WORK STRESS, LEADERSHIP AND ORGANIZATIONAL HEALTH

José M. Peiró* and Isabel Rodríguez**

*UIPOT. University of Valencia and IVIE. ** UIPOT. University of Valencia

The aim of this article is to analyze the role of leadership for promoting work and organizational wellbeing and health at the individual and collective (work unit, company) levels, paying particular attention to psychosocial factors, such as work stress. We shall discuss research carried out in the Work and Organizational Psychology Unit at the University of Valencia (www.uv.es/uipot), referring to additional studies where necessary. The second section of the article will focus on recent trends in work stress conceptualization and recent theoretical models, whose analysis will reveal new perspectives for promoting the prevention of stress at work. In the third section we shall review the multiple roles individual leadership can play in stress. The fourth section will concentrate on the role of leadership in stress from a multi- and-cross-level approach. The fifth section will briefly analyze shared leadership and its implications for work stress, while in a final section we shall consider the implications of the available empirical evidence and knowledge for the assessment of leadership and intervention in the context of the analysis and prevention of psychosocial risks in organizations.
Key words: work stress, leadership, wellbeing, occupational health, psychosocial risks.

El presente trabajo pretende analizar el papel del liderazgo en la promoción del bienestar y la salud organizacional y laboral a nivel individual y colectivo (unidad de trabajo y empresa), prestando especial atención a los factores psicosociales, como el estrés laboral. Nos centraremos en la investigación llevada a cabo en la Unidad de Investigación de Psicología de las Organizaciones y del Trabajo (UIPOT) de la Universidad de Valencia (www.uv.es/uipot) presentando trabajos adicionales cuando se considere oportuno. Para ello, la segunda sección del artículo se centrará en las recientes tendencias sobre la conceptualización del estrés laboral así como en los recientes modelos teóricos; su análisis proporcionará nuevas perspectivas que ayuden a promover la prevención del estrés en el trabajo. En la tercera sección, se revisan los múltiples roles que el liderazgo puede jugar en el estrés laboral, a nivel individual. La cuarta sección se centrará en el papel que juega el liderazgo en el estrés desde una aproximación multi- y trans-nivel. La quinta sección analiza brevemente el liderazgo compartido y sus implicaciones para el estrés laboral, y la sección final considera las implicaciones de la evidencia empírica y el conocimiento disponibles para la evaluación del liderazgo y la intervención en el contexto del análisis y prevención de los riesgos psicosociales en las organizaciones.
Palabras clave: estrés laboral, liderazgo, bienestar, salud ocupacional, riesgos psicosociales.

INTRODUCTION

Globalization, new technologies and socioeconomic and sociopolitical changes are having a clear but complex effect on labour markets, on work and on organizations. Companies are adopting new forms and using diverse strategies to respond to such changes, maintaining and increasing their capacity to compete and adapting to the new demands of their environment, ever more complex and global. Changes in companies, combined with those deriving from new technologies, markets, value systems and demographic alterations of the workforce are bringing about substantial transformations in the world of work. Mental work and emotional work, job flexibility, more frequent and more complex social interactions with large numbers of people (co-workers, suppliers, clients, etc.), tele-work, new management systems that

seek to increase efficiency and new relationships between employees and employer are some of the characteristics shaping new types of jobs, work systems and labour markets.

Changes of this kind can have clear implications and consequences for workers' health and wellbeing, and have significant effects on the health and efficacy of organizations. Companies are becoming increasingly aware that part of their social corporate responsibility involves promoting health and improving the workplace context. Moreover, there is evidence that such healthy and positive environments benefit companies and improve their results.

Nevertheless, many indicators (sickness absenteeism, accidents at work, low performance, conflicts, etc.) suggest that the situation with regard to the development of healthy organizations and the promotion of health in the workplace is not as positive as it should be, and that therefore it is important for government policies and legislation, as well as public and private initiatives, to contribute to the promotion of health in companies. Moreover, companies themselves must develop health and safety policies and practices and promote

Correspondence: José M. Peiró. Departamento de Psicología Social. Facultad de Psicología. Universidad de Valencia. Avda. Blasco Ibáñez, 21. 46010 Valencia. España.
E-mail: Jose.M.Peiro@uv.es

improvements in work systems and working conditions. With regard to such objectives, management plays an important role in directing processes of change and promoting health in the workplace.

The aim of the present article is to analyze the role of leadership in the promotion of work and organizational health and wellbeing at both the individual and the collective (work unit and company) levels, paying special attention to psychosocial factors, such as work stress. We shall concentrate on research carried out at the Work and Organizational Psychology Unit (*Unidad de Investigación de Psicología de las Organizaciones y del Trabajo*, UIPOT), referring to additional studies where appropriate. With this aim, in the second section of this article we shall focus on recent trends in the conceptualization of work stress, and on recent theoretical models. In the third section, we shall review the multiple roles leadership can play in work stress, considering mainly the individual level. In the fourth section, we shall focus our review on the role of leadership in stress from a multi- and cross-level approach. The fifth section includes a brief analysis of shared leadership and its implications for work stress. Finally, we shall consider the implications of the empirical evidence and knowledge available for the assessment of leadership in organizations, as well as intervention in the context of the analysis and prevention of psychosocial risks in organizations.

CONCEPTUALIZATION OF WORK STRESS
Various forms of conceptualizing work stress have shown themselves to be useful for understanding such a complex set of phenomena. However, all the approaches proposed are partial, and have overlooked relevant aspects. Therefore, in order to obtain a more comprehensive picture of stress it is important to take into account various theoretical models that approach it from different angles.

The classical approach: Work stress as a lack of fit
Work stress has commonly been considered as a person's subjective experience resulting from the perception of excessive or threatening demands difficult to control that may have negative consequences for him or her. Such negative consequences for the person are called *strain*, and the sources of stress experiences referred to above, *stressors*. The analysis of stressors is of the utmost importance in the process of the prevention and control of work stress. Stressors are the stimuli that trigger stress-strain experiences. They have been conceptualized in different ways.

From a dimensional definition, authors have taken into account dimensions such as frequency of occurrence, intensity, duration and predictability (Pratt & Barling, 1988). In fact, the combination of these dimensions gives rise to several categories of stressors that are useful for their analysis, prevention and

control. The authors cited above have identified the following categories: acute, chronic, daily, and catastrophic or disastrous. Based on the content analysis of work stressors, Peiró (1999a) reviewed the most important stressors and identified 8 categories: 1) those related to the physical environment, environmental risks and working conditions (noise, temperature, available space, etc.); 2) devoted to work organization (shifts, workload, etc.); 3) focused on job content, such as control, complexity, opportunities to use skills, task identity and meaning, task feedback, etc.; 4) devoted to role stressors (role conflict, role ambiguity, role overload, etc.); 5) all the stressors deriving from social relations and interactions (relations with supervisors, co-workers, subordinates, clients, etc.); 6) devoted to aspects of job development, such as change of job, promotion, and career development and transitions; 7) related to the characteristics of the organization, such as the technology that must be used, the structure of the organization or its social climate; and 8) related to the interface between work and other spheres of life as a source of stress (work-family and family-work conflict, etc.).

Some theoretical models have attempted to identify not only the content of stressors but also the process through which certain environmental (external) or personal (internal) characteristics become stressful for someone. A widely accepted answer to this question is that provided by Karasek (1979). From this author's point of view, what makes a condition or situation stressful is the person's lack of control for coping with high demands, normally deriving from the work environment. The Demands-Control model suggests that the source of stress is in the discrepancy between demands and the person's control, or decision latitude, for dealing with such demands. Demerouti, Bakker, Nachreiner and Schaufeli (2001) have formulated a similar model, which extends the notion of control to that of "resource". In this model resources are considered not only at the job level, but also at the group or organizational level.

