# Chapter 6
# Interventions to Promote Healthy & Resilient Organizations (HERO) from Positive Psychology

**Susana Llorens, Marisa Salanova, Pedro Torrente, and Hedy Acosta**

**Abstract** The development of the concept of HEalthy and Resilient Organization (HERO) is a milestone in research and practice aimed at promoting health among employees, teams, and organizations. HERO is thus conceptualized as an organization that makes systematic, planned, and proactive efforts to improve employees' and organizational processes and outcomes. These efforts involve fostering healthy organizational resources and practices intended to improve the work environment at the task, interpersonal, and organizational levels, especially during times of change and crisis. Despite its relevance in modern societies, research on the subject is scarce, particularly in terms of the effects of interventions focused on Positive Psychology. Consequently, the objective of this chapter is to present an overview of intervention effectiveness based on Positive Psychology. First, we focus on the concept, its relationship with salutogenesis, and the measurement of HEROs. Second, we review the literature on interventions to promote HEROs based on Positive Psychology. Third, we analyze methodological questions concerning the way to test the effectiveness of interventions in order to obtain criteria with which to develop a set of best practices. Finally, we address future research, professional practice, and teaching/training on positive interventions in organizations.

**Keywords** Health • Resilience • Positive interventions

S. Llorens (✉) • M. Salanova • P. Torrente • H. Acosta
WONT (Work & Organization NeTwork) Research Team,
Universitat Jaume I, Castellón, Spain
e-mail: llorgum@uji.es; salanova@uji.es; torrente@uji.es; hacosta@uji.es

*The Concepts Behind Organizational Health Intervention Research*,
DOI 10.1007/978-94-007-6470-5_6, 

## Conceptualizing and Measuring HEROs

Modern societies are characterized by recurring periods of crisis, and social and economic change. This situation requires modern organizations to be focused on healthy employees, teams, and organizations. In this scenario, Occupational Health Psychology (OHP) calls for Integral Health Management in the development and promotion of health at work. Research has shown the importance of: (1) focusing on a more comprehensive, interdisciplinary, and multicausal approach that establishes the role of different stakeholders (e.g., Chief Executive Officers – CEOs, teams' immediate supervisors, employees, and customers) in the intervention process, and (2) integrating healthy programs in the companies' policies and culture as a benefit itself (Salanova et al. 2009a, b).

Therefore, HEROs constitute a key element within the framework of Positive Organizational Psychology. As stated above, Salanova et al. (2012) stressed that a HERO is an organization that make systematic, planned, and proactive efforts to improve employees', teams', and organizational processes and outcomes. Moreover, these organizations are "resilient" because they: maintain positive adjustment under challenging conditions, bounce back from untoward events, and maintain desirable functions and outcomes in the midst of strain. These efforts involve implementing healthy organizational resources and practices aimed at improving the work environment at the task (e.g., autonomy), interpersonal (e.g., transformational leadership styles), and organizational (e.g., Human Resources – HR – practices) levels, especially during times of turbulence and change.

### *Multilevel and Mixed-Method Measurement of HEROs*

The so-called *HERO Model* is a heuristic theoretical model that integrates results from empirical and theoretically-based evidence on topics such as job stress, Human Resource Management (HRM), organizational behavior, and positive OHP. Specifically, the HERO Model has been developed based on previous research from 2004 until now. The studies of Wilson, DeJoy and colleagues stressed that a direct and systematic test of a comprehensive model of healthy work organization is needed (DeJoy et al. 2010; Wilson et al. 2004). These authors attempted to develop and test heuristic models of healthy organizations, which included employees' health as well as variables referring to the organizational context (e.g., work demands, tools and technologies, or social environment) and business performance. Both studies represent a preliminary approach towards understanding how organizational practices are related to employees' health. However, the validation of these first comprehensive models of healthy work organization (DeJoy et al. 2010; Wilson et al. 2004) had several limitations: (1) data were collected from the same respondents (employees) using the same measure instruments, thus making common method variance a potential bias in the dataset; and


**Fig. 6.1** HEalthy & Resilient Organizations (HERO) model (Salanova et al. 2012)

(2) constructs were tested at the individual level of analysis though the underlying conceptual premises of a healthy organization suggest the need to examine the model at the collective level of analysis.

