

Borgogni, L., Dello Russo, S., Miraglia, M., & Vecchione, M. (2013). The role of self-efficacy and job satisfaction on absences from work in a privatized organization. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, 63, 129-136.

'This article may not exactly replicate the final version published in the APA journal. It is not the copy of record.'

The role of self-efficacy and job satisfaction on absences from work / Le rôle de l'auto-efficacité et de la satisfaction professionnelle dans les absences au travail

Laura Borgogni, Silvia Dello Russo, Mariella Miraglia & Michele Vecchione

#### CONTACTS:

Laura Borgogni: University “Sapienza” of Rome (Faculty of Medicine and Psychology, University “Sapienza” of Rome, Via dei Marsi 78, 00185 - Rome, Italy), [laura.borgogni@uniroma1.it](mailto:laura.borgogni@uniroma1.it) – (tel.) 0039 06 4991 7626.

Silvia Dello Russo: ISCTE-IUL, Lisboa (Avenida das Forças Armadas, 1649-026, Lisbon, Portugal), [silvia.dellorusso@iscte.pt](mailto:silvia.dellorusso@iscte.pt).

Mariella Miraglia: University “Sapienza” of Rome (Faculty of Medicine and Psychology, University “Sapienza” of Rome, Via dei Marsi 78, 00185 - Rome, Italy), [mariella.miraglia@uniroma1.it](mailto:mariella.miraglia@uniroma1.it) – (tel.) 0039 06 4991 7626.

Michele Vecchione: University “Sapienza” of Rome (Faculty of Medicine and Psychology, University “Sapienza” of Rome, Via dei Marsi 78, 00185 - Rome, Italy), [michele.vecchione@uniroma1.it](mailto:michele.vecchione@uniroma1.it) – (tel.) 0039 06 4991 7632.

The role of self-efficacy and job satisfaction on absences from work/

Le rôle de l'auto-efficacité et de la satisfaction professionnelle dans les absences au travail

### *Abstract*

*Introduction.* - Absenteeism is a relevant and costly issue for organizations, constantly looking at its antecedents in order to reduce the phenomenon.

*Objective.* - This study aims to deepen the concurrent role - that has been rarely investigated in predicting absence behavior - of self-efficacy and job satisfaction, testing both a direct as well as an indirect relation.

*Method.* - Self-efficacy and job satisfaction were measured in a sample of 1160 white-collars from the main delivery Italian company, a privatized organization. Then, the self-report questionnaire was matched with objective data on absences (i.e., the total days lost at work over 12 months).

*Results.* - The results of Structural Equation Modeling (SEM) lent support to the indirect relation between self-efficacy and absences from work via job satisfaction, but not to the direct link.

*Conclusion.* - These findings show that training in self efficacy can lead to higher job satisfaction and therefore to greater work attendance.

### *Résumé*

S'intéressant aux origines de l'absentéisme professionnel, cette étude a eu pour objectif d'approfondir le rôle joué – peu analysé jusqu'ici pour prédire un comportement absentéiste – par l'auto-efficacité et la satisfaction professionnelle, en testant tant les relations directes qu'indirectes (entre l'absentéisme et ces deux facteurs). L'auto efficacité et la satisfaction professionnelle ont été mesurées sur un échantillon de 1160 cols blancs appartenant à la principale entreprise italienne de livraison, une organisation récemment privatisée. Dans un second temps, le self report questionnaire a été croisé avec un ensemble de données objectives

relatives aux absences au travail (comme par exemple le total des jours perdus au travail sur une période de 12 mois). Les résultats du SEM ont permis d'appuyer la thèse d'une relation indirecte entre l'auto efficacité et les absences au travail, via la satisfaction professionnelle, mais non celle d'un lien direct. Comme en débattent les auteurs de cette étude, ces découvertes ont des implications pour la formation professionnelle et la gestion des talents, et ouvrent la voie à d'ultérieures opportunités de recherche.

Keywords: self-efficacy; job satisfaction; absences from work; privatized organization.

