

# Psychosocial Training: A Case of Self-Efficacy Improvement in an Italian School

GIANFRANCO CICOTTO\*, SILVIA DE SIMONE\*\*, LUCA GIUSTINIANO<sup>†</sup> & ROBERTA PINNA<sup>‡</sup>

\*Psychologist of Work and Organization, Cagliari 09042, Italy, \*\*Department of Pedagogy, Psychology, Philosophy, University of Cagliari, Cagliari, Italy, <sup>†</sup>Department of Business and Management Luiss Guido Carli, Roma IT 00197, Italy, <sup>‡</sup>Department of Economics and Management, University of Cagliari, Cagliari, Italy

**Keywords:** training, school, self-efficacy, work-related stress, job satisfaction

## Abstract

The changes that the regulatory institutions have imposed to the Italian school system over the last decades may actually result in contradictory effects at the individual and organizational levels: resistance or indifference on the one hand and training or coping strategies on the other one. The paper focuses on the impact of such changes on teachers, as professional workers within public schools and individual participants of change. The paper refers to psychosocial training as a coping strategy, analysing how school teachers deal with work-related stress, and what impact a training intervention might have on some individual dimensions. Subsequently, in the longitudinal study presented, we analysed whether the training intervention conducted was effective in terms of learning and change. The case under consideration is a primary school located in the South of Italy, and the participants in the training and research were 92 female teachers. In order to investigate the effectiveness of the designed and applied training program, we measured how some important psychological dimensions have changed over time: self-efficacy, job satisfaction and interpersonal strain. According to a sociological learning approach, the results suggest the effectiveness of training programs as enablers of change and solutions to some change paradoxes, when they respond to the identified needs, they are based on practical activities that require a collective participation, they focus on social relationships and processes, and the knowledge is created through the transformation of experience. In school context, the psychosocial training might represent a solution, if not a prevention strategy, for change management.

## Introduction

The interest in professionals and their professions is getting more and more momentum as organisations acknowledge the growing importance of their available human capital (Brock, Leblebici and Muzio, 2014). Further, professional workers have a crucial role as individual participants in change processes. This is even more relevant for “mercenary” (high solidarity) and “fragmented” (low solidarity) organisational settings in which sociability might be low (Goffee and Jones, 1996). In such settings the chance that a change management process would result in implementation paradoxes is higher (Goffee and Jones, 1996), because of the high autonomy and the lack of cohesiveness of the individuals. Amongst all the categories of professional workers, the paper deals with school teacher, as a specific case of “helping” professions. The term “helping professions” includes all those professionals whose mission and main activity is based on helping establish and maintain relationships (Corey et al., 2014). The relationship is “helping” when one of the two people involved aims to promote in the other the growth, development, maturation and the attainment of a more appropriate act. The process of aid is therefore a high-level goal to be acquired through

a long path comparable to that of learning something: the art of knowing how to help. The helping professions include a wide range of professionals: social workers, nurses, doctors, teachers, psychologists, psychotherapists, and so on. This paper deals with Italian teachers who work in public schools.

The Italian school system has experienced relatively complex developments during the last decades, with most of the schools caught up in change paradoxes, in which the institutional ‘general interest’ logic was not consistent with the professionals’ rationale, their needs and expectations. The choice of the professional group of teachers depends both on the many changes that have recently affected the Italian school system, and on the influence that this category of workers exerts on students. In other terms, on the one hand, in accordance with Muzio, Brock, and Suddaby (2013) we acknowledge the consideration that changes in the institutional setting do have an impact on individual professionals; on the other hand, we try to deepen the analysis of the motivational triggers that drive and guide them in their work, which in turn endorses students’ motivation to learn (Atkinson, 2000). The teacher-student relationship does not represent a symmetric relationship, as it develops between two people with different characteristics, roles, knowledge and power, within a pedagogical context in which one individual is called to educate while the other is undergoing training. However, in recent decades, the definition of tasks and roles within the school context has been redesigned by the profound changes that have involved the figure of the teacher.

The advent of the computer age and the increasing demand for more important socio-educational, psychological, relational and management skills, for which the teacher has rarely received proper training and often remain confined to his or her initiative and its personal capacity, have certainly disturbed teachers’ awareness of their professional skills. In addition, in many developed countries, the school environment has become increasingly multiethnic and multicultural. Furthermore, the numerous cultural exchanges enacted by globalisation, new policies for disability which have led to the inclusion of disabled pupils in the classes, the presence of an increasing number of single-parent families, and the constantly growing number of women being introduced into the workforce, all have burdened teachers with more responsibility for the education of students. Finally, the relatively low salary, the lack of career opportunities, and the often difficult relationship with colleagues, school directors, students and their parents, are factors that seem to justify a situation of general dissatisfaction for the Italian school teachers (Ichino and Tabellini, 2014).

Despite the existence of quite a significant amount of literature on teachers’ work-related stress (Russell, Altmaier and Van Velzen, 1987; Greene, Abidin and Kmetz, 1997; Ritvanen, Louhevaara, Helin, Väisänen and Hänninen, 2006), and its relationship with their job performance and state of health (Kovess-Masféty *et al.*, 2006), there are only a very few studies that really assess the level of success of interventions aimed to tackle such phenomena through training (Kealey, Peterson, Gaul and Dinh, 2000).

After describing the main institutional reforms that the Italian educational systems have witnessed during the past 15 years, the paper will deal with the idea of work-related stress and how it can be tackled through training, taking the case of an Italian school as locus of empirical investigation. This paper is focused on training and changing, and presents a longitudinal analysis conducted in an Italian school which used training as a strategy for coping with inertia to change, with the non-banal challenge of “teaching to teachers”. As results show, the paper reports a successful case of nurturing change for managing significant continuous change (Higgs and Rowland, 2000). After having put the subject of change in the general framework of the Italian school system, the paper introduces the stress-related impacts on teachers and, subsequently, presents the constructs analysed in the research. In such a context, the work-related stress is a way for assessing the existence of an implementation paradox. In details, although the institutional reforms introduced in the Italian school system where aiming at enhancing the level of work engagement of teachers, resistance, indifference or compliance against the imposed organizational changes (Ichino and Tabellini, 2014) were generally observed and reported in our study as phenomena linked to the work-related stress. Next, the paper investigates the aspects connected to the individual psychological reactions to training, then summarises the methods and results of its empirical investigation. The results report briefly on the attitudes and reactions of a teachers’ sample and the effective production of learning / change, compared to certain important psychological dimensions (self-efficacy, job satisfaction and interpersonal strain). The discussion of the results enlighten that in such contexts, psychosocial training might represent a solution for dealing with implementation paradoxes.

## **The reform of the educational system in Italy and new skills of teachers**

Today, the Italian public schools are called to play a role more complex than in the past, as they are called to help young people to design a way of life, with a sense of contributing to the training of future citizens. It follows, therefore, that the traditional models based on the processes of knowledge transmission and the self-reinforcement of reiterative educational schemes, are always identical to each other and are no longer adapted to the new conditions of modern society. The Italian education system is the subject of an extensive restructuring process, not yet completed, in which two reformative principles operate simultaneously:

- subsidiarity, meant as the administrative decentralisation that has formed the educational and organisational prejudice towards the autonomy of educational institutions;
- consistency with the European guidelines, aiming to improve the general level of education by raising participation rates in training activities that focus on the concept of life-long learning.

From 1 September 2010, for the first time in Italy, a comprehensive reform of the upper secondary schools was launched with the aim of creating greater flexibility and customisation of training (DPR 81/2009; DPR 89/2009; MoU MPO-MIUR 2012).

Hence, the spirit of the reform was in line with a search for greater clarity, and the aim of facilitating the choice of the course of study and to better address university education and the world of work. Among the strengths of the “new secondary education”, there is definitely a closer link with universities and higher education, with the world of work (i.e., internships and project works) and with the territory (e.g., with the presence in technical and scientific committees, representatives of the business community in the area). Within this general framework, primary education plays a crucial role since learning is becoming increasingly more tied to the way the new generations learn through practical experience and cutting-edge practices and techniques with an enhanced use of laboratories, which make the school a centre of permanent innovation.