In order to overcome these limitations, a HERO (Salanova 2008, 2009; Salanova et al. 2011, 2012) refers to a combination of three main interrelated components: healthy organizational resources and practices (e.g., job resources, healthy organizational practices) as strategies to structure and organize the work; healthy employees/teams (e.g., trust, work engagement), who show high levels of psychosocial well-being; and healthy organizational outcomes (e.g., high performance, corporate social responsibility). The HERO Model has mainly two advantages which are related to data collection and analyses. First, data are collected from different respondents (e.g., CEOs, teams' immediate supervisors, employees and customers) and from objective financial performance indicators (e.g., Return Of Assets – ROA) using both quantitative (questionnaires) and qualitative (interviews) methodologies. Secondly, data analyses are computed at the collective level following a multilevel perspective (i.e., individuals, teams, and organizations) (see Fig. 6.1).

Results from a validity study conducted with 303 teams and their immediate supervisors (Salanova et al. 2012) show that when organizations have healthy practices and resources (team autonomy, team feedback, supportive team climate, team working, team coordination, transformational leadership), teams feel healthier (more efficacious, engaged, and resilient to adversity), which in turn leads to healthier organizational outcomes (team in-role and extra-role performance as assessed by their immediate supervisors). Employees' excellent job performance also positively predicted customer loyalty and satisfaction with the company. Further evidence for the HERO Model is shown in other research (Acosta et al. 2012; Cruz et al. 2013; Torrente et al. 2012).

### *HEROs and Salutogenesis*

Given the positive essence of the HERO Model, it could be integrated within the theoretical framework of *salutogenesis* (see Antonovsky 1979, 1996). Salutogenesis is related to the developing, testing, and implementing of plans and practices in order to enhance health and well-being by making use of the key elements: sense of coherence, optimization, and continuous improvement. Research provides evidence that sense of coherence and optimization are positively associated to better health, enjoyment (Eriksson and Lindström 2005; Hakanen et al. 2007), and the effective use of coping (McCrae and Costa 1990).

There are a number of different reasons showing that HEROs and salutogenesis share interests regarding: (1) health development and promotion rather than pathogenic factors, illness-focused approaches and/or the biomedical model; (2) the discovery of the precursors (e.g., communication practices, social support) and causes of health or beneficial factors regarding the person as a whole, immersed in their social and biographical context; (3) the strategies to create, enhance, and improve psychosocial factors that influence a person's ability to keep healthy; (4) the role of resources (personal, social, and organizational) as drivers of healthy settings; and (5) the key impact of HRM plans and practices, which are shown as health promoters (by implementing healthy organizational resources and practices) to build and maintain healthy work places as a whole (Becker et al. 2010; Rabin et al. 2005).

## Promoting HEROs: Interventions from Positive Psychology

The relevance of developing theoretical models, valid methodologies, and positive interventions for enhancing HEROs despite crises is a milestone in OHP. It is time for a shift of focus and the moment to improve the strengths of teams and the optimal and positive functioning of organizations (Nielsen et al. 2010a; Schaufeli and Salanova 2007).

## *Intervention Strategies*

Positive interventions refer to strategies implemented in teams and organizations in order to improve the performance and satisfaction of teams and organizations with the ultimate goal of promoting health, quality of work life, and organizational excellence. They could be split into primary (for achieving optimal functioning and the satisfaction of individuals, teams, and organizations) and secondary (further efforts over time to achieve peak functioning, health and satisfaction of teams and organizations) (Snyder et al. 2000). Thus, secondary improvement only occurs when the basic levels of functioning, health, and satisfaction are guaranteed.

Finally, Schaufeli and Salanova (2010) went a step further by arguing that we are entering into a novel phase of development known as *amplition*, which is based on the principle of improvement or betterment (Seligman and Csikszentmihalyi 2000). Amplition is defined as "positive" interventions that promote, increase, and improve health and well-being (e.g., engagement) at the collective level (teams and organizations) and includes three characteristics: (1) comprehension: the focus of interventions is oriented toward improving the health and wellness of teams and organizations; (2) inclusion of the *entire* workforce: employees, teams, and organizations that are not sick or distressed; and (3) it constitutes a long mission that requires continuous and sustained effort. Based on these features, positive interventions at the collective level (teams and organization) constitute the essence of amplifying strategies to develop HEROs. Research suggests that healthy organizational resources and practices are responsible for increasing the health of employees and healthy organizational outcomes (Acosta et al. 2012; Cruz et al. 2013; Salanova et al. 2012; Torrente et al. 2012).