Mots clés: auto-efficacité; satisfaction professionnelle; absences au travail; organisation privatisée

## 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 fourth European Survey on Working Conditions conducted in 2005 revealed that in Europe 23% of workers, on average, took at least one day off from work as “health-related leave” in the 12 months prior to the survey, and that in Italy the percentage is even higher, raising to slightly higher than 25%. 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 (Parent-Thirion, Fernández Macías, Hurley, & Vermeulen, 2007). 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 day-off from work, increasing the absenteeism rate. In addition, the economic recession and the consequent unemployment rate represent psychological stressors that negatively impact employees’ well-being, further increasing absenteeism – which is known as the Catalano and Dooly (1983) economic stress hypothesis (Shoss & Penney, 2012).

The phenomenon is relevant both in private organizations, where the majority of the studies have been conducted, and public sector. Public administration, in fact, is often characterized by high levels of absences (Dibben, James, & Cunningham 2001; Scoppa, 2010). This result could depend on the frequent use of standardized employment practices in public organizations that ensure job security (Boyne, Jenkins, & Poole, 1999). They could also depend on the large dimension of some public organizations, where high levels of absences become more difficult to control (Paton, 2005; Scoppa, 2010).

In literature, the most investigated antecedents of absenteeism are individual characteristics and work attitudes. The individual factors include demographic variables, such as gender and organizational tenure (Hackett, 1990; Thomson, Griffiths, & Davison, 2000), and personality traits, such as Conscientiousness and Openness (Darviri & Woods, 2006; Furnham & Bramwell, 2006; Judge, Martocchio, & Thoresen, 1997).

Among attitudinal correlates of absenteeism, job satisfaction has been broadly studied (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, showing inconsistent results, and focusing on demographic and contextual variables as predictors more than psychological characteristics (Goldberg & Waldman, 2000; Steel, Rentsch, & van Scotter, 2007).

Among psychological characteristics, self-efficacy represents an important predictor of absenteeism 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) that, 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. Consistently, our contribution aims to test a conceptual model (Figure 1) in the former Italian Ministry of Telegraph and Communication that has been recently privatized, 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 and between job satisfaction and absences from work; c) examine the mediating role of job satisfaction between self-efficacy and absences from work, controlling for gender and organizational tenure.

---

Insert Figure 1 About Here

---

### **Self-efficacy and absences from work: the direct link**

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, Patera, & West, 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 the above-set theoretical framework, we assume that self-efficacy, a state like characteristic, is critical for absences from work and we believe that self-efficacious employee 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.

### **Self-efficacy and absences from work: The indirect link through job satisfaction**

*Self-efficacy* → *Job satisfaction*. Literature has already shown that self-efficacy is consistently associated with 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 competence to perform a job will be more satisfied with it:

*Hypothesis 2: Self-efficacy will be positively related to job satisfaction.*

*Job satisfaction* → *Absences from work*. 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. This holds true in private organizations, and also in public administration where low levels of job satisfaction were reported by public employees (Markovits, Davis, & van Dick, 2010; Porter & Mitchell, 1967; Solomon, 1986), which would explain the high public administration's absenteeism rates (Garcia, 1987; Sagie, 1998).

Hence, in order to corroborate the proposition that the employees more satisfied with the job and the workplace would be less absent, even in a privatized organization that shares some similarities with both the public and the private sectors, we tested the following hypothesis:

*Hypothesis 3: Job satisfaction will be negatively related to absences from work.*

*Self-efficacy* → *Job satisfaction* → *Absences from work*. 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.

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 (Gist & Mitchell, 1992; Bandura, 1997). This results in more successful work experiences and in more positive perceptions of the work environment that, in turn, increase job satisfaction (Judge & Bono, 2001; Borgogni, Petitta, & Mastroilli, 2010; Borgogni, Dello Russo, Petitta, & Vecchione, 2010). 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, satisfied employees exhibit more extra-role behaviors and reduce withdrawal behaviors (Vilela, González, & Ferrín, 2008), namely turnover (Freund, 2005; Yieth Chen, Long Chan, & WenYet, 2004) or absenteeism, when alternative employments are lacking as in the Italian context (Punnett, et al., 2007).