These changes have implied a critical redefinition of the teaching profession and the identification of skills needed to cope with these new tasks, mostly at the primary level (DM 249/2010). Nowadays, we are witnessing a profound transformation of the teaching profession, due to the changes of the institutional perspective in a post-bureaucratic fashion, and thrusts towards models of organisational and managerial professionalism. The processes of change are categorised into three levels. The first level concerns the enhancement of professional practice. The teachers have to operate in a variety of situations that are constantly changing. Skills and traits like adaptability, flexibility, and inter-relational dimension of the profession have acquired a major role in this regard. The second level concerns the transformation of the role of the teacher both “inside and outside the classroom”. Teachers must increasingly assert a) forms of interconnection within the educational dimension, which are programmed both individually and together and then carried out in the classroom, and b) professional practices of the nature of design, evaluation and organisation, which have a cooperative nature and establish themselves outside the classroom. There is an increasing shift from an individualistic vision of the profession to a collective vision. The third level concerns the emergence of new organisational functions, particularly the roles of school autonomy in teaching and organisational coordination.

Although the extant literature has identified several models to describe the skills of teachers, all scholars agree on the fundamental principle that jurisdiction is constructed with practice, in local communities, and not according to predefined roles. The professionalism of teachers is derived from a set of cognitive, affective, social and instrumental abilities, as well as from the ability to be able to adapt quickly and flexibly to fluctuations. Further, as in many other similar fields (e.g. universities, teaching hospitals), some additional skills required to teachers can be related to: 1) their involvement in managerial and other administrative activities, including the relations with the students’ families, 2) continuous education of themselves and the promotion of new learning tools and experiences for the students.

At European level, the key competencies for the quality of teaching are related to communication, logical-mathematical, the mastery of ICT, problem-solving skills, the ability to work in groups for the pursuit of a common goal, and the management and improvement of their own learning.

### **The risks from work-related stress for the teachers**

The radical changes that have affected the Italian school system in more recent times were aimed at the realisation of a more flexible way of organising the work of teachers and the management of human resources, making it more individual and more result-oriented. Together with this, the efforts were addressed towards the achievement of positive effects on health issues in the workplace or, more generally, on well-

being at work. For several years, psychology and occupational medicine have been dealing with diseases that may arise in the workplace and that may depend on the relationships between people. In particular, despite the large number of European documents dealing with the issue of the risks from work-related stress, the Italian legislation has delayed this matter and made it the subject of regulation as late as 2008, with the Legislative Decree No. 81/2008 – “The Code on Health and Safety Protection of Employees in the Workplace”. More specifically, the Art. 28 reads: “The risk assessment should include [...] all the risks to health and safety [...] including those related to work related stress, according to the contents of the Europe Agreement of 8 October 2004, and those relating to workers in pregnant [...] as well as those related to gender, age, origin from other countries [...]” (Legislative Decree No. 81/2008, Art. 28).

The fact that the European and Italian national legislations have focused more and more on the wealth of psychosocial factors is related to the clinical risks that medicine and psychology have emphasised during the last decade. Accordingly, a higher level of social awareness has also pervaded the job design in all areas. The stress itself is not considered a disease; rather, it is a functional adaptation of organisms to the environment and its stressors. One of the most common definitions of stress speaks of adaptation syndrome for relatively nonspecific stress (stressor) of the stimuli (Selye, 1956). The adaptive response to stimuli can become dysfunctional – we speak in this case of distress or negative stress – because of the particular intensity of the stimuli, their duration in time, or the individual characteristics of the subject. People, in fact, can also withstand intense stress situations very well, provided that the stress is reduced over time. Among the employment sectors most affected by work-related stress, education is one of the areas at highest risk, as reported in literature. Starting from the work of Pithers and Fogarty (1995), different studies (Austin, Shah and Muncer, 2005; Johnson *et al.*, 2005) have confirmed that the teaching profession is subjected to numerous stressors. The nature of such stressors, both in general and with specific reference to the Italian school setting (Ichino and Tabellini, 2014), can be attributed to several factors relating to:

- a) the characteristics of the profession (relationship with students and parents, large classes, the situation of insecurity, conflict between colleagues, constant need of renovation, the delegation from the educational part of the family in the face of the absence of working parents or single-parent families or extended, transition from individualism to teamwork);
- b) the transformation of society towards a more multiethnic and multicultural lifestyle;
- c) scientific evolution and the new technologies (particularly ICT);
- d) the Italian school system reforms (workload, scarcity of resources).

From the point of view of organisational management, some signals can be kept under control and can show the presence of risk: high rate of absenteeism, turnover, high mobility; conflicts between operators, with students, with families; low quality performance.

The results obtained both from teachers and in other helping professions seem to show the need for organisations to implement educational training interventions, with the objective of achieving some form of stress prevention, by acting on the size of the personal, interpersonal, micro-environmental and organisational levels. In fact, organisations are called to go beyond the law or contractual requirements, to work on an organisational design that will help the individuals (teachers) find spaces and common meanings, share operational alliances and agree upon procedures, in order to preserve and promote personal and organisational well-being, and in turn, both the collective and the individual health.

In Italy, as a result of the Legislative Decree No. 81/2008, all employers should have a specific policy on work-stress issues for the management of the health of their workers. Work stress can be managed effectively by applying risk management assessment tools, which could enlighten the possible risks that the work environment might generate, and the specific hazards it might cause to employees. Several studies have investigated which typologies of intervention are most appropriate to reduce work-related stress (Van der Klink, Blonk, Schene and van Dijk, 2001), and have explored the effects of interventions to reduce work-related stress on the health (Arnetz, Arble, Backman, Lynch and Lublin, 2013). For some time, teachers’ work-related stress (Russell, Altmaier and Van Velzen, 1987; Greene, Abidin and Kmetz, 1997; Ritvanen, Louhevaara, Helin, Väisänen and Hänninen, 2006) and its relationship with their job performances and state of health (Kovess-Masféty *et al.*, 2006) have also been investigated. However, there are very few studies that really assess the level of success of interventions (Kealey, Peterson, Gaul and Dinh, 2000).

## **Psychosocial training**

The psychosocial training is a useful tool in the implementation of change management processes, also in schools. As supported by the policies of many countries, the promotion of professional teachers’

development improves their teaching performance and, consequently, students' learning (Opfer, 2011). This happens only if we ensure the assimilation and application of the new knowledge for the teachers (Garet, Porter, Andrew and Desimone, 2001), through a continuous training and not with just short and sporadic interventions, which have less probability of producing a change (Ball 1994; Hawley and Valli, 1999). Another aspect to consider in the teachers' training context is the collaboration, which must remain at intermediate levels to promote change and not to disengage or determine isolation. In such a perspective, training could be a way to reduce the disaggregation of the organizational context depicted by Goffee and Jones (1996) for "fragmented" communities. Further, the teachers' change and professional development are cyclical, with a multi-causal and multidimensional nature; for change and development to occur, they must happen in multiple areas of influence (Clarke and Hollingsworth, 2002).

According to a sociological learning approach, the psychosocial training is effectiveness to produce change, when it responds to the training' needs, it focuses on social processes, it is based on practical activities and on experience. A sociological learning approach has its focus on social relationships and processes that influence the individual's values, beliefs and perceptions of their environment. According to this approach, learning is the process whereby knowledge is created through the transformation of experience (Kolb, 1984); in this context, learning and experience "mean the same thing" (Wilson and Beard, 2003). Experiential learning is the insight gained through the interactions, which build upon our past experiences and knowledge (ibidem). Bandura (1977) suggests that learning takes place through the dynamic interplay between person, environment and behaviour. Professional development is more effective when it is based on practical activities (e.g., Hawley and Valli, 1998; Putnam and Borko, 2000), which reflect the teaching method (e.g., Darling-Hammond and McLaughlin, 1999), and which require a collective participation (e.g., Desimone et al., 2002; Wayne et al., 2008). It defines the discussion of the emerged problems and the search for strategies and solutions to solve them.