A review of collective intervention highlights the benefits of using the following strategies: (1) assessment and evaluation of HEROs (talent attraction, recruitment, selection and retention, establishing and monitoring the psychological contract, periodical HERO audits, and workshops on positive experiences); (2) job and organization (re)design and changing work places (investing in task and social resources, organizational practices, and work changes); (3) developing transformational leadership; (4) work training in efficacy beliefs; and (5) career management (see Salanova et al. 2013; Schaufeli and Salanova 2010).

## *Optimization Targets*

Despite the advances in the concept, models, and strategies of amplition programs, less empirical research has been conducted on the effectiveness of positive programs, above all when they are applied at the collective level. We conducted a review of the scholarly publications in the PsycInfo database following these criteria:

(1) publication date (from 2000 to 2012) and (2) "psychosocial intervention" and "organization" as subject terms in abstract. Results reveal that 66 articles (90 %) are related to intervention programs at work (training, participation, team re-design, workshop) that are oriented, for example, toward the reduction of: (1) mental and psychosocial health problems (Milnea et al. 2000); (2) burnout at the individual and organizational levels (Awa et al. 2010); (3) job stress, learning climate, and leadership style (Mikkelsen et al. 2000); and (4) anxiety and stress in university students (Bresó et al. 2011).

However, only seven of the articles (10 %) are based on current interventions from Positive Psychology, which are focused on developing the personal strengths, teams, and the optimal functioning of organizations. A deeper revision reveals that interventions are generally oriented toward optimizing: (1) self-confidence, self-consciousness, communication, skills for resolving conflicts, and personal resilience (McDonald et al. 2012); (2) individual performance, team collaboration, and team effectiveness (Robertson and Huang 2006); (3) learning and the improvement of the quality of service with patients (Phillips 2005); (4) psychological capital (hope, optimism, self-efficacy, and resilience), economic impact and revenues (Luthans et al. 2006); (5) positive feelings, behaviors, cognitions, and well-being (see Sin and Lyubomirsky's meta-analysis 2009); (6) self-efficacy, work engagement, and job performance (Carter et al. 2010); and (7) participation, problem-solving skills, and organizational healthiness (satisfaction, commitment, and well-being) in teams (DeJoy et al. 2010). Moreover, in the WONT Research Team we also carried out an intervention to boost emotional intelligence in nurses (Rodríguez et al. 2006; Salanova et al. 2007).

## Methodology Issues of Positive Interventions

A deeper review of previous research reveals that interventions at work based on Positive Psychology differ in their focus, design, and data analyses. Firstly, interventions are focused on organizations and individuals, and consider a number of different stakeholders: employees (DeJoy et al. 2010; McDonald et al. 2012; Salanova et al. 2007), employees, managers, and supervisors (Carter et al. 2010; Luthans et al. 2006, 2008; Robertson and Huang 2006).

Secondly, participants are mainly distributed in intervened (experimental, pilot) and non-intervened (non-experimental, control) groups either by random selection (Carter et al. 2010; Luthans et al. 2006, 2008) or by assigning them to intervention and non-intervention conditions, which are comparable groups in terms of location, demographics, or employee characteristics (DeJoy et al. 2010). Different alternatives are also used: non-random selection with one group intervened and no control group (McDonald et al. 2012; Robertson and Huang 2006), and "natural" selection with intervened (participants who voluntarily participated in the intervention) and non-intervened groups (Salanova et al. 2007).

## *Procedures of Positive Interventions*

In terms of the procedure, interventions are largely focused on case studies (e.g., Carter et al. 2010; McDonald et al. 2012; Rodríguez et al. 2006) with quasi-experimental designs, but also on different organizations (DeJoy et al. 2010). They are mainly divided into pre- and post-interventions with different strategies, and time schedules. Interventions are focused above all on different strategies: (1) feedback survey (Rodríguez et al. 2006); (2) workshops and training on learning goals, ergonomics or emotional intelligence (McDonald et al. 2012; Rodríguez et al. 2006); (3) micro-interventions (exercises, videos, small team talks) (Luthans et al. 2006); (4) web-based interventions in Psychological Capital (Luthans et al. 2008); (5) theatre-based interventions to increase self-efficacy (Carter et al. 2010); and (6) problem-solving processes to increase the healthiness of organizations (DeJoy et al. 2010). A review of the different interventions shows significant differences in time schedules, which range from one session (1–3 h; Luthans et al. 2006) to six sessions (McDonald et al. 2012). Generally, the interventions mainly involve a pre- and post-assessment with different time lags in order to measure the progress of the interventions. These post-evaluations range from a final assessment conducted immediately after the last intervention sessions (Rodríguez et al. 2006) to 3 days (Luthans et al. 2008), 8 months (Carter et al. 2010) or 6 and even 18 months after the last session (DeJoy et al. 2010).