For this reason, we believe that job satisfaction can function as a mediating variable between self-efficacy and absences from work.

*Hypothesis 4:* Self-efficacy will be indirectly related to absences from work via job satisfaction.

**Control variables: gender and organizational tenure.**

Gender and organizational tenure were two of the most common characteristics reported in 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). Accordingly we hypothesized:

*Hypothesis 5:* Gender will be positively associated to absences from work, with women being more absent than men.

Organizational tenure is another important predictor of employee absence behaviors (Thomson et al., 2000), although this relationship is still controversial. Some scholars (Harrison & Martocchio, 1998) hypothesized a negative relation because higher-tenured employees would have a better P-O fit and would find a more satisfactory position in the organization; moreover, organizations usually dismiss those who tend to be frequently absent. Indeed, research has lent some empirical support to this line of reasoning (Knox, 1961; Nicholson, Brown, & Chadwick-Jones, 1977; Rhodes & Steers, 1990). However, few studies have also reported a non significant relation between organizational tenure and absenteeism, because the association was explained by age (Hackett, 1990), and some others showed that the link between organizational tenure and absenteeism is curvilinear rather than linear (Hill & Trist, 1955; Thomson et al., 2000). We posit that in this privatized organization employees were used to a different organizational culture, which was likely more tolerant toward absences coming from the public stage, and accordingly we hypothesized the following:

*Hypothesis 6:* Organizational tenure will be positively related to absences from work.

## **DATA AND METHODS**

## **Organizational Context**

The research was conducted in the main mail delivery Italian company, that is one of the largest service company in Italy, with about 150.000 people employed in the 14.000 offices throughout the country with 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. The privatization has led to important changes in the organization, modifying work procedures, standards, organizational culture and HR management practices.

Moving away from a bureaucratic culture, the HR Department is more and more engaged in reducing the costs associated with absenteeism and valuing the employees' contribution to organizational effectiveness and development. Therefore, they are interested in the drivers of job satisfaction and absenteeism, to obtain a deeper understanding of the relationship between absenteeism, personal and organizational characteristics.

## **Participants and procedure**

Participants were 1160 white-collars of the main mail delivery company in Italy (representing the 70% of response rate). The respondents were balanced among men (51%) and women (49%) and their age ranged from 26 to 65 years old ( $M = 43.7$ ,  $SD = 9.3$ ). The mean for organizational tenure was 12.7 years ( $SD = 11.1$ ).

Since we had information about demographic characteristics of the entire population identified for the research, we conducted a Pearson's Chi-Square test for gender and hierarchical level and a T-test for age and organizational tenure, in order to compare respondents and non respondents. They did not differ significantly with regards to

demographics: gender percentage ( $\chi^2(1) = .60, p < 0.44$ ); hierarchical level ( $\chi^2(4) = 2.53, p < 0.64$ ); age ( $t = .57, p = .57$ ); organizational tenure ( $t = 1.65, p = .10$ ).

Employees were administered a paper and pencil questionnaire in collective meetings organized during normal working hours. In order to match their answers with respondents' absences from work, 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.

### **Measures**

*Self-efficacy.* A 6-item scale (Borgogni et al., 2010b) was used to measure an 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 ("I am confident to keep in a good mood, even in tense situations", "I am confident to remain calm in very stressful situations"); to restore one's energies ("I am confident to recover quickly after a period of intense activity"); to handle difficult situations with colleagues ("I am confident to solve all the conflicts that may occur with my colleagues", "I am confident to defend my rights when treated unfairly", "I am confident to earn the esteem of all my colleagues"). 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”. 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 questionnaire). The number of days of absence had a non normal distribution, with extremely large skewness and kurtosis (3.48 and 15.00 respectively). Because of non-normality, we transformed the variable into a three-category ordinal variable using percentiles (Muthen & Kaplan, 1985; see also Farrington & Loeber, 2000, for the advantages of categorization). The first category includes employees which reported no absences per year; the second category contained employees which reported from 1 to 6 days of absences per year; finally, the third category includes employees which reported 7 or more days of absences per year.