Warr (1987) presented another model to explain what constitutes a stressor. His Vitamin Model distinguishes nine types of stressor: lack of control, lack of opportunity for use of skills, external generation of goals, lack of variety, environmental uncertainty, low availability of money, lack of physical security, lack of interpersonal contact and poorly-rated social position. Warr groups these stressors in two broad categories: 1) those that are similar to vitamins B and C, in that scarcity of these characteristics produces stress, whilst large quantities do not have negative effects (e.g., availability of money); and 2) those that are similar to vitamins A and D, which have negative effects both if they are scarce and if they are excessively present (e.g., variety of work). It is interesting to note that the notion of fit is also the key concept of this theory. Wellbeing is related to the degree of fit between the amount of the work characteristics in question and those the person requires, bearing in mind that the

quantity required and the acceptable threshold may vary from person to person according to certain personal and environmental characteristics.

The AMIGO model: A comprehensive and contextualized approach to work stress.

Recently, a contextualized approach to work stress has been proposed, with a view to broadening and redefining the contexts and content of work stressors. In the new and ever-changing context in which organizations operate, and given emerging types of work, it is important to bear in mind phenomena such as: 1) Human resources policies and practices; 2) structural changes, such as mergers, takeovers, privatization, downsizing, or relocation; 3) the flexibility of organizations in their different forms (numerical, contractual, functional, geographical, etc.) and job insecurity; 4) the new careers, as well as new types of career management and perspectives; 5) reconciliation and balance between work and other spheres of life; 6) stressors related to loss of status and to social demands; and 7) cross-cultural phenomena.

In order to provide a framework for the study of work stress, we have developed a comprehensive model that helps to identify and draw up a taxonomy of stressors which takes into account not only stressors at the work level but also those at the strategic level of the organization, and stressors that emerge at the interface between the organization and its environment. The AMIGO model (Analysis, Management and Intervention Guidelines for Organizations) (Peiró, 1999b; 2000; Peiró & Martínez-Tur, 2008) is a conceptual model for organizational analysis, intervention and management that aids understanding of the facets and functioning of organizations, and which serves as a guide for organizational change. The different facets considered in the model describe the organization in comprehensive fashion, and can be classified in five blocks as explained below. Each facet can contain several stressors that

should be analyzed in a comprehensive assessment of the psychosocial risks in an organization. The blocks of facets are as follows:

Strategic and paradigmatic facets. The first block corresponds to the paradigm of the organization, which includes its culture, mission and vision, and strategic facets related to the pressures and opportunities of the environment. It is important to stress that special attention is paid to anticipation of the future environment, since this is critical for the life of the organization and the development of its members. Also taken into account are the goods and services the organization aims to produce as the basic specification of its mission.

Hard facets. The second block includes four types of "hard" facets: economic resources and infrastructure; organizational structure; technology; and work system. The work system is the critical facet in this block. It is defined as the set of procedures for designing, producing and selling the goods and services provided by the company, and for carrying out any other activity related to this purpose. The organization's technology, structure, infrastructure and material resources are assumed to contribute to the effective and efficient functioning of the work system.

Soft facets. The third block corresponds to four types of "soft" organizational facets": communication and climate; human resources management policies and practices; organizational management; and human capital (persons and groups). In a parallel way to the case of the previous block, here human capital is the central facet. The rest of the facets should contribute to its better performance and development.

Integration facets. These involve two critical alignments in organizations. On the one hand, the alignment between human capital (persons and groups) and the organization's work system. Given that the characteristics of persons are critical, this alignment is essential for the production of goods and services, the achievement of the organization's goals, and the fulfilment of its mission. On the other hand, the psychological contract describes the mutual expectations and promises between employees and employers in relation to working conditions, performance and other transactional and relational aspects. The psychological contract plays an important role, extending the notion of dynamic fit between persons and teams and the work system to the fit between people's expectations and values, human resources policies and practices, management styles, and many other facets of the organization. Promises and agreements between employers and employees (individual and collective) play an important role in the construction of the psychological contract, which is one of the key facets of the model, since it relates to the degree of integration between the organization and its members.

Organizational results. Organizational results can be divided into three categories: results for the supra-system (results for

society in general, clients, etc.), for the system (results related to the survival, improvement and development of the organization as a system), and for sub-systems (compensation, satisfaction of interests and development of persons and groups). Moreover, these results must be considered in both the short and the long term, and it is important for there to be a balance, so that the attainment of some does not impede or hinder the attainment of others.

This multi-facet model has shown itself to be useful for identifying the psychosocial risks and stressors of the different facets of the model that can affect workers' wellbeing and health. On the basis of this model we have developed the "Prevenlab-Psicosocial" organizational check-up tool for the diagnosis of psychosocial risks in organizations, focusing on the principal characteristics of each facet considered in the model (Peiró, 2006).

Recent theoretical approaches to work stress

Although the concept of fit between the person and the relevant characteristics of their work environment is important for understanding stress, it is not sufficiently comprehensive for interpreting the emergent phenomena in the field of work and organizations. Other issues, such as the complex dynamics of exchange between the parties involved in the work context, deserve attention. Thus, it is important to understand the balance in the exchange between employees and company, or between the different actors in the work environment. In order to understand this balance, various social mechanisms and processes become relevant, such as social comparison (Buunk, Zurriaga, Peiró, Nauta & Gosálvez, 2005; Carmona, Buunk, Peiró, Rodríguez & Bravo, 2006), justice (Martínez-Tur, Moliner & Carbonell, 2003) and reciprocity. Justice models provide an interesting theoretical framework for embarking on the study of work stress and the results – both positive and negative – emerging from such experience (Cropanzano, Goldman and Benson, 2005; Moliner, Martínez-Tur, Peiró & Ramos, 2005). Thus, in addition to taking into account demands and abilities, and the degree of fit between the values and expectations of the person and those of the company, future research will have to analyze the complex dynamic of exchange between the parties.

In this regard, it is necessary to integrate research on power (Peiró & Meliá, 2003) and conflict (Munduate, Ganaza, Peiró & Euwema, 1999) in theoretical models aimed at improving the understanding of work stress in organizations. Power and conflict are complex phenomena with multiple functions in social systems. They are present not only at the interpersonal level but also at the social level, involving political manoeuvring. Such processes spread through organizations and play a significant role in the social processes involved in work stress.

The psychological contract and work stress

Psychological contract theory can contribute to a more contextualized analysis of stress (Gakovic & Tetrick, 2003; Rousseau, 2005). It revolves around the transaction between the employer and an employee or group of employees (Estreder, Ramos, Caballer & Carbonell, 2004). This contract starts out from the formulation by each party of a number of promises – explicit or implicit – about work behaviour and attitudes, which generate expectations in the other party. During the development of the relationship these promises can be kept or broken. If the promise made by one party is kept, the expectations of the other party are satisfied. If no promise is made about a certain action but the agent nevertheless performs that action, the other party may be positively surprised, and this generates positive feelings and assessments. However, if a promise made is not honoured, the expectations of the other party are not satisfied. When this promise-breaking is interpreted as something intentional, there emerges a sense of violation of the psychological contract, accompanied by irritation and frustration. This experience is significantly related to health and wellbeing (Gracia, Silla, Peiró & Fortes, 2006).

Likewise, it is important for both parties to perceive the exchange of promises and their fulfilment as just. It may occur that an employer does everything that was promised to an employee, but even so the employee feels that it is insufficient in comparison to what he/she has promised and done. Therefore, the perception of justice by both parties is an important component of the psychological contract that generates reciprocity and contributes to the emergence of trust. Indeed, the decision by each party to make itself vulnerable to the other party under the expectation that the other will not take unfair advantage of the fact is the key point of the relational contract. The relational contract is built on trust and looks toward the future. In contrast, when there is a lack of trust, the psychological contract becomes transactional and remains confined to present exchanges with no orientation to the future. Of course, this complex dynamic of exchange, as long as the employer-employee relations last, has clear implications for the health and wellbeing of the participants, so that disappointment or frustration due to violation of the psychological contract or the perception of injustice in transactions are antecedents of risk of health deterioration.