The intervention conducted in our study followed the model of psychosocial training: sessions with teachers were highly interactive, with group discussion, role playing, group work and case study (Kolb, 1984; Hawley and Valli, 1998; Putnam and Borko, 2000; Wilson and Beard, 2003). In a context where technical and specialised skills are considered to be of secondary importance to more non-specific and transversal skills, it is necessary for individuals to learn how to learn, and to learn to change. We therefore have considered the training as a planned instruction in a particular skill or practice, intended to result in changed behavioural approach to the work, and thus to improved performance (Mankin, 2009). That is an approach to the psychosocial training that responds adequately to the growth of complexity by focusing on the possibility to recognise and analyse the individual, group, organisational and social reality as variously determined and composed in complex ways often unknown to the same organisational actors (Burke and Hutchins, 2007).

According to the psychosocial perspective, before designing a training intervention, it is necessary to analyse the organisational context in terms of structural and cultural characteristics; it is also necessary to clarify and revise the demand of the client, to detect and analyse the needs of the users/clients (Silberman and Auerbach, 2011). Through an integration of the obtained information, it is possible to design interventions that consider the real characteristics of the context, the needs expressed by the client, the real individuals' needs and the need of the organisation, and it is possible to realise specific training courses that respond to the identified needs and that satisfy the explicit demand (Whyte, 1991; Silberman and Auerbach, 2011). After an analysis of the organisational context and of recipients' needs, it is possible to design other phases of the training process. The execution of a psychosocial training intervention requires active methods, group techniques centred on the group and on the participants' involvement, which promote learning through the understanding and the processing experience. The effectiveness of the intervention related to the type of organisational culture, to the kind of relationship that is established between trainer and participants, to the group and teachers' resources, and to the characteristics of the training setting (Cohen, 1994). The results obtained from this type of psychosocial training are the development of cooperative relationships and the establishment of a positive climate that is appropriate to achieving the objectives of the organisation, which is reflected in the work that teachers perform in the class group, extending the benefit to the students also (Silberman and Auerbach, 2011). For these reasons, we considered important to explore the needs of teachers and we have designed the intervention of psychosocial training based on the expressed needs, and took the theme of the work-related stress into account. In addition, in psychosocial training, the group becomes a resource that can provide emotional and decisive support. Consequently the training consisted of four training modules, addressed to all the teaching staff in groups of twenty participants. What is learned about group dynamics is useful to teachers in their teaching activities with groups/classes. In the training intervention discussed in this paper, an active teaching methodology was therefore used.

In summary, the paper is focused on the theme of psychosocial training as a coping strategy to manage imposed changes in the Italian school. This training might have an impact on how teachers are coping with stress and may have an impact on some psychosocial dimensions as self-efficacy, job satisfaction and interpersonal strain. In school context, the psychosocial training might represent a solution or a prevention strategy for change management.

### **Self-efficacy, job satisfaction and interpersonal strain**

The reform of the educational system in Italy had a strong impact on some important teachers' psychological dimensions. Such dimensions mirror effects of inertia, resistance or obstructionism to change, whereas psychosocial training can produce change over time on some dimensions as self-efficacy, job satisfaction and interpersonal strain. Changes on self-efficacy beliefs are very important, because they have a pervasive influence on different domains of functioning and are placed at the root of human agency (Bandura, 2001). The belief that one is able to control specific tasks allows people to face difficulties as challenges, and allows for focusing on problems and for the use of one's capacities and the resources available (*ibidem*). In addition, the more one believes in one's self-efficacy in a context, the greater one's satisfaction will be in that context; self-efficacy beliefs have proved to be a significant advantage in achieving success in many contexts including school (Bandura, 1997). The beliefs that teachers hold about their capacity to successfully meet the opportunities and challenges associated with the various tasks influences individual choices, motivation, actions, and performance.

The psychosocial dimensions analysed in this paper are linked to change management and can contribute to its effective deployment. In fact, self-efficacy has been shown as one of the strongest individual predictors of job satisfaction (Judge and Bono 2001; Caprara et al., 2003; Luthans, Zhu and Avolio, 2006; Day, Sammons, Stobard and Kington, 2007; Borgogni, Dello Russo, Petitta and Latham, 2008; Scheopner, 2010). Further, teachers who perceive difficulties as challenges, capitalise on their personal resources and are likely to attain valued outcomes according to personal standards (Caprara, Barbaranelli, Borgogni, and Steca, 2003), derive more satisfaction from work (Bandura 1997). Self-efficacious employees actively influence their context and, through this, derive more satisfaction (Bandura 1997). According to Brief's (1998) model, the individual personality characteristics' influence on job satisfaction are mediated by interpretations of job circumstances. Judge and colleagues (2000) found support for a model in which self-efficacy, as a core self-evaluation, affects job satisfaction, mediated through perceived job characteristics. The studies cited show the strong link between self-efficacy and job satisfaction.

The construct of job satisfaction has been defined in different ways and there are two common approaches to the measurement of job satisfaction (Spector, 1997): the global approach that considers job satisfaction based on an individual's overall affective reaction to his or her job, and the composite approach that assesses the pattern of attitudes a person holds regarding different facets of the job (for example, co-workers, fringe benefits, job conditions, nature of the work itself, policies and procedures, pay, and supervision). In our study we refer to the global approach and to Locke's (1976) and Spector's (1997) definitions. Locke (1969) defined job satisfaction as the extent to which the expectations that an individual holds for a job match what one actually receives from the job, and described this dimension as a pleasant or positive emotional state resulting from the appraisal of one's job experience. According to Spector (1997), job satisfaction is an attitude concerning the extent to which people like or dislike their jobs. Brief (1998) also defined Job satisfaction as an affective and/or cognitive evaluation of one's job. Given that a low level of job satisfaction predicts negative attitudes and behaviour in the work context, such as absenteeism, turnover and low productivity (Spector, 1997), an analysis of the factors that determine satisfaction or dissatisfaction is of great interest to managers and directors in an organisational context, for the creation of programs to increase job satisfaction and indirectly reduce negative behaviour. Several studies on teachers have investigated their job satisfaction (Somech and Drach-Zahavy, 2000; Nir and Bogler, 2007; Duffy and Lent, 2009; Huang and Waxman, 2009; Akhtara, Hashmib and Naqvic, 2010; Demirta, 2010; Lent *et al.*, 2011; Moè, Pazzaglia and Ronconi, 2010) and the relationship between occupational stress and job satisfaction (Prick, 1989; Smith and Bourke, 1992; Ben-Ari, Krole and Har-Even, 2003; Klassen and Chiu, 2010). In fact, job satisfaction has a key role in avoiding dysfunctional behaviour within the organisation, and it is an antecedent in preventing occupational stress (Caprara, Barbaranelli, Borgogni, and Steca, 2003).

Our study emphasises the strong links between perceived self-efficacy and stress, and specifically the links between coping, efficacy and stress (Krampen, 1988; Miller and Seltzer, 1991). Perceived self-efficacy

refers to the person's belief in his or her ability to organise and execute the courses of action required to achieve goals (Bandura, 1997). Individuals with a stronger sense of perceived self-efficacy experience low stress in threatening or taxing situations, and experience situations as less stressful owing to their belief in their ability to cope (*ibidem*). It has been documented that perceived self-efficacy predicts the level of stress and anxiety experienced and manifested in interpersonal transactions (Alden, 1986). Exposure to chronic occupational stressors, with a low sense of efficacy to manage job demands and to enlist social support in times of difficulty, increases vulnerability to burnout (Leiter, 1992).

Starting from empirical evidences above, we decided to include the perceived self-efficacy levels' improvement in the psychosocial training program. The increase in self-efficacy beliefs can affect job satisfaction and strain.