*Control Variables.* Gender and organizational tenure were considered as control variables, and were made available to researchers by the HR department. Gender is coded 1 for men and 2 for women. Organizational tenure is measured in years.

### **Statistical Analyses**

The analysis was carried within the framework of structural equation modeling (SEM), using the Mplus software (Muthén & Muthén, 1998). Parameters were estimated using the

Weighted Root Mean Square Residual (WRMR, Muthén, 1998–2004). The WRMR is a measure of the weighted average differences between the sample and the estimated population variance-covariance matrix that is especially suitable for models with categorical variables.

Preliminarily, we tested a measurement model to determine whether the observed variables served as adequate indicators of the latent variables (i.e., job satisfaction and self-efficacy) and supported the construct validity of the measures (Anderson & Gerbing, 1988). Subsequently, we specified a structural model to examine the posited paths among variables represented in Figure 1. In this model, organizational tenure and gender were included as covariates because of their expected relationship with absences from work.

## **RESULTS**

### **Descriptive Statistics**

Means, standard deviations, and the correlation matrix among the study variables are presented in Table I. As can be observed, the correlations involving absenteeism are all significant and in the hypothesized direction, with the exception of the correlation with self-efficacy (non significant).

---

Insert Table I About Here

---

### **Measurement Model**

A two-factor model was specified where the latent factors of self-efficacy and job satisfaction were allowed to correlate. The confirmatory model relating each observed

indicator to its respective latent factor satisfied multiple goodness of fit tests,  $X^2(34) = 154.54$ ,  $p < .001$ , TLI = .957, CFI = .968, RMSEA = .056 (IC 90% .047 – .065), SRMR = .032, 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 higher than .40 and significantly different from zero, providing support for the internal validity of the scales. The correlation between the latent self-efficacy and job satisfaction factors was .52.

### **Structural model**

The posited model fits the data,  $X^2(24) = 89.89$ ,  $p < .001$ , TLI = .969, CFI = .956, WRMR = 1.137, RMSEA = .049, and provides partial support to our hypotheses. Figure 2 presents the parameter estimates of the structural model. As hypothesized, self-efficacy beliefs contributed positively to job satisfaction, which in turn negatively predicted absences from work. However, the direct link between self-efficacy and absences from work was not significant. Gender was positively and significantly related to absences from work (i.e., females had a higher number of days of absence than males), whereas the contribution of organizational tenure was not significant. Overall, the model explained 28% of variance in job satisfaction and 8% of variance in absences from work. Additional analyses were conducted to test the mediation hypothesis, 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:  $\beta = -.11$ ,  $p < .01$ ). According to MacKinnon, Fairchild and Fritz (2007), despite the non significant direct relation between self-efficacy and absences from work, since both variables had a statistically significant

relationship with the mediation variable (namely, job satisfaction), there is evidence of mediation and we can consider the significance of the indirect effect.

---

Insert Figure 2 About Here

---

## **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 an organization that has changed its status from public to privatized organization.

The results partially supported our hypotheses. As in previous researches (Avey et al., 2006; Punnett et al., 2007), we did not detect a direct relationship between self-efficacy and absences from work, therefore, the first hypothesis was not supported. Following our theoretical framework, this means that, in this former public organization, self-efficacy per se does not suffice to increase the probability that employees attend work; rather, it may operate via other factors, as we will explain below. Thus, there is room to illuminate other intervening variables responsible for transmitting the effect of self-efficacy to absences from work (Mathieu & Taylor, 2006).

Consistent with the second hypothesis, we corroborated the link between self-efficacy and job satisfaction, as attested by previous studies (e.g., Judge & Bono, 2001): people that are more confident to exercise a control over their work and social context and over their moods and reactions even in front of difficulties, are more satisfied.

Moreover, consistent with literature (Hackett, 1989; Harrison & Martocchio, 1998; Lambert et al., 2005) and according to the attitudinal response perspective (Johns, 1997), we found support for the third hypothesis that employees who are satisfied with their job and with relevant facets of it, namely the workplace, the direct supervisor and the job itself, are less likely to be absent. Job dissatisfaction with work conditions can lead to a voluntary withdrawal response (Sagie, 1998) and 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.