Thus, the analysis and prevention of psychosocial risks must take into account the promises made and the fulfilment of expectations, as well as reciprocity and justice in employer-employee relations. Interventions that set out to improve the work situation must consider that the objective is not only the person but also his or her context, including the other people who interact in the same situation. The building of mutual trust between employer and employees, and between employees themselves, is an important aspect in the promotion of effective interventions.

LEADERSHIP IN ORGANIZATIONS AND WORK STRESS

Leadership is an important concept for understanding work and organizational behaviour. This concept, principally when considered as formal leadership, has often been associated with that of management and with the hierarchical line in organizations. Managers, especially when they fulfil a function of leadership, play a central role in organizations and can influence the behaviours and health both of organizations and of their subordinates (Britt, Davison, Bliese & Castro, 2004). Therefore, it is important to analyze in more depth the relations between leadership (especially formal leadership) and work stress in organizations. The literature has dealt with this aspect, and has distinguished different types of relations between leadership and stress and health in the work context.

The leader's behaviours as predictors of strain and wellbeing

It has been argued that the supervisor-subordinate relationship is one of the commonest sources of stress in organizations (Tepper, 2000). The behaviour of the leader, when it is inappropriate, can be abusive and exhausting and become a significant source of stress that contributes to the emergence of negative experiences in employees and prejudices their wellbeing. In this regard, Tepper (2000) pointed out that employees who perceive their supervisors as abusive present low levels of job and general satisfaction, lower levels of affective commitment, greater psychological distress and higher levels of work-family conflict. In more serious situations, such as those of psychological harassment, managers and supervisors who behave in this way become important stressors for the victims. In other circumstances, poor, autocratic and/or authoritarian leadership can result in others committing psychological harassment and contributing to the generation of a climate in which it is more likely to occur (Ashford, 1994; Peiró, 2004).
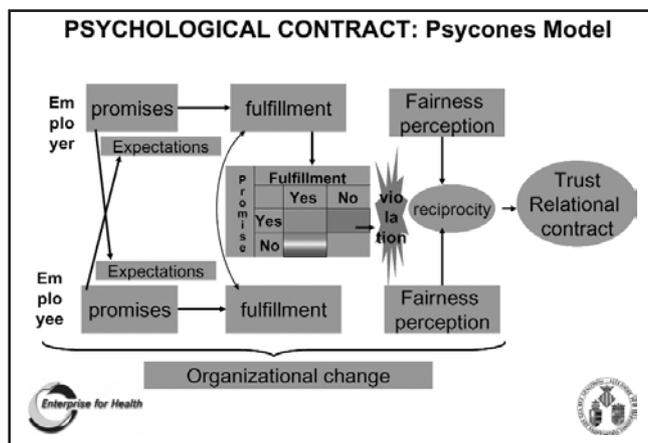
In the majority of studies the relationship with the supervisor has been operationalized in terms of social support. Lack of

support from the supervisor is negatively related to wellbeing in the work context. In a qualitative study, Peiró, Zurriaga and González-Romá (2002) held a focus group discussion with 8 teams of social workers and found that social support of leaders was perceived as a form of reducing strain. In a study with a sample of 1000 public health employees, supportive leadership presented a significant negative relationship with propensity to leave the organization and the work unit (Schaufeli, González-Romá, Peiró, Geurts & Tomás, 2005). Finally, it was found that social support from the supervisor was related negatively and significantly to burnout (Gil-Monte & Peiró, 2000). Other leadership behaviours also play a role in supervisors' contribution to the stress and wellbeing of their subordinates.

Studies based on theoretical models of leadership have also analyzed the relationship between leadership, as conceptualized in the model, and the wellbeing of their followers. Such studies normally describe the positive side of the relation, but it can be inferred that the lack of this positive characteristic of leadership has a negative impact on wellbeing and health. A widely studied model is that of the University of Ohio, originally formulated by Halpin and Winer (1957). This model distinguishes two main types of leadership behaviour: consideration and initiation of structure. In a study with 432 primary healthcare professionals, grouped in 43 teams, Peiró, González-Romá, Ripoll and Gracia (2001) found that leaders' behaviour oriented towards structure initiation had a positive influence on job satisfaction and an indirect effect on work strain mediated by the reduction of perceptions of role ambiguity. In another study with 155 nursing staff and 127 primary healthcare medical professionals, both leadership measures (behaviours of consideration and of initiation of structure) showed significant correlations with the facets of job satisfaction (Peiró, González-Romá, Ramos & Zornoza, 1996). Leadership styles are also related to burnout. Seltzer and Numerof (1986) found that people who rated their supervisors highly in consideration also presented low burnout, a similar relation being found with initiation of structure.

One seminal theory in research on the leadership-strain relationship is that of leader-members exchange (LMX). According to this theory, the quality of the leader-member interaction can vary from one vertical dyad to another, so that in one group some members may belong to the in-group, close to the leader, whilst others belong to the out-group, with poor perceptions of the interaction. Tordera, Peiró, González-Romá, Fortes-Ferreira and Mañas (2006) found that quality of the LMX relation influenced psychological wellbeing. In a longitudinal study, with 119 non-supervisor employees, they found significant concurrent and delayed (12 months later) correlations between the LMX relation and the variables enthusiastic-depressed, energetic-tired and anxious-relaxed.

In sum, from the different perspectives of leadership, the

relationship between leaders' behaviour and strain in subordinates has been well established. However, leadership can contribute to other forms of subordinates' wellbeing.

Behaviour of the leader as an antecedent of other stressors

As pointed out in the previous section, leadership practices and behaviours can be stressors in themselves. However, leaders may also influence other stressors which, in turn, can affect the wellbeing and strain of employees (Kelloway, Sivanathan, Francis & Barling, 2004). Indeed, leaders can create and contribute to the production of stressful work conditions, such as an increase in role stress, by making excessive or ambiguous demands of their subordinates. They can also generate perceptions of injustice due to their practices related to rewards or performance assessment, the way in which they use recognition among their employees or the decisions they make in the workplace. Thus, ineffective leadership can contribute seriously to damaging employees' health and wellbeing. In contrast, effective leadership is a key factor in the maintenance of healthy organizations and workers. If leaders are competent they can improve the work environment, the organization of the work and the social context, taking into account the individual characteristics of their employees, and thus contribute to the employees' wellbeing.

The studies carried out with the University of Ohio leadership model have found that consideration and initiation of structure behaviours contribute to the experience of role stress. In fact, in the study mentioned above, Peiró et al. (2001) found leaders' initiation of structure behaviour and influence on decision-making to have a significant positive impact on role clarity, though influence on role conflict was not statistically significant. In another study, also referred to above, with nursing staff and primary healthcare medical professionals, both leadership measures (consideration and initiation of structure behaviours) showed significant correlations with role clarity. Moreover, leaders' initiation of structure showed a significant correlation with role conflict in both samples, and with work strain in the medical personnel sample (Peiró et al., 1996).

Research on the LMX theory has shown that quality of the leader-members relation influences role stressors and is related to health and wellbeing. Tordera, González-Romá and Peiró (2008) have found that employees who report high quality in the LMX relationship tend to show lower levels of role overload. Using non-linear models, Harris and Kacmar (2006) found the relation between LMX and stress to be curvilinear. People who report a high-quality LMX relation with their supervisors experience more stress than their co-workers with a moderate-quality relation. This may be due to the extra pressure experienced by subordinates with high-quality LMX relations to reduce their feelings of obligation and fulfil their superiors' expectations.