## *Analytical Issues*

Regarding methodology, positive interventions were largely quantitative and involved questionnaires that were completed by different stakeholders (employees, managers, supervisors, and customers). Pre- and post-intervention scores for the variables intervened were compared using independent t-tests for the control and intervened teams (Carter et al. 2010; Luthans et al. 2006; Robertson and Huang 2006), Analysis of Variance (ANOVA), Analysis of Covariance (ANCOVA) (e.g., Luthans et al. 2008), and multilevel random coefficient models (DeJoy et al. 2010). Other interventions were based on interviews about participants' reflections and field notes (which were completed after each workshop), and the participation ratio (McDonald et al. 2012). Finally, other authors combine the qualitative and quantitative methodologies by collecting data from validated questionnaires and from interviews about the positive and improved aspects as a result of the intervention (Salanova et al. 2009a).

Although Positive interventions at work are still in an early phase of development, previous results show that researchers and practitioners are endeavoring to implement strategies to promote psychosocial health, well-being, and positive outcomes in organizations. Although more research is needed, above all on interventions at the

organizational level, the existing set of interventions that are currently being conducted provide some insight and good practices regarding positive interventions at work. In the following, we propose a set of best practices for designing positive interventions in job settings in order to conduct successful interventions. They are also intended to open up future avenues of study on the issue by means of an example of a positive intervention leading to the development of HEROs.

## The Best Practices in Positive Interventions in HEROs

The underlying Scientific-Professional Model is the one proposed (e.g., Dunnette 1990; Fleishman 1990) by the European Network of Organizational and Work Psychologists (ENOP 1998). Based on the idea that Work and Organizational Psychology is both a scientific discipline and a profession, this model stresses the significance of integrating the scientific and practical dimensions of the psychologist specialized in work and organizational Psychology. By applying this model to positive interventions, the Scientific-Professional Model should focus on not only the scientific aspects related to the design interventions, but also the procedure in order to obtain the effectiveness of the interventions. Despite the relevance of positive intervention to promote HEROs, it is not exempt of future challenges. One of the main challenges that the promotion of HEROs will face is the need of evidence-based protocols that bridges the gap between science and practice as a key element to intervene. Following this rationale, research has offered a list of advices, basically based on stress interventions, that could be extended to develop HEROs from a Positive Psychology perspective (see Macik-Frey et al. 2007; Nytrø et al. 2000; Salanova et al. 2009a). In the following section we attempt to build up a set of best practices in interventions to promote HEROs.

### *Recommendation # 1*

Preparing the Work Settings: *Thinking About the Story…*

- *All for one and one for all!* Incorporate interventions into the general policies of the organization. By including interventions in the commonly implemented practices, they will become a natural procedure, thus being easily prompted when required.
- *All aboard!* Ensure full commitment of the whole organization. Engaging CEOs and immediate supervisors requires providing them with full information about the project and the expected gains. Their implication will start a top-down process running through the whole organization, from middle managers to baseline employees via team supervisors.
- *Tell me!* Promote information and participation mechanisms for different agents in the organization: CEOs, supervisors, employees (teams), and customers in order to actively encourage their participation in the interventions. By sharing

accurate information about the procedures and the objective of the intervention anxiety and obstacles will be reduced, and motivators of change and positive experiences are developed.
- *Take your time!* Take advantage of wisdom and experience within the organization. Every organization has among the members of its workforce experienced collaborators who can act as facilitators. They can provide support in the design and in the implementation process by spreading information, acting as mentors or solving specific problems.