The main contribution of our study pertains to the finding of an indirect effect between self-efficacy and absences through job satisfaction, which supports our fourth hypothesis and encourages the exploration of other potential intervening variables in the relation between self-efficacy and absenteeism. Consistent with social cognitive theory, we provided evidence that self-efficacy is likely to act as a factor that boosts job satisfaction. In fact, 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. 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 an organization decreases job satisfaction (Wheeler, Buckley, Halbesleben,

Brouer, & Ferris, 2005; Wheeler, Gallagher, Brouer & Sablynski, 2007) which in turn increases absences.

Regarding the demographic variables, we found that gender was positively related to absence behaviors (Hypothesis 5). Consistent with previous studies (Dellve, Eriksson, & Vilhelmsson, 2007), women displayed a higher number of absences than men, probably due to their double role, at work and in dealing with family responsibilities (Lambert et al., 2005; Mastekaasa, 2000). Moreover, some studies indicate that women take better care of their health, pay more attention to their illness and consult health services more often than men (Kivimaki et al., 1997; Rael, Stansfeld, Shipley, Head, Feeney, & Marmot, 1995; Van den Heuvel & Wooden, 1995); thus they are more likely than men to “take a sickie” in the presence of sub-optimal physical symptoms (Fried, Melamed, & Ben-David, 2002). Finally, less supportive of our expectations (Hypothesis 6) was the finding of a non significant relationship between organizational tenure and absences from work, indicating that in the present sample absence behaviors were not affected by organizational tenure, consistent with some previous studies (Hackett, 1990).

### **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 and is undergoing a significant cultural change.

Moreover, the absence data referred to an overall period of 12 months, of which 6 months before and 6 months after the survey administration 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 correlation between previous and subsequent absences (Rentsch & Steel, 1998) and that attitudes toward the work predict absenteeism over different time frames, from 3 to 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).

Third, 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 higher-level variables concerning the context, such as organizational climate, perceptions of social context (PoC; Borgogni et al., 2010b) 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.

### **Practical implications**

The present study contributes to practice in two ways. First, the findings suggest that increasing self-efficacy is a good strategy to enhance job satisfaction and, consequently, to reduce absences from work. Consistent with social cognitive theory (Bandura, 1997), a training aimed at improving individual beliefs in one's own capabilities to exercise a control over circumstances in the workplace can lead to a better fit and to higher job satisfaction. The training could be offered to tenured employees as well as to newly hired employees as part of their organizational socialization, drawing on the literature that suggests that socialization practices help employees developing a better P-O fit at very early stages (Kim, Cable, & Kim, 2005). This training would be focused on self-management in order to increase one's

perceived self-efficacy with regard to responding effectively to job demands and manage 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 would aim to support job crafting on behalf of an employee (Wrzesniewski & Dutton, 2001) in order to facilitate the fit between his/her characteristics and the organizational context opportunities.

Second, our research has implications for talent management. Employees high in self-efficacy have stronger job satisfaction that, in turn, decreases absence behaviors. Therefore, HR development strategies may aim to identify self-efficacious employees, who can be considered the organization's key-people, and to find the factors underlying their satisfaction with the job, in order to foster job attendance.

## REFERENCES

- Anderson, J.C., & Gerbing, D.W. (1988). Structural Equation Modeling in Practice. *A Review and Recommended Two-Step Approach. Psychological Bulletin, 103*(3), 411–423.
- 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* (1), 9-44.
- Bollen, K.A., & Long, J.S. (1993). *Testing Structural Equation Models*. Thousand Oaks, CA: Sage,
- 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*(3), 275-296.
- Borgogni, L., Petitta, L., & Mastroilli, A. (2010b). Correlates of collective efficacy in the Italian air force. *Applied Psychology: An International Review, 59*(3), 515–537.
- Boyne, G., Jenkins, G., & Poole, M. (1999). Human resource management in the public and private sectors, an empirical comparison. *Public Administration, 77*(2), 407-20.
- 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*(3), 234-40.
- Caldwell, D.F., & O’ Reilly, C.A. (1990). Measuring Person-job Fit with a Profile-comparison Process. *Journal of Applied Psychology, 75*, 648-57.

