Thus, the cross-sectional nature of the data calls for caution in drawing causal conclusions (Podsakoff et al., 2003). However, we provided theoretical rationales for the relationship among the variables and we used the structural equation modeling frame in order to test the conditions of a nomological net that specifies the order and direction of variables (Baron & Kenny, 1986). Anyway, longitudinal studies are needed to uncover the causal paths among dimensions to better test whether self-efficacy is an early antecedent of crafting behaviors and to further investigate how job crafting unfold over time, driving to presenteeism.

Finally, the present study returned preliminary findings, especially because of the relatively novelty of the job crafting and presenteeism constructs. Hence, some cautions must be taken in generalizing the results, asking for replicate the model in other samples and diverse organizations.

Regarding future perspectives, it would be worthwhile to measure multiple facets of selfefficacy in order to better investigate the relationship with crafting components. In fact, we assessed work self-efficacy because it is consistent with behaviors aiming at modifying work activities and it was hypothesized to contribute to the explanation of why employees continue to work while ill. However, social and affective self-efficacy (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003; Caprara & Cervone, 2000) might be more strongly associated with those actions of job crafting aiming at attaining satisfactory degrees of social interactions (i.e., increasing social job resources) and reducing emotional demands or interpersonal contacts (i.e., decreasing hindering job demands).

Moreover, the positive link between presenteeism and job performance and the scarce portion of variance in job performance warrant further investigations. In fact, although an important contribution of this study is to investigate the consequences of presenteeism on employees' performance, not as a self-evaluated dimension but drawn from supervisors' ratings, it would be useful to evaluate more objective measures of performance, such as goals' achievement or fulfillment of job assignments, in order to greater understand how being at work when ill affects productivity. Furthermore, consistent with the perspective that managers could underestimate the risks associated with presenteeism, longitudinal studies should better show the possible negative effect of illness at work on future health and on general quality of personal and professional life.

Conclusively, future research would benefit from taking into account organizational features, embracing "a person cross situation perspective" (Johns, 2011, p. 496). In fact, the not so high explanatory power of the model raise the question if we have excluded any more relevant factors connected to presenteeism; adding situational aspects, that have been demonstrated to be associated with the phenomenon (Aronsson et al., 2000; Caverley et al., 2007; Johns, 2011),

110

would likely account for an additional portion of variance in presenteeism. For example, it would be interesting to investigate the role played by presenteeism culture (Dew et al., 2005; Johns, 2010; Simpson, 1998), examining how it can impact the act of working while sick, as well as how it can shape the relationship between presenteeism and supervisors' ratings of co-workers' performance. Furthermore, in the light of the present findings that positively associate developing activities with attending work if sick, it would be meaningful to explore the moderating role of a workaholism (Schaufeli, Taris, & Bakker, 2008) in the relationship between job crafting and presenteeism, supposing that increasing challenges and job resources may turn in presenteeism only for employees who work excessively and compulsory.

8. Practical implications

The present study contributes to practice mainly in two ways.

The first consideration regards those training aiming at improving employees' selfefficacy. In fact, on one hand, setting up interventions to support individuals' beliefs in own capabilities to control the work context and effectively manage the job assignments may enhance job crafting behaviors that, in turn, would align the job with own needs, values and goals and have positive effects on work motivation and performance (Wrzesniewski & Dutton, 2001). Thus, training should focus on the main sources of self-efficacy (Bandura, 2000). On the other hand, the positive link between job crafting and presenteeism and the indirect relationship between self-efficacy and presenteeism disclose a possible dark side of crafting actions: in fact, developing activities and challenges seem to drive to an undesirable outcome for individuals' overall health, that is presenteeism. Hence, it is recommendable to complete self-efficacy intervention with an information phase about its possible negative consequences and about the strategies to maintain a sane balance between work and life (Del Líbano et al., 2012), in order to lower the unhealthy tendency to work excessively and even when ill.