Leader's behaviour as a moderator of stress-strain relations

The leader's behaviours also play a moderating role in many relations between stressors and strain and lack of wellbeing in employees. Indeed, leaders' positive behaviours often have a buffering effect on these relations. This buffering effect has been widely studied with respect to leader's social support, and there is substantial evidence showing the role played by the different types of support (material, informative, emotional, etc.) as a strategy for coping with stress (Peiró & Salvador, 1993). Furthermore, the congruence hypothesis suggests that the support received is more effective when it comes from the same context as the stressor. Thus, the supervisors are an exceptional source of support, since they can often provide it in the same context in which the stressor emerges (e.g., role stress, workload, performance assessment).

In a longitudinal study with 3895 employees in private industry, Väänänen et al. (2003) found that support from the supervisor moderated the effect of job autonomy on sick leave among men. Moreover, supervisor support considerably reduced the effect of scarce job complexity on the number of long periods of sick leave among men. Also in men, support from co-workers and supervisor support moderated the effect of physical symptoms on long periods of sick leave: when there was a low level of physical symptoms, social support from both sources reduced the long periods of leave, but a similar pattern was observed when physical symptoms were very serious, indicating relations in the form of an inverted U.

Tordera et al. (2006) found a moderating effect of leadership in the relation between different facets of the climate and various indicators of emotional wellbeing. Interestingly, high quality of the LMX relation enhances the concurrent positive effects of a climate of innovation on enthusiasm and energy, and the delayed effects on experiences of relaxation. On the other hand, it reduces concurrent positive relations between goal-oriented climate in organizations and enthusiasm and energy, and also delayed relations with experiences of relaxation.

In sum, the behaviours and practices of leaders play an important role, whether it be to buffer or to strengthen the effects of different stressors on employees' wellbeing. In fact, leaders often play a pivotal role between their employees and the organization or clients. In this pivotal role they fulfil various functions, such as representation, sensor, filtering and "translating" information, buffering impacts, negotiating and transacting. All of these functions can contribute to buffer the negative experience or, in contrast, exacerbating it when they are not performed appropriately (Richter, West, Van Dick & Dawson, 2006). In the following section we shall analyze the role of leaders as generators of positive resources that contribute to preventing stress in a proactive fashion.

73

Leaders' behaviours as resources for preventing stress and promoting health

In the context of the prevention of psychosocial risks, the conceptualization of stress should not be confined to a consideration of distress. In recent years, from the perspective of Positive Psychology (Seligman & Csikszentmihalyi, 2000) there has emerged a more positive approach to stress (Peiró, 2008). *Eustress* has been defined as "a positive psychological response to a stressor, indicated by the presence of positive psychological states" (Nelson & Simmons, 2004, p. 292). Such positive experiences are more likely to occur when demands are viewed as challenges and opportunities rather than as threats. Naturally, for this to occur, leaders must play an important role in the process of generating both the conditions and the meaning of the situation. Such functions can be performed better if leadership is charismatic or transformational. Transformational leaders go beyond mere exchange relations, through idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass & Riggio, 2006). Several studies have shown that transformational leaders are capable of generating positive resources that contribute to controlling the distress and increasing the eustress of their subordinates. Schultz, Greenley and Brown (1995), using a composite measure of transactional and transformational leadership, found leadership to contribute to goal congruence, job clarity and job satisfaction, and thus indirectly to reducing burnout. Furthermore, trust is clearly related to mental health (Harvey, Kelloway & Duncan-Leiper, 2003), and transformational leadership has been positively associated with trust in several studies (Jung & Avolio, 2000). All the evidence reviewed shows that transformational leadership generates new resources and/or improves existing resources for promoting the wellbeing of employees. It also influences workers' beliefs and interpretations about the meaning of work, which again have a beneficial effect on wellbeing. Through this generation of resources and processes of reinterpretation, transformational leadership contributes to proactive coping. Several authors have shown how proactive coping revolves around immediate challenges that can create opportunities for growth (Schwarzer & Knoll, 2003). In this context, charismatic and transformational leadership can constitute an important resource for promoting proactive coping and growth opportunities.

However, not everything related to transformational leadership is positive. Various authors have pointed out how strategies employed by charismatic and transformational leaders can be manipulative and self-serving, or motivated by interests. Thus, research has distinguished authentic transformational leaders from those with agendas based more on interests. The authentic transformational leader strives to do what is right and fair for all interested parties in the organization, and can willingly sacrifice his or her own interests for the collective good of the team or

organization (Michie & Gootie, 2005). It is particularly important to explore this aspect further with a view to promoting transformational leadership as a strategy for improving wellbeing and creating new opportunities for eustress and personal growth in employees.

A MULTI- AND CROSS-LEVEL ANALYSIS OF LEADER-STRESS RELATIONSHIPS IN ORGANIZATIONS

Work and organizations are social realities immersed in phenomena with different levels of complexity. Some of these phenomena may occur at the individual level, involving individual psychological behaviours and processes. Others take place at a collective level (group or organization). Moreover, phenomena from one level may – and indeed often do – influence other phenomena from another level. Within this framework, Klein and Kozlowski (2000) argued that the approach based on levels together with micro and macro (collective) perspectives gives rise to a more integrated science of organizations.

In recent years, research has begun to explore collective stress in work units and organizations (Peiró, 2001). The analysis of work stress from an individual perspective takes into account aspects such as the discrepancy between demands and resources or available control, the person's appraisal of the situation, the emotions experienced, and the coping strategies used. However, it does not consider aspects such as the way this experience is shared by the members of the same work unit. Therefore, a collective and cross-level analysis of work stress is needed so as to provide a better understanding of stress in social systems such as organizations. Our own Research Unit (UIPOT) has launched a research programme that sets out to explore the different components of work stress with an approach that is both multi-level and cross-level in nature. The model assumes that the different components of stress (appraisal, emotions and coping) should be considered not only as individual phenomena, but also as collective ones whose emerging processes and properties are equally worthy of study (see Figure 1). A review of the conceptualization and principal themes of research has been presented in Peiró (2008).

In the present section we shall focus on the role of leadership in these phenomena. In this context, transformational leadership is especially important, since through the creation of meaning, through vision and through inspiration, leaders can influence the way in which members of the work unit shape their shared points of view of a given climate as threatening or as challenging. Moreover, these shared perceptions, together with the leader's emotions, can generate collective and shared affects and emotions in the group or organization through interaction or processes of contagion. Finally, charismatic and transformational leadership also influences the generation of collective coping strategies for

dealing with collective stress. Therefore, a collective analysis of stress and leadership is essential for obtaining a comprehensive picture of work stress and the strategies for preventing it and controlling it.

Appraisal of collective stress and leadership

The appraisal of stress is the first subjective stage of the stress experience. Under certain conditions, a group of people may develop shared perceptions of a situation, and may interpret it as threatening or as challenging and beneficial, so that a collective experience of stress emerges. This was the case in three independent divisions of a company in which collective properties of stress experiences were identified using the qualitative methodology of grounded theory Länsisalmi, Peiró & Kivimäki, 2000; 2004). It is interesting to note that when these stress experiences emerge they become a holistic property that cannot be reduced to its lower-order elements, though it does have an influence on them. Shared appraisal may be generated through different processes, and leadership can be considered as an important one of these. Leadership qualities such as the creation of meaning and charisma can shape group members' perceptions. Leaders' own perceptions of work stress can influence the stress experiences of group members.

In a study carried out with healthcare teams, Peiró and González-Roma (2003a) found that more than 80% of the 142 healthcare teams studied presented shared experiences and perception in relation to work stress. Moreover, the leader's stress predicted positively and significantly the mean stress level of group members. However, contrary to expectations, this relationship was not moderated by frequency of the interaction between the leader and group members. Britt et al. (2004) report that "through behaviours addressed to the unit as a whole, leaders can create a shared sense of social reality among subordinates (shared sense of value, mission and priorities). This shared sense of social reality has both direct and indirect effects on the wellbeing of soldiers". (p.542). In sum, research results suggest that leadership contributes to the formation of the stress climate in the work unit.