- Caprara, G.V., & Cervone, D. (2000). *Personality, Determinants, Dynamics, and Potential*. Cambridge, UK: Cambridge University 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.
- Dellve, L., Eriksson, J., & Vilhelmsson, R. (2007). Assessment of long-term work attendance within human service organisations. *Work, 29*(2), 71-80.
- Dibben, P., James, P., & Cunningham, I. (2001). Absence management in the public sector, an integrative model? *Public Money & Management, 21*(4), 55-60.
- Farrington, D.P., & Loeber, R. (2000). Some benefits of dichotomization in psychiatric and criminological research. *Criminal Behavior and Mental Health, 10*, 100–122.
- 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.
- Fried, Y., Melamed, S., & Ben-David, H.A. (2002). The joint effects of noise, job complexity, and gender on employee sickness absence: An exploratory study across 21 organizations - the CORDIS study. *Journal of Occupational and Organizational Psychology, 75*(2), 131-144.
- Furnham, A., & Bramwell, M. (2006). Personality Factors Predict Absenteeism in the Workplace. *Individual Differences Research, 4*(2), 68-77.
- Garcia, R.L. (1987). Sick-time usage by management and professional employees in the public sector. *Review of Public Personnel Administration, 7*(3), 45-59.

- 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 determinants 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.
- 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*(3), 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., & Trist, E.L. (1995). Changes in accidents and other absences with length of service. *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.

- 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.
- 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.
- 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), 233-8.
- 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.
- MacKinnon, D.P., Fairchild, A.J., & Fritz, M.S. (2007). Mediation analysis. *Annual Review of Psychology, 58*, 593-614.
- Markovits, Y., Davis, A.J., & van Dick, R. (2007). Organizational Commitment Profiles and Job Satisfaction among Greek Private and Public Sector Employees. *International Journal of Cross Cultural Management, 7*(1), 77-99.
- Mastekaasa, A. (2000). Parenthood, gender and sickness absence. *Social Science & Medicine, 50*, 1827–1842.
- Mathieu, J.E., & Taylor, S.R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior, 27*, 1031–1056.

- 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.
- 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, B., & Kaplan, D. (1985). A comparison of some methodologies for the factor analysis of non-normal Likert variables. *British Journal Of Mathematical and Statistical Psychology, 38*, 171-189.
- Muthén, L., & Muthén, B.O. (1998). *Mplus User's Guide*. Muthén and Muthén, Los Angeles, CA.
- Nicholson, N., Brown, C.A., & Chadwick-Jones, J. K. (1977). Absence from work and personal characteristics. *Journal of Applied Psychology, 62*(3), 319-327.
- Parent-Thirion, A., Macías, F.E., Hurley, J., & Vermeulen, G. (2007). *Fourth European Working Conditions Survey*. European Foundation for the Improvement of Living and Working Conditions, Dublin, Ireland.
- Paton, N. (2005). Public sector workers widen the gap in days taken off sick. *Occupational Health, 57*(8), 4.
- Perdue, S.V., Reardon, R.C., & Peterson, G.W. (2007). Person-environment congruence, self-efficacy, 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.
- Porter, L.W., & Mitchell, V.F. (1967). Comparative study of need satisfactions in military and business hierarchies. *Journal of Applied Psychology, 51*(2), 139-144.
- 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.
- Rael, E., Stansfeld, S., Shipley, M., Head, J., Feeney, A., & Marmot, M. (1995). Sickness absence in the Whitehall II study, London, the role of social support and material problems. *Journal of Epidemiol Community Health, 49*, 474–481.
- 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.
- Sagie, A. (1998). Employee absenteeism, organizational commitment, and job satisfaction: Another look. *Journal of Vocational Behavior, 52*(2), 156-171.
- Scoppa, V. (2010). Worker Absenteeism and Incentives: Evidence from Italy. *Managerial and Decision Economics, 31*, 503-515.
- Shoss, M.K., & Penney, L.M. (2012). The economy and Absenteeism: A macro-Level Study. *Journal of Applied Psychology, 97* (4), 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.