Second, our research holds implications for managers' training. In fact, the positive link between presenteeism and employees' performance evaluations from supervisors leads to hypothesize that managers view presenteeism as a quite positive behavior, a form of citizenship behaviors and, consequently, they underestimate the high negative risks that the on the job illness may have for individuals' future health (Aronsson & Gustafsson, 2005; Bergström et al., 2009b; Kivimäki et al., 2005) and long term productivity (Goetzel et al., 2004). Therefore, a training that educates managers to what is presenteeism and how it harms employees and organization can be useful, in order to identify the phenomenon and set programs intended to reduce it and the associated jeopardies (Pauly et al., 2008).

References

- Adler, A. (1930). Individual psychology. In. C. Murchinson (Ed.), *Psychologies of 1930* (pp. 395-405). Worcester, MA: Clark University Press.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice. A review and recommended two-step approach. *Psychological Bulletin*, *103*, 411–423.
- Aronsson, G., & Gustafsson, K. (2005). Sickness presenteeism: Prevalence, attendance-pressure factors, and an outline of a model for research. *Journal of Occupational and Environmental Medicine*, 47, 958–966.
- Aronsson, G., Gustafsson, K., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. *Journal of Epidemiology and Community Health*, 54, 502–509.
- Baker-McClearn, D., Greasley, K., Dale, J., & Griffith, F. (2010). Absence management and presenteeism: The pressures on employees to attend work and the impact of attendance on performance. *Human Resource Management Journal*, *20*(3), 311–328.

- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328.
- Bandalos, D. L., & Boehm-Kaufman, M. R. (2009). Four common misconceptions in exploratory factor analysis. In C. E. Vance & R. J. Vandenberg (Eds.), *Statistical and methodological myths and urban legends* (pp. 61–87). New York, NY: Routledge.
- Bandura, A. (1986). Social foundations of thought and action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). Self-Efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, *9*, 75–78.
- Bandura, A. (2006). Guide to the construction of self-efficacy scales. In F. Pajares & T. Urdan (Eds.), Self-Efficacy Beliefs of Adolescents (pp. 307-337). Greenwich, CT: Information Age Publishing.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38, 9-44.
- Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Impact of affective self-regulatory efficacy on diverse sphere of functioning. *Child Development*, 74, 1–14.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 6, 1173–1182.
- Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin*, 107, 238–246.

- Bentler, P. M., & Bonett, D. G. (1980). Significance Tests and Goodness of Fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Berg, J. M., Wrzesniewski, A. M. Y., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal* of Organizational Behavior, 31, 158–186.
- Bergström, G., Bodin, L., Hagberg, J., Aronsson, G., & Josephson, M. (2009a). Sickness presenteeism today, sickness absenteeism tomorrow? A prospective study on sickness presenteeism and future sickness absenteeism. *Journal of Occupational and Environmental Medicine*, 51, 629–38.
- Bergström, G., Bodin, L., Hagberg, J., Lindh, T., Aronsson, G., & Josephson, M. (2009b). Does sickness presenteeism have an impact on future general health? *International Archives of Occupational and Environmental Health*, 82, 1179–1190.
- Böckerman, P., & Laukkanen, E. (2010). What makes you work while you are sick? Evidence from a survey of workers. *European Journal of Public Health*, *20*(1), 43–46.
- Bollen, K. A., & Long, J. S. (1993). Testing Structural Equation Models. Thousand Oaks, CA: Sage.
- Borgogni, L., Dello Russo, S., & Latham, G. (2011). The relationship of employee perceptions of the immediate supervisor and top management with collective efficacy. *Journal of Leadership & Organizational Studies*, *18*, 5-13.
- Burke, R. J., Matthiesen, S. B., & Pallesen, S. (2006). Personality correlates of workaholism. Personality and Individual differences, 40, 1223–1233.
- Caprara, G. V., & Cervone, D. (2000). *Personality, determinants, dynamics, and potential*. Cambridge, UK: Cambridge University Press.

- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85, 65–74.
- Caverley, N., Cunningham, J. B., & MacGregor, J. N. (2007). Sickness presenteeism, sickness absenteeism and health following restructuring in a public service organization. *Journal of Management Studies*, 44, 304–319.
- Chapman, L. S. (2005). Presenteeism and its role in worksite health promotion. *American* Journal of Health Promotion, 19(4), 1–8.
- Chatterji, M., & Tilley, C. J. (2002). Sickness, absenteeism, presenteeism and sick pay. *Oxford Economic Papers*, *54*, 669–687.
- Conway, J. M. (2002). Method variance and method bias in industrial and organizational psychology. In S. G. Rogelberg (Ed.), *Handbook of Research Methods in Organizational and Industrial Psychology* (pp. 344-365). Malden, NJ: Blackwell Publishers.
- Cooper, C., & Dewe, P. (2008). Well-being, absenteeism, presenteeism, costs and challenges. *Occupational Medicine*, 58, 522–524.
- Côté, D., & Haccoun, R. R. (1991). L'absentéisme des femmes et des hommes: Une métaanalyse. *Canadian Journal of Administrative Sciences*, *8*, 130-139.
- Del Líbano, M., Llorens, S., Salanova, M., & Schaufeli, W. B. (2012). About the dark and bright sides of self-efficacy: Workaholism and work engagement. *The Spanish Journal of Psychology*, 15, 688–701.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001), The job demandsresources model of burnout. *Journal of Applied Psychology*, 86, 499–512.

- Demerouti, E., Le Blanc, P., Bakker, A. B., Schaufeli, W. B. & Hox, J. (2009). Present but sick: A three-wave study on job demands, presenteeism and burnout. *Career Development International*, 14, 50-68.
- Dew, K., Keefe, V., & Small, K. (2005). "Choosing" to work when sick: Workplace presenteeism. Social Science & Medicine, 60, 2273–2282.
- Dixon, K. (2005). Weighing the costs of presenteeism: Recognise the signs and repair the damage of employee burnout. *Chief Executive-New York*, 209, 22–23.
- Eurofound (2012). *Fifth European working conditions survey*. Luxembourg: Publications Office of the European Union.
- Gergen, K. J. (1994). *Realities and relationships: Soundings in social constructionism*. Cambridge, MA: Harvard University Press.
- Ghitulescu, B. (2006). Job crafting and social embeddedness at work. Unpublished doctoral dissertation, University of Pittsburgh.
- Goetzel, R. Z., Long, S. R., Ozminkowski, R. J., Hawkins, K., Wang, S., & Lynch, W. (2004).
 Health, absence, disability, and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine*, *46*, 398–412.
- Grinyer, A., & Singleton, V. (2000). Sickness absence as risk-taking behaviour: A study of organisational and cultural factors in the public sector. *Health, Risk & Society*, 2(1), 7–21.

Hackett, R. D. (1990). Age, tenure, and employee absenteeism. Human Relations, 43, 601-619.

- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Halbesleben, J. R. B. (2010). A meta- analysis of work engagement: relationships with burnout, demands, resources and consequences. In A. B. Bakker & M. P. Leiter (Eds.), *Work*

engagement: A handbook of essential theory and research (pp. 102–117). New York: Psychology Press.

- Hansen, C. D., & Andersen, J. H. (2008). Going ill to work--what personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? *Social Science & Medicine*, 67, 956–964.
- Hansson, M., Bostrom, C., & Harms-Ringdahl, K. (2006). Sickness absence and sickness attendance – What people with neck or back pain think. *Social Science and Medicine*, 62, 2183–2195.
- Hemp, P. (2004). Presenteeism: At work But out of it. *Harward Bussiness Review*, 82(10), 49–58.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424–453.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for Fit Indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Johansson, G., & Lundberg, I. (2004). Adjustment latitude and attendance requirements as determinants of sickness absence or attendance. Empirical tests of the illness flexibility model. *Social Science & Medicine*, *58*, 1857–1868.
- Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, *31*, 519-542.
- Johns, G. (2011). Attendance dynamics at work: The antecedents and correlates of presenteeism, absenteeism, and productivity loss. *Journal of Occupational Health Psychology*, *16*, 483-500.