Leadership and the emotional and affective climate of work units
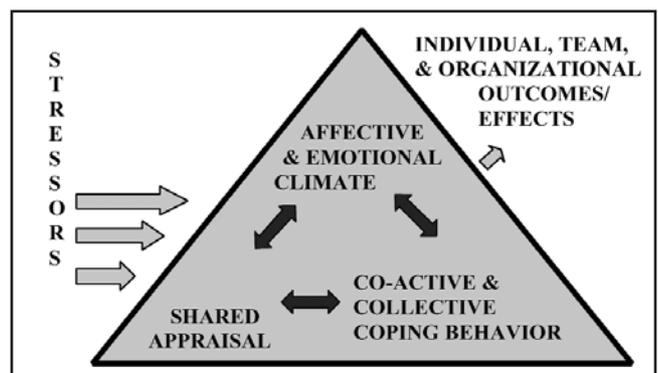
When groups share stress experiences, it is likely that their members will tend to express similar emotions, which gives rise to an emotional climate in the work unit. Recently, various authors have explored these phenomena. George (1996) described them as "group affective tone," while De Rivera (1992) spoke of "emotional climate". The latter author stressed how emotional climate is conceived as an objective fact, even though socially constructed, and can be considered as a subjective construct (emotions are in people's minds) as well as

an objective one (they are shared and manifested as collective forms of behaviour). González-Romá, Peiró, Subirats and Mañas (2000) provided empirical support for the validity of what they called the "affective climate of the work team". González-Morales, Peiró, Rodríguez and Bliese (2005) found empirical evidence, in a sample of 555 teachers in 100 schools, supporting the existence of shared burnout in these institutions.

Shared emotions can emerge due to the members of the work unit perceiving the climate of the unit in a similar way. When a collective experience of stress emerges, it can give rise to behavioural and emotional processes that may also become collective. In a recent study carried out with a sample of 156 bank branches, Gamero, González-Romá and Peiró (2008) found that the work units experiencing the highest levels of task conflict presented the most negative affective climate; moreover, this relationship was mediated by relational conflict.

As occurred with the shared appraisal of stress, leadership can also play an important role in the formation of emotional climates. George (1996), based on the results of her own research, reported that "leaders who feel excited, enthusiastic, and energetic themselves are likely to similarly energize their followers, as are the leaders who feel distressed and hostile likely to negatively activate their followers" (p.84). Tordera, González-Romá, Mañas and Ramos (1999), in a study of the quality of the LMX interaction in work units, found that the quality of leadership behaviour at the work unit level is positively and significantly related to the affective climate of the team, operationalized as satisfaction shared among the team members. Likewise, González-Roma, Peiró and Tordera (2002) found that the informative behaviour of leaders, as perceived by the members of 197 work units in the public healthcare sector, was positively and significantly correlated with team members' job satisfaction and organizational commitment. Finally, Potocnik, Tordera, Peiró and González-Roma (2007) found the LMX interaction of the unit to be positively and significantly related to the wellbeing of the unit and negatively related to propensity, at the work unit level, to leave the team.

Given these results, it is important to identify the mechanisms through which leaders influence the shared emotions and

affective climates of their teams. A basic mechanism is the interaction between leaders and the members of their work unit. Moreover, emotional contagion (both conscious and unconscious), can also play an important role in this process. Peiró and González-Romá (2003b) found a positive and significant relationship between leaders' burnout and the mean burnout level of the members of their work unit. This relationship was in fact moderated by the frequency of interaction resulting from work activity. When interaction was high, the relationship between leaders' burnout and mean burnout of their team members was stronger than in situations with less frequent interactions. In another study, Westman and Etzion (1999) analyzed the contagion of strain from school principals to teachers, and vice versa. They found an effect of direct contagion of work-induced strain between principals and teachers in both directions. These authors explain such processes as follows: "people who share the same environment may experience a similar level of stress to begin with, but once they express a strain, such as anxiety or panic, a 'ping-pong' dynamic sets in that elevates everybody's reaction to the stressful situation. Thus, a supervisor's behavior may be a source of stress to many individuals in the organization, whose stress may in turn not only boomerang back to the supervisors but also start the ping-pong reaction among her or his group of subordinates," (p.277) creating a "climate of strain".

The role of leadership in co-active and collective coping with work stress

In the paradigm inherited from research on stress, coping has been studied almost exclusively from an individualistic perspective, on the assumption that people function in a fairly independent way and decide for themselves how to manage stressors. However, in some cases individualistic approaches to coping in organizations may be ineffective, or even counter-productive, and collective coping strategies the only way of reducing work stress. In order to better understand collective coping, we can distinguish two different types (Peiró, 2008; Torkelson, Muhonen & Peiró, 2007): first, *co-active coping* occurs when the people in a work group or unit use similar individual forms of coping, due to social pressure, shared perceptions or beliefs or strategies of imitation when they see that others have obtained positive results from certain forms of coping. Leaders can contribute in a significant way to the development of co-active coping. They can produce convincing interpretations and reasons that persuade team members to use a given coping strategy for certain common stressors. Secondly, *collective coping* occurs when a group initiates actions for preventing, eliminating or reducing the stressful situation, for interpreting the situation in a more positive way, or for relieving its negative effects and consequences. Collective coping involves collective goals and actions of the members of the group. Group activities address the achievement of such goals, even when they incur individual costs. Once again, leaders can play an important role in these processes, promoting cooperation to cope with a collective stressful situation.

The study of co-active and collective coping is especially important in work environments in which the control of stressful events is not in people's hands in an individual way. Under certain conditions, only collective action can lead to effective control of stress. In a study with 100 schools, we found evidence that although individual and co-active coping in teachers was ineffective for reducing collective stress, the use of collective action, often initiated by school principals, effectively reduced individual and collective stress levels. Examples of such collective actions are the development of a common plan for dealing with bad pupil behaviour and the search for training to meet the demands of the introduction of new information technologies (Peiró, Rodríguez & Bravo, 2003).

Länsisalmi et al., (2000), in a qualitative study, found that the collective coping of the departments studied often involved supervisors and management. Also with a qualitative methodology, Torkelson et al. (2007), on analyzing stressors and strategies of collective coping, found that in some cases workers sought the support of management, whilst in others the collective strategies were addressed to putting pressure on management to improve conditions.

In sum, research to date has shown that leaders influence the stress and health of their subordinates not only at an individual level but also at the level of work units as a whole. First of all, they influence the social environment of the workplace at the group level and contribute to creating a shared sense of social reality among subordinates. But they can also influence the values and beliefs that contribute to generating a shared sense of value and mission. This shared interpretation of social realities has direct effects on shared emotions and affects, and is related to co-active and collective coping. Shared emotions and coping are also influenced directly by leadership. All of these processes, in turn, have direct and indirect effects on the wellbeing of subordinates, both individually and collectively.