## *Recommendation # 2*

Design of the Intervention: *Once Upon a Time…*

- *Step by step!* Plan the positive interventions, which should be realistic and take into account the possibility of unexpected events; the aim is to avoid unnecessary delays in the application of the intervention strategies and to generate a culture of positivity at work.
- *Please don't forget me!* Objectives and hypotheses should be based on scientific, valid, and robust theories (e.g., HERO Model; Salanova et al. 2012). The general objective should include three interrelated elements: (1) the design, (2) the implementation, and (3) how to test the effectiveness of team/organizational positive intervention. In addition to the general objective, specific objectives and hypotheses should also be included.
- *We are the 'sample', my friend!* The sample is composed of the "top organizations", which are characterized by showing the best organizational resources and practices. The intervention should be oriented toward organizations/teams that are randomly distributed as either intervened or non-intervened. To guarantee ethical tenets, the intervention should be implemented in the non-intervened organizations/teams after finishing the intervention process (www.apa.com).
- *Take a picture!* The focus of the strategies is on the collective level (organizations and teams). Specific strategies should be conducted to capture the collective nature of the work in organizations. The specific strategies to be implemented depend on the previous results obtained in the evaluation of the HEROs, in which different perspectives are gathered from different stakeholders (CEOs, supervisors, employees, and customers) (Chan 1998).

## *Recommendation #3*

Development in the Work Setting and Testing Effectiveness: *Telling the Story…*

- *Divide and conquer!* The design should include a field and quasi-experimental study (intervened and non-intervened groups), with a longitudinal design and multiple levels of analyses (individuals, teams, organizations), and multiple stakeholders

(CEOs, supervisors, employees, and customers). This makes it possible to understand the dynamic processes (antecedents, processes, and results) and positive spirals among the intervened constructs (Chan 1998; Lindsley et al. 1995; Mathieu and Taylor 2006) through different time lags: pre-intervention and three post-intervention evaluations (immediately after finishing the intervention, and at 6 and 12 months after the intervention).

- *The power of collectivity!* Perform a comprehensive global analysis of the information based on the specific real results. The main goal is to propose collective intervention strategies (e.g., developing transformational leadership) based on optimization targets (e.g. collective efficacy) at the organizational and team level.
- *Put the meat on the grill!* Different data analyses could be computed based on the specific hypothesis. First, quantitative analyses could be carried out (by SPSS, AMOS, LISREL, MPlus): (1) descriptive analyses, chi-square, MANOVA, ANCOVAs or t-test to check whether there are significant differences between intervened and non-intervened teams/organizations from the pre- to the post-evaluations; (2) Structural Equation Modeling, to test the causal and reciprocal impact of intervention strategies on healthy organizational resources and practices, healthy employees (teams), and healthy organizational outcomes; and (3) multilevel analyses by hierarchical linear modeling to test the impact of intervention strategies at the organizational (level 2) and temporal levels (level 3) on team-level variables (level 1). Furthermore, qualitative analyses (by SPSS, ATLAS.Ti, N-Vivo) could be computed to analyze the perceptions, and positive aspects of improvement assessed by the intervened teams/organizations in order to increase the quality of the intervention in the future. These could include criteria on inter-judge validity (Cohen's Kappa), the Concordance Index (CI), and the Intraclass Correlation Coefficient (ICC).

## *Recommendation #4*

Maintenance Over Time: *To Be Continued…*

- *Speed up the process!* Assess the actual impact of the intervention in the short, medium and long term in order to increase the benefits of its effectiveness by checking for significant increases in the variables over time. It also includes comparing non-intervened groups with subjective (perceived performance) and objective measures of effectiveness (e.g., financial returns or cost reduction).
- *And what else?* Focus on the actual transferability of the intervention to the current jobs. An important part of the intervention process has to do with putting knowledge into practice and exercising how to transfer it into daily work procedures.

- *Top secret, please!* Guarantee data protection and the confidentiality of the organizations and teams which participate in the process of evaluation-intervention.
- *The show must go on!* Institutionalize HERO services by creating and strengthening support services to promote the overall health of the organization at the collective level. This involves the proactive assessment of future needs, the anticipation of economic and social changes, and monitoring the primary and secondary enhancement interventions as a strategic goal of the organization.

## Future Avenues in Positive Interventions at Work

### *Research Methods*

Focusing on *research*, the future avenues in positive interventions imply a change in focus so as to intervene in teams and organizations and to get the different key agents involved (CEOs, teams, immediate supervisors, and the customers themselves), given the collective and multilevel nature of organizations (Whitman et al. 2010; Wilson et al. 2004). Furthermore, it is obviously necessary to continue the development of well-articulated theoretical models and validated instruments, which integrate the focus of collectivism and shared experiences ("*My team*…"; "*My organization*…" instead of "*I*…"), as well as the use of objective indicators (e.g., ROA) to avoid possible sources of common-method variance. In terms of design, research should also include empirical evidence and an agreement on the optimal time schedule and temporal patterns (3 months, 6 months, a year or even further) to test the effectiveness of positive interventions in HEROs (Rappaport 1977; Swerissen and Crisp 2004). Researchers are also strongly encouraged to report in-depth information about details regarding the implementation and evaluation of the intervention in order to identify the most suitable situations for a particular intervention to succeed (i.e., generalizability). They should also be on the lookout for factors that threaten an optimal implementation (Nielsen and Randall 2012; Nielsen et al. 2010b). As regards statistical procedures, the effectiveness of the positive intervention should be tested using a broader range of statistical procedures, by combining multiple qualitative (e.g., interviews, focus teams) and quantitative methodologies (e.g., diary studies, and multi-trait multi-method matrices) to ensure that the intervention is successful throughout different situations and circumstances.