In the last decade, definitions of teacher self-efficacy that are more complex in terms of the scope and the facets they embrace have appeared in the literature. For example, Cherniss (1993) has suggested that teacher efficacy should consist of three domains (task, interpersonal and organization), Tschannen-Moran and Woolfolk-Hoy (2001) offered a measure of teacher efficacy comprising three sub-scales (efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement), while Friedman and Kass (2002) devised a conceptual model of teacher self-efficacy, named the "Classroom and School Context (CSC)" model of teacher efficacy. The teacher's functioning within the school comprises two basic domains: the classroom, where the teacher works with students, and the school, where the teacher functions as a member of an organisation (*ibidem*). In both contexts, the teacher must perform professional tasks and be involved in interpersonal relations. Considering the rise of the number of jobs in which interactions with others (e.g., team members, customers) constitute a major part of the work tasks, we argue that interpersonal relationships may represent in themselves a significant source of psychological distress, even outside the human services, in which, initially, burnout was studied exclusively. For this reason we decided to include in our study the interpersonal strain dimension. Therefore, to recapture the original social root of burnout, Borgogni *et al.* (2012) introduce the interpersonal strain concept, which refers to a specific disengagement reaction from all relevant interpersonal relationships in the workplace. That reflects a self-protective reaction from demanding interactions and overtaxing social pressures, coming from both within and/or outside the organisation, which interferes with performance.

One of the ways to develop self-efficacy is via the direct experience, tangible in psychosocial training. High self-efficacy would weaken work-related stress (Perrewé *et al.* 2002; Bandura, 2006), especially when accompanied by conscious use of active coping strategies (Jex *et al.* 2001). Literature on stress and coping emphasises the primary role of cognitive appraisal in the stress process (Lazarus and Folkman, 1984; Moos and Schaefer, 1993). Coping is generally defined as behavioural or cognitive efforts to manage situations that are appraised as stressful; an individual effort made to reduce stress. Problem-focused coping has been associated with different levels of stress (Brown *et al.*, 2002). According to Bandura (1997), stress reactions depend on self-appraisal of one's coping capabilities. Lazarus and Folkman (1984) have defined coping as a process through which individuals, upon perceiving a situation as stressful, evaluate and implement coping strategies. Coping strategies are appraisals or behaviours employed to reduce emotional and physical reactions to stressors. Starting from these empirical evidences, we decided to include in the training a part where we implemented coping skills in the training course. We also added some parts dedicated to communication skills and problem solving. Several studies, in fact, find that communication skills prevent problems derived from work-related stress (Shimizu *et al.*, 2003), and that the problem-solving skills help to cope with stressful situations (Cox, 1987; Thoits, 1994).

## Methods

The research presented in this paper considers psychosocial training as a coping strategy aimed at reducing the dysfunctional effects of the described implementation paradoxes in a school. This section shows the how the design and the execution of the training program involved the school teachers, as main actors of the change processes and addressees of the initiative.

In order to investigate the effectiveness of the training program, we measured how some important psychological dimensions of work-related stress have changed over time, self-efficacy and job satisfaction. Also measured were the feelings of dejection, disengagement at work and in relationships due to exaggerated social requests, and interpersonal strain (Faragher, Cass and Cooper, 2005; Borgogni, Consiglio, Alessandri and Schaufeli, 2012).

### *Context and procedure*

The case under consideration is a primary school located in South Italy. This school was typical of other schools in similar areas. The story of the entire research process is shown in Diagram 1.

Diagram 1 - Outline of the research project

---- Diagram 1 – goes around here ----

In the year 2011, the school manager and his staff undertook to measure their work-related stress. A medium-low level of risk was found. In such cases, the law does not require the implementation of corrective actions, but training interventions are required (Legislative Decree No. 81/2008, Art. 36). Consequently, the school manager and board of teachers decided to organise, under the supervision of a psychologist, a lesson about work-related stress risk and its legal obligations.

At the end of the lesson, in order to obtain some important information about the teachers' appreciation of the lesson, and to identify the specific training needs and preferred methodologies, the QA (Assessment Questionnaire) was administered. This and other questionnaires will be better explained in the section Measures. Based on the expressed needs, and taking into account the work-related stress theme, the intervention of psychosocial training was designed. The training consisted of four training modules of three hours each, addressed to all the teaching staff in groups of twenty participants. The training project took place during the school year 2011/2012. The teachers trained in the following matters: work-related stress and coping strategies, group dynamics, effective communication, problem solving, and decision making. Tests were administered to make teachers aware about: coping strategies, communication style, ability to work in a team, and problem-solving ability. According to the model of psychosocial training, the methods used were highly interactive, with group discussion, role playing, group work and case study (Kolb, 1984; Hawley and Valli, 1998; Putnam and Borko, 2000; Wilson and Beard, 2003). The efficacy of the training was verified by administering the questionnaire QC (Questionnaire of Comparison). We administered the QC questionnaire before commencement of the training course (test) and two months after completion (re-test). In order to infer that the changes were due to the intervention training, we administered the same questionnaire QC, always with the test-retest method, to a control group of other teachers from the same school who did not attend the training intervention. In this case, no change was recorded between the first and second administration. In order to measure the perceived usefulness, at the end of each training module the questionnaire QR (Questionnaire of Reaction) was administered. The results of questionnaires are listed below and discussed.

### *Sample*

The sample constituted of 126 teachers, all women, from one Italian primary school. Of these only 92 participated in the training; 34 did not participate. The absence of male teachers isn't a surprise: in Italy the majority of teachers are women (Barbieri *et al.*, 2007; OECD 2012). The mean age of the respondents was 45 years ( $SD = 7.3$ ), the average tenure in the organisation was 6.7 years ( $SD = 7.4$ ) and the average employment seniority in teaching was 17 years ( $SD = 8.7$ ).

### *Measures*

#### QA, Questionnaire of Assessment

We have created and administered the Questionnaire of Assessment to design the training adequately according to the teachers' conceptions and expectations. The QA, aimed to investigate the attitude towards the training received, consists of 6 items in a 5-point, Likert-type questionnaire (1 = strongly disagree to 5 = strongly agree) and an open-ended question asked which topics and way preferred for the training course. The six items are: "This training was useful for me to understand what stress is and how I can manage it", "Stress can't be eliminated", "What I learned will be useful in my work life", "Stress can be managed", "The produced information lends itself to a concrete application in the work", "This training wasn't useful". The



open-ended question is: Which arguments would you like to discuss on a future occasion, and with which methodologies?

#### QR, Questionnaire of Reaction

The reaction to the training modules has been tested through 8 items with a 5-point rating scale (1 = strongly disagree to 5 = strongly agree). To the participants it was asked, at the end of each module, how much they considered useful what they learned. For the first module, they were asked about these three items: “To understand better what the stress is”, “To understand how I manage the stress”, “To understand how to better manage the stress”. For the second module, they were asked about the following two items: “To understand better the group dynamics” and “To be more aware of how I work in a group”. For the third module, about the following two items: “To understand better the communication processes” and “To be more aware of how I communicate”. Finally, for the fourth and last module: “To understand better how to analyse the work-critical situations with co-workers”.

#### QC, Questionnaire of Comparison

This included three different scales, described below.

##### Interpersonal strain

This scale was made starting from the original depersonalisation scale of MBI-HSS (Maslach and Jackson, 1981) and of the MBI depersonalisation scale (Kristensen *et al.*, 2005), considering also the results obtained from Borgogni and colleagues' (2007, 2012) works. In the 20-item scale, rated on a 7-point frequency scale (ranging from 0 = “never” to 6 = “daily”), two factors emerged that explain the total 49.23% of variance. The first factor – job strain (Cronbach's  $\alpha = .83$ ): it expresses the perceived effort to cope work (e.g., “To work all day it's a real effort for me”). Second factor – relational strain (Cronbach's  $\alpha = .85$ ): it expresses the perceived effort to cope with relational demands (e.g., “I spend a lot of time and resources to cope with the others' demands”).

##### Job satisfaction

According to the global approach that assesses job satisfaction based on an individual's overall affective reaction to his or her job (Spector, 1997), this construct was measured using the Brief Overall Job satisfaction measure II (Judge *et al.*, 1998). The respondents evaluated their perceptions of satisfaction concerning their current job on a response scale from 1 to 7 (1 = strongly disagree, 7 = strongly agree). The five items are: “I feel fairly well satisfied with my present job”, “On most days I am enthusiastic about my work”, “Each day of work seems like it will never end”, “I really enjoy my work”, “I consider my job rather unpleasant”. In this study, the variance explained by the factor is 70.40% and the internal consistency of the scale was good (Cronbach's  $\alpha = .86$ ).