SHARED LEADERSHIP AND ITS IMPLICATIONS FOR WORK STRESS AND HEALTH IN ORGANIZATIONS

Recently, various authors have challenged the traditional conceptions of leadership focused on the behaviour and actions of individual leaders. In doing so they have used the concept of "shared leadership" introduced by Yukl (1998) and defined as "a dynamic interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both" (Pearce & Conger, 2003, p. 1). The assessment of shared leadership implies a shift from the individual focus found in the majority of research on leadership. It is the group which, in a collective

fashion, performs leadership behaviours, and their assessment involves determining the extent to which the vision they represent is shared by the members of the group. At the same time, there appear to be various forms of shared leadership: 1) the leadership role flows from person to person as the team goes through different activities and stages; 2) there is little differentiation of the leadership role within the group, it being the group that carries out, in a collective way, the leadership behaviours; 3) the responsibilities of leadership are divided up among the group; 4) leadership is shared through lateral influence among the team members; or 5) influence can flow in any direction. Thus, in recent times new forms of leadership have emerged that require new conceptual models and empirical analyses. Indeed, shared leadership will be particularly critical in dealing with complex and interdependent tasks and with the creation of knowledge. There is some empirical evidence suggesting that shared leadership is a significant predictor of team effectiveness (Pearce & Sims, 2002). However, to the best of our knowledge, no studies have focused on the implications and consequences of shared leadership for the health and wellbeing of team members and for the teams in general. Given the importance of these new forms of leadership, this is a matter that demands inclusion on the research agenda for the immediate future.

IMPLICATIONS FOR THE ASSESSMENT OF THE LEADER, SURVEY FEEDBACK AND THE DEVELOPMENT OF LEADERSHIP

As stressed throughout this article, the transformations taking place in the context of a globalized economy and an information society are bringing about important changes in the world of work and organizations, and such changes are increasing the relevance of work stress and psychosocial risks in organizations to the promotion of health and wellbeing at work. Here we shall briefly consider the main implications of our review for the improvement of organizations.

New approaches and practical implications for risk-prevention interventions based on leadership actions

The richness of the conceptual models on work stress provides an extensive set of new approaches for interventions whose goal is the prevention and control of stress. In this context, the analysis of leadership in organizations merits attention, since it plays an important role in many relevant facets and processes of stress. Indeed, the theoretical models considered and the empirical evidence reviewed have shown that leadership is a complex concept involving a variety of facets and processes that are relevant to a clear understanding of the promotion of health and wellbeing of and in organizations.

On considering stress as an individual experience of the worker, the evidence reviewed has revealed the importance of leadership as a potential source of increases or reductions in stress. Likewise, leadership can influence other potential sources of stress for good or ill and, through them, can have a significant impact on the health and wellbeing of workers. Leadership can also play a moderating role, in the majority of cases with a buffering effect, but it may also strengthen the negative effects of stressors on strain in workers. Finally, leadership, especially when it is considered transformational, can generate resources for the pro-active prevention of worker stress. The empirical evidence available provides professionals and companies with a set of proposals for intervention and suggests several ways of preventing and controlling distress and promoting 'eustress' in organizations. For example, leaders should be aware that their management practices can influence perceptions of justice or fulfilment of the psychological contract and, through them, can improve or hamper the wellbeing and health of employees.

The leadership role becomes even more important if stress is considered at a collective level and multi- and cross-level relations are analyzed. Leadership can influence team members' perceptions and contribute to the formation of a more or less stressful climate in the organization. It can also influence shared perceptions of stress and the conceptualization of a climate as threatening or as challenging. Leadership contributes to this process through various mechanisms, such as the creation of meaning, formal and informal power, the socialization of members, the use of rewards, and various other practices. Leaders fulfil the role of "affective climate engineers," contributing to the shaping of shared emotions and affective responses and influencing the group's emotional responses by means of interaction and processes of contagion. Through different leadership behaviours they can contribute, moreover, to the development of co-active and collective coping strategies in their work unit, department or organization as a whole. Likewise, they can influence collective strategies for coping with stress. Finally, recent research developments have questioned the consideration of leadership as an individual phenomenon and have focused on "shared leadership". We have not found empirical evidence on the relationships of this type of leadership with wellbeing and health, but given the rapidly-changing nature of the world of work and the potential role of "shared leadership" to make work units and organizations more effective in complex and interdependent work contexts and in the management of information, we trust that future research will consider such relationships.

The assessment of leadership for diagnosing roles and functions in the prevention of stress and the promotion of health

The assessment of leadership is a complex matter, and involves making decisions on the theoretical models, facets, tools and methodologies to be used. In our review we mentioned various instruments and tools used in research. We shall now describe

two additional tools developed in our Research Unit: The *scale to assess managerial competences in leading people* and the *module about supervision and management* of the organizational checkup "Prevenlab-Psicosocial. The first scale is made up of 43 items measuring the following competencies: motivation of employees, planning of work, assessment of performance, employee development, consideration, promotion of innovation, delegation, monitoring and control of employees, charisma, and creation of meaning. It is included in the Organizational Climate and Employee Satisfaction Inventory (González-Romá & Peiró, 2004), together with other scales assessing organizational climate, employee satisfaction, commitment and propensity to leave the job. The second scale, "Management and Supervision", is made up of 11 items that assess the psychosocial risks generated by management and supervision, within the "Prevenlab-Psicosocial" methodology. This methodology rates the organizational risks of the different facets involved in the AMIGO model (Peiró, 2006). Both instruments may provide multi-level information.

Survey feedback for leaders

Survey feedback is one of the most widely used techniques in organizational development. When applied to the development of leadership it involves gathering data on the leadership behaviours of a particular manager or supervisor from one or more sources (e.g., subordinates or peers) and returning the information obtained to the target so as to analyze it, interpret its meaning and design corrective or development actions (Nadler, 1977). Where a multiple-source and multiple-assessor design is used, this process is known as 360º feedback. Feedback has been described as a key element in the process of acquisition of skills, goal achievement and behavioural change. However, Bailey and Austin (2006) found in a study on the effectiveness of 360º feedback that while favourability of feedback (from certain rater sources) predicted the criterion measures, there are relevant factors outside of the characteristics of the feedback itself that affect its efficacy. The authors mention the initial self-image and self-efficacy of the focal person, the information and preparation session for the feedback, and the subsequent support for its development.

Peiró, González-Romá and Cañero (1999) presented a case study in a savings bank in which they carried out an intervention for correcting dysfunctional effects produced by a survey feedback strategy. These dysfunctions occurred due to the perception developed by managers and their subordinates about the political function and power games behind the assessment. This interpretation provoked emotional reactions such as fear, suspicion and unease among the target managers. Thus, the aim of the intervention was to reinterpret the situation, air some emotions and promote management development through the rational use of the survey information. This case provides an interesting example of how interventions in organizations should pay attention to power games and political aspects since, depending on the context, participants can construct a reality that is quite distinct from that intended by the professionals, producing different – and sometimes contradictory – results.

The development of managers and supervisors in leadership functions for the improvement of health and wellbeing at work

To draw the present article to a close, it only remains to stress that the review carried out can inspire programmes for helping supervisors and managers to develop leadership competencies for reducing stress and promoting health in the work context. Within a general framework that guides interventions for the prevention of psychosocial risks (Peiró, 2007), leadership development programmes can be effective for enhancing and promoting health and wellbeing at work. In such programmes, we recommend placing emphasis on both human and social capital. As Day (2001 p. 605) points out, "orientation towards human capital emphasizes the development of individual capabilities such as those related to self-awareness, self-regulation and self-motivation that serve as the foundation of intrapersonal competence… Orientation towards social capital emphasizes the development of reciprocal obligations and commitment built on a foundation of mutual trust and respect…; it rests on a foundation of interpersonal competence, but ultimately it requires enactment." Likewise, it is necessary to pay attention to the development of competencies related to shared leadership. In general, various actions can contribute to the development of leadership. First of all, it is important to make leaders and managers aware of their functions for promoting quality of life at work at both the individual and collective levels. Moreover, leaders should be conscious of their function as creators of meaning, and how it can be used to promote eustress, positive emotional responses and collective coping. Managerial and supervisory practices should aim to generate perceptions of justice and equity in team members and in the organization. Managers should also be trained in the handling of the psychological contract, especially during periods of change in organizations. Similarly, educating managers and supervisors to coach their employees can improve wellbeing and health at work. Among the specific practices covered in Day's (2001) useful review on the development of leadership, the most noteworthy are 360º feedback, executive training, performance of the *mentoring* role and networking, the assignment of posts, and learning through action. All of these activities can be useful to improve the competencies of managers and supervisors for performing leadership behaviours that contribute to enhancing and promoting health in the work context.