- Jöreskog, K., & Sörbom, D. (1996). *LISREL 8: Structural Equation Modeling with the SIMPLIS Command. Language*. Chicago: Scientific Software International.
- Kivimäki, M., Head, J., Ferrie, J. E., Hemingway, H., Shipley, M. J., Vahtera, J., & Marmot, M. G. (2005). Working while ill as a risk factor for serious coronary events: The Whitehall II study. *American Journal of Public Health*, *95*(1), 98–102.
- Latham, G. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology*, *56*, 485–516.
- LePine, J. A., Podsakoff, N. P., & 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*, 48, 764–775.
- Lyons, P. (2008). The crafting of jobs and individual differences. *Journal of Business and Psychology*, 23, 25–36.

McDonald, R. P. (1999). Test theory. A unified treatment. Mahwah, NJ: Erlbaum.

- McKevitt, C., Morgan, M., Dundas, R., & Holland, W. W. (1997). Sickness absence and "working through" illness: A comparison of two professional groups. *Journal of Public Health Medicine*, 19(3), 295–300.
- Mulaik, S. A., James, L. R., & Van Alstine, J. (1989). Evaluation of Goodness-of-Fit Indices for Structural Equation Models. *Psychological Bulletin*, 105, 430–445.
- Muthén, L., & Muthén, B. O. (1998). *Mplus User's Guide*. Los Angeles, CA: Muthén and Muthén.
- Ng, T. W. H., Sorensen, K. L., & Feldman, D. C. (2007). Dimensions, antecedents, and consequences of workaholism: A conceptual integration and extension. *Journal of Organizational Behavior*, 28, 111–136.

- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Oldham, G. R., & Hackman, J. R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, *31*, 463–479.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Parker, S. K., & Ohly, S. (2008). Designing motivating work. In R. Kanfer, G. Chen, & R. D. Pritchard (Eds.), *Work motivation: Past, present, and future* (pp. 233–384). New York: Routledge.
- Pauly, M. V, Nicholson, S., Polsky, D., Berger, M. L., & Sharda, C. (2008). Valuing reductions in on-the-job illness: Presenteeism from managerial and economic perspectives. *Health Economics*, 17, 469–485.
- Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior, 33*, 1120-1141.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressorhindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92, 438–454.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Ramsey, R. (2006). "Presenteeism" a new problem in the workplace. Supervision, 67(8), 14-17.
- Salanova, M., & Schaufeli, W. B. (2008). Job resources, engagement and proactive behaviour. International Journal of Human Resource Management, 19, 116-131.

- Schaufeli, W. B., Taris, T., & Bakker, A. B. (2008). It takes two to tango. Workaholism is working excessively and working compulsively. In R. J. Burke & C. L. Cooper (Eds.), *The long work hours culture. Causes, consequences and choices* (pp. 203-226). Bingley, England: Emerald.
- Schultz, A., & Edington, D. W. (2007). Employee health and presenteeism: A systematic review. *Journal of Occupational Rehabilitation*, 17, 547–579.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *I*(1), 27–41.
- Simpson, R. (1998). Presenteeism, power and organizational change: Long hours as a career barrier and the impact on the working lives of women managers. *British Journal of Management*, 9, S37–S50.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in Structural Equation Models. Sociological Methodology, 13, 290–312.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A metaanalysis. *Psychological Bulletin*, 124, 240-261.
- Steiger, J. H., & Lind, J. C. (1980, May). *Statistically based tests for the number of factors*.Paper presented at the annual meeting of the Psychometric Society, Iowa City, IA.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 36(2), 841-850.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, *80*(1), 173–186.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1–10.

- Van den Heuvel, S. G., IJmker, S., Blatter, B. M., & de Korte, E. M. (2007). Loss of productivity due to neck/shoulder symptoms and hand/arm symptoms: Results from the PROMO-study. *Journal Occupational Rehabilitation*, 17, 370–832.
- Vingard, E., Alexanderson, K., & Norlund, A. (2004). Sickness presence. *Scandinavian Journal of Public Health*, *32*, 216–21.
- Widera, E., Chang, A., & Chen, H. L. (2010). Presenteeism: A public health hazard. Journal of General Internal Medicine, 25, 1244–1247.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*(2), 179–201.