- Solomon, E.E. (1986). Private and public sector managers: An empirical investigation of job characteristics and organizational climate. *Journal of Applied Psychology, 71*(2), 247-259.
- Stajkovic, A.D., & Luthans, F. (1998). Self-efficacy and work-related performance: a meta-analysis. *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.
- 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.
- 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.
- Van den Heuvel, A., & Wooden, M. (1995). Do explanations of absenteeism differ for men and women? *Human Relations, 48*, 1309–1330.
- Vilela, B., Gonzalez, J., & Ferrin, P. (2008). Person–organization fit, OCB and performance appraisal: Evidence from matched supervisor–salesperson data set in a Spanish context. *Industrial Marketing Management, 37*(8), 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.
- 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 person-organization (mis)fit and (dis)satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22(2), 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.
- Yieth Chen, T., Long Chang, P., & WenYeh, C. (2004). A study of career needs, career development programs, job satisfaction and the turnover intentions of R&D personnel. *Career Development International*, 9(4), 424-437.

Table 1. Correlations among the study variables.

*Tableau 1. Corrélations entre les dimensions de l'étude.*

Constructs	M	SD	1.	2.	3.	4.	5.
1. Self-efficacy	5.39	.72					
2. Job Satisfaction	4.94	1.10	.42**				
3. Organizational tenure	12.70	11.10	.00	-.02			
4. Gender	1.48	.50	.06*	-.02	.10**		
5. Absenteeism <sup>a</sup>	7.31	12.17	-.04	-.12**	.08*	.21**	

*Note.* \*\*  $p < .01$ , \*  $p < .05$ . Gender was coded as 1 for males and 2 for females.

<sup>a</sup> Since data are ordinal, we used Spearman's rho to determine the correlation.

Figure 1. From self-efficacy to absenteeism: the mediating role of job satisfaction.

*Figure 1. De l'auto-efficacité à l'absentéisme: le rôle médiateur de la satisfaction professionnelle.*

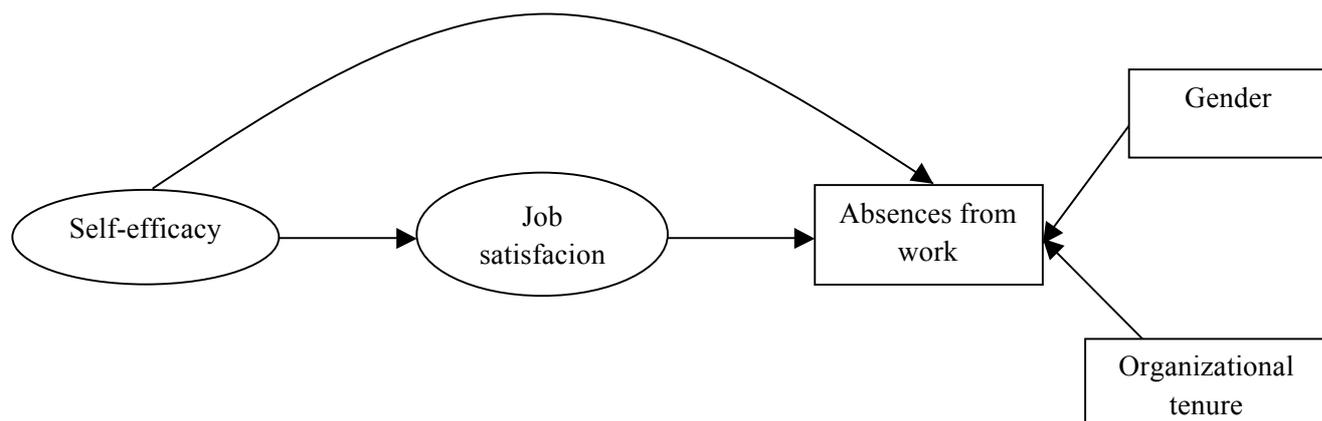


Figure 2. Results from the structural equation modeling analysis.

*Figure 2. Résultats du modèle d'équations structurelles.*