### *Professional Practice*

The second future line of research is related to professional practice, with the application of the procedure and the results from the intervention to *real* practice in *real* organizations. The immediate future will require occupational health

psychologists to be familiar with strategies for optimizing people, teams, and organizations in the long term. Salanova et al. (2005) pointed out that the literature about how to manage interventions from Positive Psychology is scarce but interest is growing – above all in times of crisis. Despite its relevance, practice intervention in Positive Psychology is still in an incipient phase, and in fact the evaluations and interventions of the vast majority of companies are mainly focused on "risks" (Salanova et al. 2009a). More efforts should be made to integrate positive intervention in organizations and to test their effectiveness by means of methodological safeguards. One of these efforts would be the use of web- or software-based platforms in the e-design and e-implementation of positive interventions at the workplace (Luthans et al. 2008). These virtual environments are more flexible and make it easier to adapt and to implement the interventions to different populations at different times and places. Of course, all of these aspects make sense if strategic HRM is integrated with business policies for developing HEROs and everyone in the company (including the customers) is allowed to participate (Boselie 2010; Marks et al. 1986; Verburg et al. 2007). Finally, the future of positive interventions implies the refining of evidence-based protocols for optimizing teams and organizations from a global perspective.

### *Teaching/Training*

The last future line of research is related to training in Positive Psychology interventions. Specific positive training should be implemented in universities and training centers from the positive and scientific-professional paradigms. With this specialized training, psychologists will undertake holistic and comprehensive training that complements their training grounded on the traditional illness-based model. This perspective facilitates the implementation of interventions that are focused not only on the "bad" side – it also makes it easier to promote the optimization of employees, teams, and organizations. A positive intervention has been implemented at the Universitat Jaume I through the Master's Degree in Work, Organizational and Human Resources Psychology, which has been available to students since the academic year 2007–2008. It includes a dual perspective and prepares master's degree students in professional competencies, as well as researchers specialized in OHP with special emphasis on Positive evaluation and interventions in different organizational settings. Furthermore, students can also study a PhD in a Occupational Health Psychology doctoral degree program. In this regard, it is worth highlighting the efforts made by different European and international institutions to hold specific conferences on Positive Psychology, such as *European Network for Positive Psychology, International Positive Psychology Association, Pennsylvania's Positive Psychology Center,* and *Spanish Society for Positive Psychology.*

## A General Overview of the Chapter and Conclusions

The aim of this chapter was to provide an overview of interventions based on Positive Psychology, especially during times of turbulence and change, focused on the concept and measurement of HERO (Salanova et al. 2012). Likewise, its purpose was to discuss methodological questions with the aim of developing a set of best practices for organizational interventions based on Positive Psychology.

The present chapter makes different key contributions to the field of OHP. First, it shows the strengths of the *HERO Model* as a guide for data collection and analysis involved in the evaluation and promotion of HEROs based on Positive Psychology. Despite the relevance of this new approach (Nielsen et al. 2010a, b) to cope with current demands and crises, there is lack of research about positive interventions focused on HEROs.

The second contribution is related to the state-of-the art of positive interventions. Based on the *Research to Practice (R2P)* premise and on the Professional-Scientific Model, the chapter offers a revision of the main interventions strategies, optimization targets, and methodological issues to improve health and well-being at the collective level (teams and organizations) (Salanova et al. 2012; Schaufeli and Salanova 2010). These contributions are reflected in a set of best practices to develop and design successful interventions.

The final contribution of this chapter deals with future challenges in positive interventions at work, particularly concerning to the research methods, professional practice and teaching/training. The chapter illustrates the needs to (1) change the focus of interventions given the collective and multi-level nature of organizations (e.g., Whitman et al. 2010; Wilson et al. 2004), (2) integrate positive interventions within the organizations' policies, and (3) train in positive psychology interventions by means of masters' degrees and PhDs in Occupational Health Psychology Interventions.