##### Self-efficacy

Consistent with Bandura's (2006) recommendation for construct specificity, perceived work and social self-efficacy was measured by a 12-item scale (7-point scale from 1 to 7; 1 = strongly disagree, 7 = strongly agree), considering Borgogni and colleagues. (2009). From EFA of 12 items of the scale, we obtained two factors that overall explain the 44.97 % of variance. 1° factor – Work Self-Efficacy (Cronbach's  $\alpha = .77$ ): it expresses one's own self-efficacy beliefs about different activities and challenges that are at work. (e.g., “To deal with an important project without I lose myself in thoughts and delay”). 2° factor – Social Self-Efficacy (Cronbach's  $\alpha = .75$ ): it expresses self-efficacy through one's own beliefs regarding relationships with people at work (e.g., “To repair a relationship that started badly”).

#### Data analysis

To obtain factor scores of the used scales, we conducted an Exploratory Factor Analysis (EFA) using SPSS 13.0 for Windows. The consistent scale was calculated with Cronbach's alpha. Pearson correlations were performed to determine the degree of association between the various variables considered. The simple linear regression analysis was performed to determine the degree of dependence between the various variables considered. The t-test for independent samples was used as a longitudinal element to verify differences of means of the variables before and after the training intervention.

### *Results of Questionnaire of Assessment*

Teachers expressed a need to study these topics: how to deal with stress, how to deal with difficult situations at school, strategies to apply to work situations, communication strategies, group dynamics, and case studies. They asked that these matters be discussed in interactive lessons in small groups, through exercises, role playing, administration of psychological tests and case studies, or through a psychosocial training rather than frontal lessons. These indications served for the design of four training modules in which all these issues have been included in the required ways.

We conducted a correlation analysis using the r Pearson coefficient between the items of QA. The following table (Table 1) shows the Pearson's correlation indices, the mean and the standard deviation for each statement of QA.

Table 1- Descriptive and Pearson correlations of QA.

---- table 1 – goes around here ----

This analysis has enabled us to understand not only the reaction to the lesson about work-related stress risk (see Diagram 1), but also to understand the attitude towards training in general. This attitude was taken into account in the design, as explained below.

We found a significant and positive relationship between the items “What I learned will be useful in my work life” and “This training was useful for me to understand what stress is and how can manage it” ( $r = .602$ ), between this last item and “The produced information lends itself to a concrete application in the work” ( $r = .386$ ). In addition, we found a significant and positive correlation between “The produced information lends itself to a concrete application in the work” and the items “What I learned will be useful in my work life” ( $r = .425$ ) and “Stress can be managed” ( $r = .444$ ).

Statements number 3 and 5 have a difference of meaning: statement 3 ascribes the usefulness to what has been learned, statement 5 to what has been presented. According to these answers, the usefulness of the course would derive mainly from the teachers' abilities to learn rather than the presented content. Teachers have expressed substantially high beliefs of human agency.

It is also possible to note a significant but less strong correlation between the items “This training wasn't useful” and “Stress can't be eliminated” ( $r = .298$ ). Some teachers believe that it is useless to attend a course where we talk about the work-related stress, as they believe that it can't be eradicated.

Starting from the relationship between these two statements, which implies specific needs of the participants, during the course of psychosocial training we highlighted which coping strategies people can use to reduce the perception of work-related stress, and we discussed the issue of how to improve their skills in problem solving and decision making.

### *Results of Questionnaire of Reaction*

At the end of each training module, the Questionnaire of Reaction was administered to monitor the perceived utility regarding the discussed contents and the used methodologies. The results are shown in Exhibit 1.

Exhibit 1 – Percentage scores of QR.

---- Exhibit 1 – goes around here ----

The scores, on a five point scale, were recorded in this way: “yes” (4 and 5), “doubtful” (2 and 3), and “no” (1). The results, in percentage, are shown in the following graphic.

The monitoring data suggest a high degree of appreciation, a signal that the used contents and methodologies have satisfied the participants' expectations. The participants' evaluation of what they learned was very positive, and this denotes that the goal to make the teachers aware of themselves and of their actions was achieved. The trainer said that during the course, the class group climate was collaborative and enthusiastic. The excellent interaction between teacher and class group favoured the learning process. These results underscore the utility, in the design phase, to include the needs expressed by the recipients of the training.

### *Results of Questionnaire of Comparison*

The longitudinal analysis of such results verifies the effectiveness of the training. The time elapsed between the first (*ex ante*) and second administration (*ex post*) was six months. The QC was administered before starting the training intervention (*ex ante*). The training intervention lasted for four months. We again administered the QC two months after completion (*ex post*). The results of those who participated are reported in Table 2. Measurements performed on the group of non-participants (N = 34) who gave results on the t-test are not significant (Sig. > .05).

Table 2 - Descriptive and t-test analysis of QC.

---- table 2 – goes around here ----

The results show a decrease, slight but significant, in relationship and job strain, and an increase, slight but significant, in self-efficacy and related work. This is what was expected. There has been no change in job satisfaction; however, this was not the subject of the training. In particular, the increase (or decrease) of job satisfaction is associated with the increase (or decrease) of social self-efficacy (Pearson's  $r = .340$ ; sig. = .001), that is, when we feel competent in our relationships, we also have a higher satisfaction in the exercise of our work. We also observed that high levels of job satisfaction are associated with low levels of relational strain (Pearson's  $r = -.293$ ; sig. = .005) and of job strain (Pearson's  $r = -.528$ ; sig. = .000).

Furthermore, we have conducted the simple linear regression analysis.

We place work self-efficacy as an independent variable and job strain as the dependent variable. The model proved to be adequate ( $F = 11,462$ ,  $df = 1$ , Sig. = .001), and indexes of regression show the role of work self-efficacy to reduce the job strain ( $R^2 = .061$ ,  $\beta = -.247$ ; Sig. = .001). In the second simple linear regression analysis, we have placed social self-efficacy as an independent variable, and relational strain as a dependent variable. The model proved to be adequate ( $F = 9.314$ ,  $df = 1$ , sig. = .003), and indexes of regression show the role of social self-efficacy to reduce the relational strain ( $R^2 = .051$ ,  $\beta = -.225$ ; sig. = .003).

## Discussion

The paper dealt with the implementation paradox that the Italian educational system has been facing during the last 15 years, having on one hand the institutional rulers pushing towards a more modern and interactive educational system and the teachers feeling confused and overwhelmed with non-primary activities and concerns. In this paper we investigated such an implementation paradox by considering the school teachers as professional workers and main actors of such expected changes and we considered psychosocial training as a possible solution for solving the paradox. The above presented results suggest the effectiveness of psychosocial training programs as enablers of change. Some evidences could contribute to a wider discussion and will be subsequently illustrated.

The analysis of Questionnaire of Assessment data shows that the teachers interviewed expressed a need to study how to deal with stress at school and what strategies to adopt to deal with difficult situations. Whereas the Italian Ministry of Education has regularly tried to increase the ease of their job and the level their engagement, teachers have been increasingly subjected to numerous stressors (Pithers and Fogarty, 1995; Ichino and Tabellini, 2014) that can be attributed to several factors relating to the characteristics of the profession (as for example, relationship with students and parents, large classes, constant need of renovation, etc.), the transformation of society towards a more multiethnic and multicultural lifestyle, scientific evolution and new technologies (particularly ICT), and the Italian school system reforms. These phenomena show the emergence of a relationship between occupational stress and job satisfaction (Prick, 1989; Smith and Bourke, 1992; Ben-Ari, Krole and Har-Even, 2003; Klassen and Chiu, 2010), and confirm that the teaching profession is subjected to numerous stressors (Pithers and Fogarty, 1995).

In our analysis the interviewed teachers highlighted that changes in the institutional setting do have an impact on individual professionals (Muzio, Brock and Suddaby, 2013). In fact, the participants complained that the profound changes that have involved the figure of the teacher, redefining tasks and roles within the school context, have produced difficulties and dissatisfaction for teachers in Italian schools (Somech and Drach-Zahavy, 2000; Nir and Bogler, 2007; Duffy and Lent, 2009; Huang and Waxman, 2009; Akhtara, Hashmib and Naqvic, 2010; Demirta, 2010; Lent *et al.*, 2011; Moè, Pazzaglia and Ronconi, 2010).