REFERENCES

Ashford B. (1994). Petty tyranny in organizations. *Human Relations, 47* (7), 755-778.

Bailey, C, & Austin, M. (2006). 360 degree feedback and developmental outcomes: The role of feedback characteristics, self-efficacy and importance of feedback dimensions to focal managers' current role. *International Journal of Selection and Assessment, 14*(1), 51-66.

Bass, B.M., & Riggio, R.E. (2006). *Transformational Leadership*, 2nd ed. Mahwah, NJ: Erlbaum.

Britt, T. W., Davison, J., Bliese, P.D., & Castro, C.A. (2004). How leaders can influence the impact that stressors have on soldiers. *Military Medicine, 169*(7), 541-545.

Buunk, B. P., Zurriaga, R., Peiró, J. M., Nauta, A., & Gosalvez, I. (2005). Social comparisons at work as related to a cooperative social climate and to individual differences in social comparison orientation. *Applied Psychology: An International Review, 54*, 61-80.

Carmona, C., Buunk, B.P., Peiró J. M., Rodríguez, I., & Bravo, M. J. (2006). Do social comparison and coping styles play a role in the development of burnout? Cross-sectional and longitudinal findings. *Journal of Occupational and Organizational Psychology, 79*, 85-99.

Cropanzano, R., Goldman, B., & Benson, L., III. (2005). Organizational justice. In J. Barling, K. Kelloway & M. Frone (Eds*.) Handbook of work stress* (pp. 63-87). Beverly Hills, CA: Sage.

Day, D.V. (2001). Leadership development: A review in context. *Leadership Quarterly, 11*(4), 581-613.

De Rivera, J. H. (1992). Emotional climate: Social structure and emotional dynamics. In K. T. Strongman (Ed*.). International review of studies on emotion* (Vol. 2, pp.197-218). Chichester: John Wiley and Sons.

Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The Job demands-Resources model of burnout. *Journal of Applied Psychology, 86*, 499-512.

Estreder, Y., Ramos, J., Caballer, A., & Carbonell, S. (2004). Contenido y estado del contrato psicológico entre los trabajadores y sus empresas: Un estudio piloto en una muestra española. *Revista de Psicología Social Aplicada, 14*(3) 67-107.

Gakovic, A,. & Tetrick, L. E. (2003). Psychological contract breach as a source of strain for employees. *Journal of Business and Psychology, 18*, 235-246.

Gamero, N., González-Romá, V., & Peiró, J.M. (2008). The influence of intra-team conflict on work teams' affective climate: A longitudinal study. *Journal of Occupational and Organizational Psychology. 1-24.*

George, J. M. (1996). Group affective tone. In M. A. West (Ed*.), Handbook of work group Psychology.* (pp.77-94). Chichester: John Wiley & Sons.

Gil-Monte, P., & Peiró, J.M. (2000). Un estudio comparativo sobre criterios normativos y diferenciales para el diagnóstico del síndrome de quemarse por el trabajo (burnout) según el MBI-HSS en España. *Revista de Psicología del Trabajo y de las Organizaciones, 16*(2), 135-149.

González-Morales, M. G., Peiró, J. M., Rodríguez, I., & Bliese, P. D. (2005). *A longitudinal multilevel analysis of burnout consequences on teachers' job satisfaction from a gender perspective.* Paper presented at the X European Congress of Psychology. Granada, 7-12, July.

González-Romá, V., & Peiró, J.M. (2004*): Encuesta de Clima Organizacional y Satisfacción Laboral* (ECOS)®. University of Valencia. (mimeo).

González-Romá, V., Peiró, J. M., Subirats, M., & Mañas, M. A. (2000). The Validity of Affective Work Team Climates. In M. Vartiainen, F. Avallone, & N. Anderson (Eds.), *Innovative theories, tools, and practices in work and organizational psychology* (pp. 97-109). Göttingen: Hogrefe and Huber Publishers.

González-Romá, V., Peiró, J.M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of Climate Strength. *Journal of Applied Psychology, 87*, 465-473.

Gracia, F. Silla, I. Peiró, J.M., & Fortes, L. (2006). El estado del contrato psicológico y su relación con la salud psicológica de los empleados. *Psicothema, 18*, 256-262.

Halpin, A.W., & Winer, B.J. (1957) A factorial study of the leaders behavior description. In R.M. Stogdill & A.E. Coons (eds*.): Leader Behavior: The description and measurement.* Columbus, Ohio State University Res. Mon. 88, pp. 39-51.

Harris, K. J., & Kacmar, K.M. (2006): Too much of a good thing: the curvilinear effect of leader-member exchange on stress. *The Journal of Social Psychology, 146*, 65-84.

Harvey, S., Kelloway, E.K., & Duncan-Leiper, L. (2003) Trust in management as a buffer of overload-strain relationships. *Journal of Occupational Health Psychology, 8*, 306-15.

Jung, D.I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior, 21*, 949-964.

Karasek, R. A. (1979). Job demands, job decision latitude and mental strain: implications for job redesign. *Administrative Science Quarterly, 24*, 285-308.

Kelloway, E. K., Sivanathan, N., Francis, L., & Barling, J. (2004). Poor leadership. In J. Barling, E. K. Kelloway, & M.

R. Frone (Eds.), *Handbook of work stress* (pp. 89 – 112). Thousand Oaks, CA: Sage.

Klein, K. J. & Kozlowski, S. W. J. (2000*). Multilevel theory, research and methods in organizations. Foundations, extensions and new directions*. San Francisco: Jossey-Bass.

Länsisalmi, H., Peiró, J. M., & Kivimäki, M. (2000). Collective stress and coping in the context of organizational culture. *European Journal of Work and Organizational Psychology, 9*, 527-559.

Länsisalmi, H., Peiró, J. M., & Kivimäki, M. (2004). Grounded theory in organizational research. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 242–255). London: Sage.

Martínez-Tur, V., Moliner, C., & Carbonell, S. (2003). ¿Cuántas dimensiones tiene la justicia organizacional? *Revista de Psicología Social Aplicada, 13*(3) 91-106.

Michie, S., & Gootie, J. (2005). Values, emotions and authenticity: Will the real leader please stand up? *The Leadership Quarterly, 16*, 441-457.

Moliner, C., Martínez-Tur, V., Peiró, J. M., & Ramos, J. (2005). Linking organizational justice to burnout: Are men and women different? *Psychological Reports, 96*, 805-816.

Munduate, L., Ganaza, J., Peiró, J.M., & Euwema, M. (1999). Patterns of Styles in Conflict Management and Effectiveness. *The International Journal of Conflict Management. 10*(1), 5-24.

Nadler, D.A. (1977). *Feedback and organizational development. Using data-based methods*. Reading, MA. Addison-Wesley.

Nelson, D.L, & Simmons, B.L. (2004). Eustress: An elusive construct, an engaging pursuit. In P.L. Perrewé and D.C. Ganster (eds.) *Research in occupational stress and well-being (volume 3) Emotional and Physiological Processes and Positive Intervention Strategies*. (pp. 265-322) Oxford: Elsevier.

Pearce, C.L., & Conger, J.A. (Eds) (2003*). Shared Leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA, Sage Pub

Pearce, C.L., & Sims, H.P. Jr. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics: Theory, Research and Practice, 6*, 172-197.

Peiró, J.M. (1999a). *Desencadenantes del estrés laboral*. Madrid. Pirámide.

Peiró, J.M. (1999b). El modelo AMIGO: Marco contextualizador del desarrollo y la gestión de recursos humanos en las organizaciones. *Papeles del Psicólogo, 72*, 3-15.