## References

Acosta, H., Salanova, S., & Llorens, S. (2012). How organizational practices predict team work engagement: The role of organizational trust [Special issue in work engagement]. *Ciencia & Trabajo, 14*, 7–15.

Antonovsky, A. (1979). *Health, stress and coping*. San Francisco: Jossey-Bass.

Antonovsky, A. (1996). The salutogenic modes as a theory to guide health promotion. *Health Promotion International, 11*(1), 11–18. doi:10.1093/heapro/11.1.11.

Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling, 78*(2), 184–190. doi:10.1016/j.bbr.2011.03.031.

Becker, C. M., Glascoff, M. A., & Felts, W. (2010). Salutogenesis 30 years later: Where do we go from here? *The International Electronic Journal of Health Education, 13*, 25–32.

Boselie, P. (2010). *Strategic human resource management. A balanced approach*. Glasgow: McGraw-Hill.

Bresó, E., Schaufeli, W. B., & Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education, 61*(4), 339–355. doi:10.1007/s10734-010-9334-6.

Carter, A., Nesbit, P., & Joy, M. (2010). Using theatre-based interventions to increase employee self-efficacy and engagement. In S. L. Albrecht (Ed.), *Handbook of employee engagement* (pp. 416–424). Northampton: Edward Elgar Publishing.

Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *The Journal of Applied Psychology, 83*(2), 234–246. doi:10.1037/0021-9010.83.2.234.

Cruz, V., Salanova, M., & Martínez, I. M. (2013). Liderazgo transformacional y desempeño grupal: unidos por el engagement grupal [Transformational leadership and group performance: linked by team work engagement]. *Revista de Psicología Social, 28*(2), 183–196.

DeJoy, D. M., Wilson, M. G., Vandenberg, R. J., McGrath-Higgins, A. L., & Griffin-Blake, C. S. (2010). Assessing the impact of healthy work organization intervention. *Journal of Occupational and Organizational Psychology, 83*(1), 139–165. doi:10.1348/096317908X398773.

Dunnette, M. D. (1990). Blending the science and practice of industrial and organizational psychology: Where are we and where are we going? In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, pp. 1–27). Palo Alto: Consulting Psychologists Press.

Eriksson, M., & Lindström, B. (2005). Validity of Antonovsky's sense of coherence scale: A systematic review. *Journal of Epidemiology and Community Health, 59*(6), 460–466. doi:10.1136/jech.2003.018085.

European Network of Organizational and Work Psychologists. (1998). *European curriculum in W & O Psychology*. Reference model and minimal standards. http://www.ucm.es/info/Psyap/enop/rmodel.html. Accessed 17 Nov 2012.

Fleishman, E. A. (1990). Prologue. In K. R. Murphy & F. E. Saal (Eds.), *Psychology in organizations: Integrating science and practice*. Hillsdale: Lawrence Erlbaum Associates.

Hakanen, J., Feldt, T., & Leskinen, E. (2007). Change and stability of sense of coherence in adulthood: Longitudinal evidence from the healthy child study. *Journal of Research in Personality, 41*(3), 602–617. doi:10.1016/j.bbr.2011.03.031.

Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performance spirals: A multilevel perspective. *The Academy of Management Review, 20*(3), 645–678. doi:10.2307/258790.

Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behaviour, 27*(3), 387–393. doi:10.1002/job.373.

Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *The Academy of Management Learning and Education, 7*(2), 209–221. doi:10.5465/AMLE.2008.32712618.

Macik-Frey, M., Quick, J. C., & Nelson, D. (2007). Advances in occupational health: From a stressful beginning to a positive future. *Journal of Management, 33*(6), 809–840. doi:10.1177/0149206307307634.

Marks, M. L., Mirvis, P. H., Hackett, E. J., & Grady, J. (1986). Employee participation in a quality circle program: Impact on quality of work life, productivity, and absenteeism. *The Journal of Applied Psychology, 71*(1), 61–69. doi:10.1037/0021-9010.71.1.61.

Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior, 27*(8), 1031–1056. doi:10.1002/job.406.

McCrae, R. R., & Costa, P. T. J. (1990). *Personality in adulthood*. New York: Guilford Press.