Further, the correlations analysis between items of QA shows that teachers think that during the course, they have learned something useful for their working life, and have also rated the course as useful for the study of

stress and strategies to manage it; although asserted more weakly, they also considered it useful in applying the information presented in the work. The usefulness of the course would derive mainly from the teachers' learning abilities rather than the actual contents. Teachers have expressed substantially high beliefs of human agency that regards acts performed intentionally to achieve particular results (Bandura, 2001). The ability to generate actions for a particular purpose is its essential feature. Self-efficacy beliefs are the key element of human agency, because if people do not believe they can influence reality in some way, they do not try to do so (Bandura, 2000). In training design, this has resulted in the choice of active methodologies, where contents and learning processes are centred on the processes and the learners rather than simply on contents. The training has included the implementation of coping skills. These results highlighted which the coping strategies can be used to reduce the perception of work-related stress and we also discussed the issue about how to improve their skills in problem solving and decision making in the training.

There is an evident relationship between coping, stress and efficacy (Krampen, 1988; Miller and Seltzer, 1991). The teachers' learning abilities are linked to use of active coping (Jex *et al.* 2001). In fact, the coping allows teachers to manage situations that are appraised as stressful and, through an individual effort, to reduce stress (Lazarus and Folkman, 1984; Moos and Schaefer, 1993). The teachers have used problem-focused coping in the training and have indirectly acted on their levels of stress (Brown *et al.*, 2002). In fact, coping is a process through which individuals, upon perceiving a situation as stressful, evaluate and implement coping strategies (Lazarus and Folkman, 1984).

The teachers asked to address these matters in interactive lessons in small groups, through exercises, role playing, administration of psychological tests and case studies, or through a psychosocial training rather than frontal lessons. These indications served for the design of four training modules, in which all these issues have been included in the required ways. Results of Questionnaire of Reaction suggest a high degree of appreciation, a signal that the contents and methodologies used have satisfied the participants' expectations. The participants' evaluation of what they learned was very positive, and this denotes that the goal to make the teachers aware of themselves and of their actions in the school was achieved. The trainer said that during the course, the class group climate was collaborative and enthusiastic. The excellent interaction between teacher and class group favoured the learning process. These results underscore the utility, in the design phase, to include the needs expressed by the recipients of the training. The teachers enjoyed the experiential learning through interactions and experiences (Kolb, 1984; Wilson and Beard, 2003). The results show the effectiveness of the training program. The approach to the psychosocial training responded adequately to the needs and expectations (Burke and Hutchins, 2007; Silberman and Auerbach, 2011). The training's design has in fact considered the real needs expressed by the teachers and the real characteristics of that specific school context (Whyte, 1991; Silberman and Auerbach, 2011). The effectiveness of the training is related to the type of relationship that was established between trainer and participants, to the group and teachers' resources, and to the characteristics of the training setting (Cohen, 1994). The group becomes a resource that can provide emotional and decisive support. What is learned about group dynamics is useful to teachers in their teaching activities with their groups/classes. In the training discussed in this paper, an active teaching methodology is used.

The pre- and post-measurement data show the effectiveness of the training program as a coping strategy. In fact, the results show a decrease, slight but significant, in relationship and job strain, and an increase, slight but significant, in self-efficacy and relational work. There has been no change in job satisfaction; however, this was not the subject of the training. Rather, we observed an association of the different observed variables with job satisfaction, which is a protective factor towards work-related stress (Faragher, Cass and Cooper, 2005; Borgogni, Consiglio, Alessandri and Schaufeli, 2012). In this research, the increase (or decrease) of job satisfaction is associated with the increase (or decrease) of social self-efficacy; that is, when we feel competent in our relationships, we also experience a higher satisfaction in the exercise of our work. Our data also confirm that the more someone believes in one's self-efficacy in a context, the greater one's satisfaction will be in that context, and confirm, too, that self-efficacy is one of the strongest individual predictors of job satisfaction (Judge and Bono 2001; Caprara *et al.*, 2003; Luthans, Zhu and Avolio, 2006; Day, Sammons, Stobard and Kington, 2007; Borgogni, Dello Russo, Petitta and Latham, 2008; Scheopner, 2010). We also observed that high levels of job satisfaction are associated with low levels of relational strain. It is known in the literature that job satisfaction has a key role in avoiding dysfunctional behaviours for the organisation, and it is an antecedent in the prevention of work-related stress. Finally, the results of the regressions show that work self-efficacy reduces job strain and that social self-efficacy reduces the relational strain in agreement with other authors (e.g., Bandura, 2000); these results suggest that to reduce work-related stress, it is useful to design and implement training interventions that increase self-efficacy. Self-efficacy

beliefs have a pervasive influence on different domains of functioning, are placed at the root of human agency and are able to control specific tasks, allowing people to manage difficulties (Bandura, 2001). Our data show that individuals with a stronger sense of perceived self-efficacy experience low stress (Bandura, 1997); specifically, the teachers' self-efficacy beliefs about different activities and challenges that are at work influence the perceived effort to cope with work, and the teachers' self-efficacy beliefs about relationships with people at work influence the perceived effort to cope with relational demands.

In summary, in line with the sociological learning approach, the results enlighten the effectiveness of training programs as enablers of change, when they are based on practical activities that require a collective participation, when they focused on social relationships and processes, and when the knowledge is created through the transformation of experience. These results suggest that the training might be a successful coping strategy when it is possible to realise specific training courses that respond to the identified needs.

## Conclusion

This paper has presented the results of a case study about learning/change through a training project in an Italian school, taken as a case in which the implementation paradox was discussed before it happened. Specifically, this paper provides two main contributions. The first contribution concerns the criteria for educational planning. The design and implementation of a psychosocial training program was carried out in line with the main sociological theories on learning, according to which the recipients of training are the protagonists of training (Silberman and Auerbach, 2011). We have designed the training program by combining the knowledge of the training theoretical models and the results of the analysis of teachers' responses to the Questionnaire of Assessment. The contents and methods required have been included in the programming. The knowledge of the attitude towards training and the explicit requests of the teachers have formed the same part of the training process since its design, thus leading to their participation and sharing. The training can be shared and participated in then, as confirmed by our final results, producing a real and beneficial change.

The second aspect concerns the confirmation of relationships between the analysed dimensions. Aware that an increase in job satisfaction depends on many factors (Spector, 1997; Dinham and Scott, 1998), we observed the relationships between self-efficacy and job satisfaction (Judge and Bono 2001; Caprara *et al.*, 2003; Luthans, Zhu and Avolio, 2006; Day, Sammons, Stobard and Kington, 2007; Borgogni, Dello Russo, Petitta and Latham, 2008; Scheopner, 2010). We also observed the relationships between self-efficacy and interpersonal strain (Alden, 1986; Krampen, 1988; Miller and Seltzer, 1991). In particular, we observed that an increase in self-efficacy beliefs contribute to a decrease in the relational stress perceived (Bandura, 1994; Perrewé *et al.* 2002). This result depends on the psychosocial training realised and also on the conscious use of active coping (Jex *et al.* 2001). It would be useful to do a re-test after a year's time to see if learning based on practical activities has also become professional development (Hawley and Valli, 1998; Putnam and Borko, 2000); in other words, to see the relapse in terms of individuals' knowledge, skills and competencies (Mankin, 2009). The results obtained from this type of training could produce the psychosocial development of cooperative relationships and create a positive climate. Such a climate would be appropriate for achieving the objectives of the organisation, reflected in the work that teachers employ in their groups or classes, which eventually extends the benefit to students (Silberman and Auerbach, 2011). In addition, this type of training could allow teachers to learn concepts and skills that would be useful in educational work with their class groups. The project had the uneasy task of focusing on the non-specific, horizontal skills, generally considered of secondary importance but still crucial to "learn how to learn and to learn to change". Such an approach has very deep psychosocial roots, which are supposed to respond adequately to the growth of complexity in the overall school system and in individual schools. In particular, the method depends on the possibility to recognise and to analyse the individual, group, organisational and social reality as variously determined and composed in complex ways often unknown to the same organisational actors.