Peiró, J.M. (2000). Assessment of Psychosocial risks and prevention strategies: The AMIGO model as the basis of the prevenlab/Psychosocial methodology. *Psychology in Spain, 4*, 139-166, www.psychologyinspain.com/content/full/2000/12frame.htm.

Peiró, J. M. (2001). Stressed teams in organizations: A multilevel approach to the study of stress in work units. In J. Pryce, C. Weilkert, & E. Torkelson (Eds.), *Occupational health psychology: Europe 2001* (pp. 9-13). Nottingham: European Academy of Occupational Health.

Peiró, J.M. (2004). Interventions to prevent and correct work-related bullying. In C. Soares & L. Amancio (eds.): *Em torno da Psicología. Homenagem a Jorge Correia Jesuíno*. Lisboa, Horizonte. (pp. 143-154).

Peiró, J.M. (2006). Metodología PREVENLAB-PSICOSOCIAL para el análisis de riesgos laborales de carácter psicosocial. En J.L. Meliá et al. (Eds). *Perspectivas de Intervención en Riesgos Psicosociales* (pp. 105-130). Barcelona: Foment.

Peiró, J.M. (2007). La intervención en riesgos psicosociales como cambio organizacional. In. VVAA. *Perspectivas de Intervención en Riesgos Psicosociales. Medidas preventives* (pp. 65-89). Barcelona: Foment.

Peiró, J.M. (2008). Stress and Coping at Work: New Research Trends and Their Implications for Practice. In K. Naswall (Ed*.). The Individual in the Changing Working Life*. Cambridge University Press.

Peiró, J. M. & González-Romá, V. (2003a). Collective stress appraisal in health care units. Does leader-members interaction matter? VIII European Conference on Organizational Psychology and Health Care, 8-11 October, Vienna, Austria.

Peiró, J. M., & González-Romá, V. (2003b). Supervisors' Burnout, Social Interaction and Teams' Burnout. Paper presented at the 11th European Congress on Work and Organizational Psychology, 14-17 May Lisbon, Portugal.

Peiró, J.M. González-Romá, V., & Cañero, J. (1999). Survey feedback as a tool for changing managerial culture: Focusing on Users' interpretations. A case study. *European Journal of Work and Organizational Psychology, 8*, 537-550.

Peiró, J.M., González-Romá, V., Ramos, J., & Zornoza, A. (1996). Relationships between leadership and professionals' job attitudes and perceptions: comparison of two leadership models. *Work and Stress, 10*(3), 195-208.

Peiró, J.M.; González-Romá, V., Ripoll, P., & Gracia, F. (2001). Role stress and work team variables in Primary Health Care Teams: A structural equations model. In J. de Jonge, P. Vlerick, A. Büssing & W.B. Schaufeli (Eds.) *Organizational Psychology and Health Care at the Start of a New Millennium* (pp.105-122). Munich, Rainer Hampp Verlag.

Peiró, J.M., & Martinez-Tur, V. (2008). Organizational Development and Change. In N. Chmiel (Ed) *An Introduction to Work and Organisational Psychology* (pp. 351-376). Blackwells Publishing 2nd edition.

Peiró, J. M., & Meliá, J. L. (2003). Formal and informal interpersonal power in organisations: Testing a bifactorial model of power in role-sets. *Applied Psychology: An International Review, 52*(1), 14-35.

Peiró, J. M., Rodríguez, I., & Bravo, M. J. (2003). *Individual, coactive and collective coping effects on occupational stress. A longitudinal study.* Paper presented at the Conference Work Stress and Health: New Challenges in a Changing Workplace, Toronto, 20-22 March.

Peiró, J.M., & Salvador, A. (1993) *Control del Estrés Laboral.* Madrid, Eudema.

Peiró, J.M., Zurriaga, R., & González-Romá, V. (2002). Análisis y diagnóstico de las situaciones y experiencias de estrés colectivo en las unidades de trabajo y en las organizaciones de servicios sociales. *Revista del INSHT, 20*, 11-20.

Potonik, K., Tordera, N., Peiró, J.M. & González-Romá, V. (2007).The role leader-member exchange, team-member interaction, and climate in the prediction of well-being and propensity to leave the team: a multilevel analysis. 13th European Congress of Work and Organizational Psychology. Stockholm, 9-12 May.

Pratt, L.L., & Barling, J. (1988). Differentiating between daily events, acute and chronic stressors. A framework and its implications. In J.J. Hurrel Jr., L.R. Murphy, S.L. Sauter & C.L. Cooper (eds): *Occupational Stress: Issues and Development in research* (pp. 41-53). London. Taylor & Francis.

Richter, A.W., West, M.A. Van Dick, R., & Dawson, J.F. (2006). Boundary Spanners' Identification, Intergroup Contact, and Effective Intergroup Relations. *The Academy of Management Journal, 49*, 1252-1269.

Rousseau, D. M. (2005). I-DEALS: Idiosyncratic Deals Employees Bargain for themselves. Armonk, NY: M.E. Sharpes.

Schaufeli, W., González-Romá, V., Peiró, J. M., Geurts, S., & Tomás, I. (2005). Withdrawal and burnout in health care: On the mediating role of lack of reciprocity. In C. Korunka & P. Hoffmann. (Eds.), *Change and Quality in Human Service Work, Volume 4* (pp. 205-226). München, Germany: Hampp Publishers.

Schultz, R., Greenley, J.R., & Brown, R. (1995). Organization. Management and client effects on staff burnout. *Journal of Health and Social Behavior, 36*, 333-345.

Schwarzer, R., & Knoll, N. (2003). Positive coping: Mastering demands and searching meaning. In A.M. Nezu, C.M. Nezu & P.A. Geller (Eds.), *Comprehensive Handbook of Psychology, Vol. 9.* New York: Wiley.

Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist, 55*, 5-14.

Seltzer, J., & Numerof, R.E. (1986). Supervisory Leadership and subordinate Burnout. *Academy of Management Journal, 31*, 439-446.

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*(2), 178-190.

Tordera, N., González-Romá, V., Mañas, J., & Ramos, J. (1999). Relationship between the proportion of high-quality leader-member-exchanges (LMX) within a team and team-related outcomes. 9th European Congress on Work and Organizational Psychology, 12-15 May, Espoo-Helsinki, Finland.

Tordera, N., González-Roma, V., & Peiró, J.M. (2008). The moderator effect of Psychological climate on the relationships between leader-member exchange (LMX) quality and role overload. *European Journal of Work and Organizational Psychology, 17*(1), 55-72.

Tordera, N., Peiró, J.M., González-Romá, V., Fortes-Ferreira, L., & Mañas, M. A. (2006). Leaders as health enhancers: A longitudinal analysis of the impact of leadership in team members' well-being. *26th International Congress of Applied Psychology*, July 16-21, Athens, Greece.

Torkelson, E., Muhonen, T., & Peiró, J. M. (2007) Constructions of work stress and coping in a female- and a male-dominated department. *Scandinavian Journal of Psychology, 48*, 261-270.

Väänänen, A. Toppinen-Tanner, S., Kalimo, R., Mutanen, P., Vahtera, J., & Peiró, J.M. (2003). Job characteristics, physical and psychological symptoms, and social support as antecedents of sickness absence among men and women in the private industry sector. *Social Science & Medicine, 57*, 807-824.

Warr, P. (1987). *Work, Unemployment and Mental Health.* Oxford: Clarendon Press.

Westman, M., & Etzion, D. (1999): The crossover of strain from school principals to teachers and vice versa. *Journal of Occupational Health Psychology, 4*(3), 269-278.

Yukl, G.A. (1998) *Leadership in organizations.* 4th ed. Englewood Cliffs, N.J: Prentice Hall.