GENERAL CONCLUSIONS

The present work points out some main issues, which have implications for human resources management.

First of all, the three studies highlight the relevance of adopting a psychological view in the investigation of attendance behaviors, underling the individual determinants of absenteeism and presenteeism. In fact, the first study revealed that self-efficacy represents a key selfregulatory process that influences absence behavior directly and indirectly, through its impact on job attitudes, namely job satisfaction. Especially for newcomers and low-tenured employees, high efficacy beliefs strengthen the capabilities to handle the difficulties and the challenges of the work context and to self-regulate themselves even in the face of demanding and anxious situations (Bandura, 1997), reducing the stress associated with work assignments and, in turn, the probability of escape the job, taking a day-off. Moreover, consistent with social-cognitive theory (Bandura, 1986) and previous findings (Judge & Bono, 2001), self-efficacy positively impacts satisfaction with the job itself and work conditions, that, in turn, is negatively related to absences from work for longer tenured employees. In addition, as depicted by the third study, employees who hold a strong sense of efficacy are more likely to craft the boundaries of their work, engaging in behaviors aimed at increasing activities, skills, learning and challenges, rather than lowering the level of work intensity, the number of tasks and interactions. Furthermore, we found that the more the individuals extend the amount of projects, chances and challenges, the more they would attend work even if ill, highlighting the role of job crafting in impacting presenteeism decision. In other words, self-efficacious employees are encouraged to actively shape the amount and the nature of work activities and tasks and this, in turn, leads to higher

level of work motivation, responsibility and effort (Tims & Bakker, 2010; Tims, Bakker, & Derks, 2012), fostering presenteeism. This latter result supports the idea that, as absenteeism, presenteeism is determined by psychological and individual variables (Johns, 2011) and not only by contextual constraints. However, our findings may reveal a dark side of the proactive and agentic aspects of human behaviors. In fact, on one hand, strong beliefs in own capabilities may lead to crafting actions, making the job more challenging, innovative, interesting and less boring; on the other hand, via crafting behaviors, they may foster the tendency to go to work while sick, which could lead to serious and long-term health problems (Bergström, Bodin, Hagberg, Lindh, Aronsson, & Josephson, 2009; Hansen & Andersen, 2008; Kivimäki, Head, Ferrie, Hemingway, Shipley, Vahtera, & Marmot, 2005).

Second, the current work provides evidence of the relevance of organizational tenure when analyzing absenteeism. In fact, we showed that different stages in employees' organizational life are characterized by different absence behaviors and antecedents and. More specifically, the first study demonstrated that newcomers' absences from work are directly affected by their efficacy convictions but not by their level of job satisfaction, while the opposite occurs for individuals with a longer length of service. The second study explained how people in different stages of employment show different patterns of absenteeism change, reflecting the organizational socialization process and the gradual learning of informal norms and institutional rules regarding attendance behaviors.

Third, we proved that absenteeism is a dynamic process, rather than a static construct. Indeed, the second study shed light on the longitudinal change in absences from work: it illustrated how short tenured employees model their absence behaviors according to the habits of their senior colleagues and to the organizational norms and culture, that prescribes how many absences are acceptable. Moreover, it disclosed the social mechanisms underling temporal

123

variations in absenteeism, suggesting that positive perceptions of social context (PoSC; Borgogni, Dello Russo, Di Tecco, Alessandri, & Vecchione, 2011), namely perceptions of top management and colleagues, play a central role in influencing absenteeism trajectories over time. This finding sustains the importance of adopting a person cross situation perspective in the field of absence behavior and of taking into account the social context when analyzing organizational phenomena (Johns, 2006; Patton & Johns, 2012; Rousseau & Fried, 2001).

Finally, the present work calls attention to the management view of attendance dynamics. In fact, as the third study suggested, managers could positively evaluated the act of presenteeism, because it may be considered as a gain of productivity compared to the possible sick-day that the person should have taken. Moreover, it can be perceived as a sign of devotion to the organization and assimilated to an organizational citizenship behavior (Organ, 1988), because the employee is working, persisting and putting effort in the job despite his or her poor health conditions. Consequently, the risk is to underestimate the adverse effects of presenteeism for individuals' health and productivity (Bergström et al., 2009; Hemp, 2004; Kivimäki et al., 2005) and to support an organizational culture that may encourage working while ill.