To summarise, we found that the psychosocial training program allowed the achievement of important goals in terms of self-efficacy, interpersonal strain and job satisfaction. These goals are achieved by taking into account the suggestions of teachers for the training project. It is desirable that the training of teachers is a continuous training rather than short and sporadic interventions, so that it can produce change (Ball 1994; Hawley and Valli, 1999); in fact, the promotion of professional teachers' development improves their teaching activity and consequently, students' learning (Opfer, 2011).

Despite the limitation of its setting of analysis, our research confirms that training programs are important enablers for the implementation of organisational change, by nurturing the development of a positive

working climate. We believe that policymakers and decision-makers in the education system can benefit from the proposed approach, which in short might also imply that psychosocial training could represent not only a coping strategy but also a prevention strategy to implementation paradoxes. Similar considerations may be directed to complex organisational contexts, such as universities, hospitals and prisons, regardless of their institutional configuration.

## References

- Akhtara, S. N., Hashmib, M. A., and Naqvic, S. I. H. (2010) A comparative study of job satisfaction in public and private school teachers at secondary level, *Procedia Social and Behavioral Sciences*, 2, pp. 4222–4228.
- Alden, L. (1986) Self-efficacy and causal attributions for social feedback, *Journal of Research in Personality*, 20, pp. 460–473.
- Arnetz, B. B., Arble, E., Backman, L., Lynch, A., and Lublin, A. (2013) Assessment of a prevention program for work-related stress among urban police officers, *International Archives of Occupational and Environmental Health*, 86(1), pp. 79–88.
- Atkinson, E. S. (2000) An investigation into the relationship between teacher motivation and pupil motivation, *Educational Psychology*, 20(1), pp. 45–57.
- Austin V., Shah S., and Muncer S. (2005), Teacher stress and coping strategies used to reduce stress, *Occupational Therapy International*, 12 (2), pp. 63–80.
- Ball, S. (1994) *Education reform: A critical and post-structural approach* (Buckingham, Open University Press).
- Bandura, A. (1977) *Social learning theory* (New York: General Learning Press).
- Bandura, A. (1994) *Self efficacy* (Hoboken, NJ: John Wiley & Sons, Inc.).
- 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*, 51, pp. 75–78.
- Bandura, A. (2001) Sociocognitive theory: an agentic perspective, *Annual Review of Psychology*, 52, pp. 1–26.
- Bandura, A. (2006), Guide for constructing self-efficacy scales, in F. Pajares and T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (Greenwich, CT: Information Age Publishing), pp. 307–337.
- Ben-Ari, R., Krole, R., and Har-Even, D. (2003) Differential effects of simple frontal versus complex teaching strategy on teachers' stress, burnout, and satisfaction, *International Journal of Stress Management*, 10(2), pp. 173–195.
- Borgogni, L., Dello Russo, S., Petitta, L., and Latham, G. P. (2008) Collective efficacy and organizational commitment in an Italian city hall, *European Psychologist*. Vol 14(4), 2009, 363-371
- Borgogni, L., Consiglio, C., Alessandri, G., and Schaufeli, W. B. (2012) “Don't throw the baby out with the bathwater!” Interpersonal strain at work and burnout, *European Journal of Work and Organizational Psychology*, 21(6), pp. 875–898.
- Brief, A. P. (1998) *Attitudes in and around organizations*. (Thousand Oaks, CA: Sage).
- Brock, D., Leblebici, H., and Muzio, D. (2014), Understanding professionals and their workplaces: the mission of the Journal of Professions and Organization, *Journal of Professions and Organization*, 1(1), pp. 1–15.
- Brown, J., Mulhern, G., and Joseph, S. (2002) Incident-related stressors, locus of control, coping, and psychological distress among firefighters in Northern Ireland, *Journal of Traumatic Stress*, 15, pp. 161–168.

- Burke, L. A., and Hutchins, H. M. (2007) Training transfer: an integrative literature review, *Human Resource Development Review*, 6(3), pp. 263–296.
- Caprara, G. V., Barbaranelli, C., Borgogni, L., and Steca, P. (2003) Efficacy beliefs as determinants of teachers' job satisfaction, *Journal of Educational Psychology*, 95(4), pp. 821–832.
- Cherniss, C. (1993) Role of professional self-efficacy in the etiology and amelioration of burnout, in W. B. Schaufeli, C. Maslach, and T. Marek (Eds.), *Professional burnout: recent developments in theory and research* (Washington, D.C.: Taylor & Francis).
- Clarke, D., and Hollingsworth, H. (2002) Elaborating a model of teacher professional growth, *Teaching and Teacher Education*, 18(8), pp. 947–967.
- Cohen, E. G. (1994) Restructuring the classroom: Conditions for productive small groups, *Review of educational research*, 64(1), pp. 1-35.
- Corey, G., Corey, M., Corey, C., and Callanan, P. (2014) *Issues and ethics in the helping professions* (Cengage Learning), 9<sup>th</sup> edition
- Cox, T. (1987) Stress, coping and problem solving. *Work & Stress*, 1(1), pp. 5-14.
- Darling-Hammond, L., and McLaughlin, M. W. (1999) Investing in teaching as a learning profession: policy problems and prospects, in L. Darling-Hammond and G. Sykes (Eds.), *Teaching as the learning profession: handbook of policy and practice*, (Jossey-Bass Inc., San Francisco) pp. 376–411.
- Day, C., Sammons, P., Stobart, G., and Kington, A. (2007) *Teachers matter: connecting work, lives and effectiveness* (McGraw-Hill International, England).
- Demirta, Z. (2010) Teachers' job satisfaction levels, *Procedia Social and Behavioral Sciences*, 9, pp. 1069–1073.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., and Birman, B. F. (2002) Effects of professional development on teachers' instruction: results from a three-year longitudinal study, *Educational Evaluation and Policy Analysis*, 24(2), pp. 81–112.
- Dinham, S., and Scott, C. (1998) A three domain model of teacher and school executive career satisfaction, *Journal of Educational Administration*, 36(4), pp. 362–378.
- Duffy, R. D., and Lent, R. W. (2009) Test of a social cognitive model of work satisfaction in teachers, *Journal of Vocational Behavior*, 75, pp. 212–223.
- Faragher, E. B., Cass, M., and Cooper, C. L. (2005) The relationship between job satisfaction and health: a meta-analysis, *Occupational & Environmental Medicine*, 62, pp. 105–112.
- Friedman, I.A. and Kass, E. (2002) Teacher self-efficacy: a classroom-organization conceptualization, *Teaching and Teacher Education*, 18, pp. 675–686.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., and Yoon, K. S. (2001) What makes professional development effective? Results from a national sample of teachers, *American Educational Research Journal*, 38(4), pp. 915–945.
- Goffee, R., and Jones, G. (1996) What holds the modern company together? *Harvard Business Review*, 74(6), p. 133.
- Greene, R. W., Abidin, R. R., and Kmetz, C. (1997) The index of teaching stress: a measure of student-teacher compatibility, *Journal of School Psychology*, 35(3), pp. 239–259.
- Hawley, W. D., and Valli, L. (1999) The essentials of effective professional development: a new consensus, in L. Darling-Hammond and G. Sykes (Eds.), *Teaching as the learning profession: handbook of policy and practice*, (The Jossey-Bass education series), pp. 127-150.
- Higgs, M., and Rowland, D. (2005) All changes great and small: exploring approaches to change and its leadership, *Journal of Change Management*, 5(2), pp. 121–151.
- Huang, S. L., and Waxman, H. C. (2009) The association of school environment to student teachers' satisfaction and teaching commitment, *Teaching and Teacher Education*, 25(2), pp. 235–243.

- Ichino, A, and Tabellini, G. (2014) Freeing the Italian school system, *Labour Economics*, in press – Available on line 1 June 2014: <http://www.sciencedirect.com/science/article/pii/S0927537114000736>. DOI: 10.1016/j.labeco.2014.05.009
- Jex, S. M., Bliese, P. D., Buzzell, S., and Primeau, J. (2001) The impact of self-efficacy on stressor-strain relations: coping style as an explanatory mechanism. *Journal of Applied Psychology*, 86(3), pp. 401–409.
- Johnson S., Cooper C., Cartwright S., Donald I., Taylor P., and Millet C. (.2005), The experience of work-related stress across occupations, *Journal of Managerial Psychology*, 20(2), 178-187.
- Judge, T. A., Locke, E. A., Durham, C. C., and Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: the role of core evaluations. *Journal of Applied Psychology*, 83, pp. 17–34.
- Judge, T. A., and Bono, J. E. (2001) Relationship of core self-evaluation 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*, 8, pp. 80–92.
- Judge, T. A., Bono, J. E., and Locke, E. A. (2000) Personality and job satisfaction: the mediating role of job characteristics, *Journal of Applied Psychology* 85(2), pp. 237–249.
- Kealey, K. A., Peterson, A. V., Gaul, M. A., and Dinh, K. T. (2000) Teacher training as a behavior change process: principles and results from a longitudinal study, *Health Education & Behavior*, 27(1), pp. 64–81.
- Klassen, R. M., and Chiu, M. M. (2010) Effects on teachers' self-efficacy and job satisfaction: teacher gender, years of experience, and job stress, *Journal of Educational Psychology*, 102, pp. 741–756.
- Kolb G.A. (1984) *Experiential learning* (New Jersey: Prentice Hall).
- Kovess-Masféty, V., Sevilla-Dedieu, C., Rios-Seidel, C., Nerrière, E., and Chee, C. C. (2006) Do teachers have more health problems? Results from a French cross-sectional survey, *BMC Public Health*, 6(1), p. 101.
- Krampen, G. (1988) Competence and control orientations as predictors of test anxiety in students. *Anxiety Research*, 1, pp. 185–197.
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19, pp. 192–207.
- Lazarus, R. S., and Folkman, S. (1984) *Stress appraisal and coping* (New York: Springer).
- Leiter, M. P. (1992) Burnout as a crisis in self-efficacy: conceptual and practical implications, *Work and Stress*, 6, pp. 107–115.
- Lent, R. W., Nota, L., Soresi, S., Ginevra, M. C., Duffy, R. D., and Brown, S. D. (2011) Predicting the job and life satisfaction of Italian teachers: test of a social cognitive model, *Journal of Vocational Behavior*, 79(1), pp. 91–97.
- Locke, E. A. (1969). What is job satisfaction? *OB and Human Performance*, 4, pp 309–336.
- Locke, E. (1976) The nature and causes of job satisfaction, in M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (Chicago: Rand McNally), pp.1297–1349.
- Luthans, F., Zhu, W., and Avolio, B. J. (2006) The impact of efficacy on work attitudes across cultures, *Journal of World Business*, 41, pp. 121–132.
- Mankin, D. (2009) *Human resource development* (Oxford: Oxford University Press).
- Maslach, C., and Jackson, S. E. (1981). The measurement of experienced burnout, *Journal of Occupational Behavior*, 2, pp. 113–113.
- Miller, L. E., and Seltzer, J. (1991) The relationship between self-efficacy and burnout, *Journal of Health and Human Resources Administration*, 13(1), pp. 483–488.



- Moè, A., Pazzaglia, F., and Ronconi, L. (2010) When being able is not enough: the combined value of positive affect and self-efficacy for job satisfaction in teaching, *Teaching and Teacher Education*, 26, pp. 1145–1153.
- Moos, R. H., and Schaefer, J. A. (1993). Coping resources and processes: current concepts and measures, in L. Goldberger and S. Breznits (Eds.), *Handbook of stress: theoretical and clinical aspects*, 2nd ed. (New York: The Free Press), pp. 234–257.
- MoU MPO-MIUR 2012 - Memorandum of Understanding – Ministero per le Pari Opportunità (Ministry for the Equal Opportunities)-Ministero dell’Istruzione e delle Ricerca (MIUR: Ministry of Education, University and Research): [http://www.ricercainternazionale.miur.it/media/2977/protocollo-miur-dpo\\_eng.pdf](http://www.ricercainternazionale.miur.it/media/2977/protocollo-miur-dpo_eng.pdf)
- Muzio, D., Brock, D., and Suddaby, R. (2013) Professions and institutional change: towards an institutionalist sociology of the professions, *Journal of Management Studies*, 50(5), pp. 699–721.
- Nir, A. E., and Bogler, R. (2007) The antecedents of teacher satisfaction with professional development programs, *Teaching and Teacher Education*, 24(2), pp. 377–386.
- Opfer, V. D., and Pedder, D. (2011) Conceptualizing teacher professional learning, *Review of Educational Research*, 81(3), pp. 376–407.
- Perrewé, P. L., Hochwarter, W. A., Rossi, A. M., Wallace, A., Maignan, I., Castro, S. L., ... and Van Deusen, C. A. (2002). Are work stress relationships universal? A nine-region examination of role stressors, general self-efficacy, and burnout. *Journal of International Management*, 8(2), pp. 163–187.
- Pithers, R. T., and Fogarty, G. J. (1995) Occupational stress among vocational teachers, *British Journal of Educational Psychology*, 65(1), pp. 3–14.
- Prick, L. G. M. (1989) Satisfaction and stress among teachers, *International Journal of Educational Research*, 13(4), pp. 363–377.
- Putnam, R. T., and Borko, H. (2000) What do new views of knowledge and thinking have to say about research on teacher learning?, *Educational Researcher*, pp 4–15.
- Ritvanen, T., Louhevaara, V., Helin, P., Väisänen, S., and Hänninen, O. (2006) Responses of the autonomic nervous system during periods of perceived high and low work stress in younger and older female teachers, *Applied Ergonomics*, 37(3), pp. 311–318.
- Russell, D. W., Altmaier, E., and Van Velzen, D. (1987) Job-related stress, social support, and burnout among classroom teachers, *Journal of Applied Psychology*, 72(2), p. 269.
- Scheopner, A. (2010) Irreconcilable differences: teacher attrition in public and Catholic schools, *Educational Research Review*, 5, pp. 261–277.
- Selye, H. (1956) *The stress of life* (New York, NY: McGraw-Hill).
- Shimizu, T., Mizoue, T., Kubota, S., Mishima, N., and Nagata, S. (2003) Relationship between burnout and communication skill training among Japanese hospital nurses: a pilot study, *Journal of occupational health*, 45(3), pp. 185-190.
- Silberman, M., and Auerbach, C. A. (2006) *Active training: a handbook of techniques, designs case examples, and tips*. (San Francisco, CA: Jossey-Bass/Pfeiffer).
- Silberman, M., and Auerbach, C. (2011) *Active training: A handbook of techniques, designs, case examples, and tips* (Vol. 13), (San Francisco, CA: John Wiley & Sons, Inc.).
- Smith, M., and Bourke, S. (1992) Teacher stress: examining a model based on context, workload, and satisfaction, *Teaching and Teacher Education*, 8, pp. 31–46.
- Somech, A., and Drach-Zahavy, A. (2000) Understanding extra-role behavior in schools: the relationships between job satisfaction, sense of efficacy, and teachers’ extra-role behavior, *Teaching and Teacher Education*, 16, pp. 649–659.
- Spector, P. E. (1997) *Job satisfaction: application, assessment, causes, and consequences* (Thousand Oaks, CA: Sage).

- Tschannen-Moran, A. and Woolfolk-Hoy, W. K. (2001) Teacher efficacy: capturing an elusive construct, *Teaching and Teacher Education*, 17(7), pp. 783–805.
- Van der Klink, J. J., Blonk, R. W., Schene, A. H., and Van Dijk, F. J. (2001) The benefits of interventions for work-related stress, *American Journal of Public Health*, 91(2), p. 270.
- Wayne, A. J., Yoon, K. S., Zhu, P., Cronen, S., and Garet, M. S. (2008) Experimenting with teacher professional development: motives and methods, *Educational Researcher*, 37(8), pp. 469–479.
- Whyte, W. F. (1991) *Social theory for action: How individuals and organizations learn to change* (Thousand Oaks, CA: Sage Publications, Inc.).
- Wilson, J. P., and Beard, C. (2003) The learning combination lock: an experiential approach to learning design, *Journal of European Industrial Training*, pp.88–97.