In conclusion, the current work offers several practical implications for nowadays organizations, related to human resources' selection, training and development, as discussed in the three studies. Particularly, it suggests interventions at multiple levels. If fact, it recommends to pay attention to the organizational socialization process of newly hired and short tenured employees, in order to control absence behaviors from a very early stage of employment and promote an attendance-oriented culture (Xie & Johns, 2000). Moreover, it proposes to train the managers to recognize presenteeism behaviors and identify effective solutions in order to reduce the associated risks, taking into account the absenteeism control policies of the organizations and

verifying their consequences. This integrated effort could result in an enhanced long-term productivity and wellbeing for both individuals and organizations.

References

- Bandura, A. (1986). Social foundations of thought and action: A Social Cognitive Theory.Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). Self-Efficacy: The exercise of control. New York: Freeman.
- Bergström, G., Bodin, L., Hagberg, J., Lindh, T., Aronsson, G., & Josephson, M. (2009). Does sickness presenteeism have an impact on future general health? *International Archives of Occupational and Environmental Health*, 82, 1179–1190.
- Borgogni, L., Dello Russo, S., Di Tecco, C., Alessandri, G., & Vecchione, M. (2011, August).Social cognitive theory as reference frame for perceptions of context. Paper presented at the Annual Meeting of the Academy of Management, San Antonio, Texas.
- Hansen, C. D., & Andersen, J. H. (2008). Going ill to work What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? *Social Science & Medicine*, 67, 956–964.
- Hemp, P. (2004). Presenteeism: At work But out of it. *Harward Bussiness Review*, 82(10), 49–58.
- Johns, G. (2006). The essential impact of context on organizational behavior. Academy of Management Review, 31, 386-408.
- Johns, G. (2011). Attendance dynamics at work: The antecedents and correlates of presenteeism, absenteeism, and productivity loss. *Journal of Occupational Health Psychology*, *16*, 483-500.

- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86,* 80–92.
- Kivimäki, M., Head, J., Ferrie, J. E., Hemingway, H., Shipley, M. J., Vahtera, J., & Marmot, M. G. (2005). Working while ill as a risk factor for serious coronary events: The Whitehall II study. *American Journal of Public Health*, *95*(1), 98–102.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Patton, E., & Johns, G. (2012). Context and the social representation of absenteeism: Absence in the popular press and in academic research. *Human Relations*, *65*, 217-240.
- Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22, 1-13.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 36(2), 841-850.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, *80*(1), 173–186.
- Xie, J. L., & Johns, G. (2000). Interactive effects of absence culture salience and group cohesiveness: A multi-level and cross-level analysis of work absenteeism in the Chinese context. *Journal of Occupational and Organizational Psychology*, 73(1), 31-52.

Acknowledgements

I wish to express my sincere gratitude to my supervisor, Professor Laura Borgogni, who led me through the research world, who constantly supported and encouraged me, and who offered many motivating and stimulating experiences for my professional development.

I would like to thank Professor Gary Johns who gave me the opportunity to visit him at John Molson School of Business in Montreal and with whom I "discovered" the phenomenon of presenteeism.

I am thankful to all Professor and Researchers of CIRMPA and Faculty of Medicine and Psychology of "Sapienza" University of Rome and, particularly, to Professor Concetta Pastorelli for her guidance and willingness to listen over the last three years, and to Doctors Chiara Consiglio, Guido Alessandri and Michele Vecchione for their kindly availability and competent suggestions.

Many thanks go to the HR Department of Poste Italiane and, particularly, to Doctors Federica Ribeca and Emanula Gallo, who passionately collaborate in our research project and made possible the collection of organizational data.

Finally, a special thank to all my Colleagues and, above all, to Silvia Dello Russo for the passion that she puts in her work and transmitted to me, and to Cristina Di Tecco and Mario Gualandri, who coloured my doctoral journey with their competencies and friendship.