McDonald, G., Jackson, D., Wilkes, L., & Vickers, M. H. (2012). A work-based educational intervention to support the development of personal resilience in nurses and midwives. *Nurse Education Today, 32*(4), 378–384. doi:10.1016/j.nedt.2011.04.012.

Mikkelsen, A., Saksvik, P. Ø., & Landsbergis, P. (2000). The impact of a participatory organizational intervention on job stress in community health care institutions. *Work and Stress, 14*(2), 156–170. doi:10.1080/026783700750051667.

Milnea, D. L., Keegan, D., Westerman, C., & Dudley, M. (2000). Systematic process and outcome evaluation of brief staff training in psychosocial interventions for severe mental illness. *Journal of Behaviour Therapy and Experimental Psychiatric, 31*(2), 87–101. doi:10.1016/S0005-7916(00)00013-6.

Nielsen, K., & Randall, R. (2012). Opening the black box: Presenting a model for evaluation organizational-level interventions. *European Journal of Work and Organizational Psychology*, ifirst, 1–17. doi:10.1080/1359432X.2012.690556.

Nielsen, K., Randall, R., Holten, A. L., & Rial, E. (2010a). Conducting organizational-level occupational health interventions: What works? *Work and Stress, 24*(3), 234–259. doi:10.1080/02678373.2010.515393.

Nielsen, K., Taris, T. W., & Cox, T. (2010b). The future of organizational interventions: Addressing the challenges of today's organizations. *Work and Stress, 24*(3), 219–233. doi:10.1080/02678373.2010.519176.

Nytrø, K., Saksvik, P. O., Mikkelsen, A., Bohle, P., & Quinlan, M. (2000). An appraisal of key factors in the implementation of occupational stress interventions. *Work and Stress, 14*(3), 213–225. doi:10.1080/02678370010024749.

Phillips, J. (2005). Knowledge is power: Using nursing information management and leadership interventions to improve services to patients, clients and users. *Journal of Nursing Management, 13*(6), 524–536. doi:10.1111/j.1365-2934.2005.00607.x.

Rabin, S., Matalon, A., Maoz, B., & Shiber, A. (2005). Keeping doctors healthy: A salutogenic perspective. *Families, Systems & Health, 23*(1), 94–102. doi:10.1037/1091-7527.23.1.94.

Rappaport, J. (1977). *Community psychology: Values, research and action*. New York: Holt, Rinchart & Winston.

Robertson, M. M., & Huang, Y. H. (2006). Effect of a workplace design and training intervention on individual performance, group effectiveness and collaboration: The role of environmental control. *Work, 27*(1), 3–12.

Rodríguez, A. M., Llorens, S., & Salanova, M. (2006). Taller de trabajo sobre inteligencia emocional en enfermeras: Eficacia a corto plazo [Workshop on emotional intelligence in nurses: Short time efficacy]. *Gestión Práctica de Riesgos Laborales, 29*, 46–51.

Salanova, M. (2008). Organizaciones saludables y desarrollo de recursos humanos [Healthy organizations and human resource development]. *Estudios Financieros, 303*, 179–214.

Salanova, M. (2009). Organizaciones saludables, organizaciones resilientes [Healthy organizations, resilient organizations]. *Gestión Práctica de Riesgos Laborales, 58*, 18–23.

Salanova, M., Martínez, I. M., & Llorens, S. (2005). Psicología Organizacional Positiva [Positive Organizational Psychology]. In F. J. Palací (Coord.) (Ed.), *Psicología de la Organización* (pp. 349–376). Madrid: Pearson, Prentice-Hall.

Salanova, M., Cifre, E., Martínez, I., & Llorens, S. (2007). *Caso a caso en la prevención de riesgos psicosociales. Metodología WONT para una organización saludable* [Case by case in the psychosocial risk prevention: WONT methodology for a healthy organization]. Bilbao: Lettera Publicaciones.

Salanova, M., Llorens, S., & Rodríguez, A. (2009a). Hacia una psicología de la salud ocupacional más positiva [Towards a more positive occupational health psychology]. In M. Salanova (Dir.), *Psicología de la Salud Ocupacional* (pp. 247–284). Madrid: Editorial Síntesis.

Salanova, M., Martínez, I. M., Cifre, E., & Llorens, S. (2009b). La salud ocupacional desde la perspectiva psicosocial: Aspectos teóricos y conceptuales [The occupational health from the psychosocial perspective: Theoretical and conceptual aspects]. In M. Salanova (Dir.), *Psicología de la Salud Ocupacional* (pp. 27–62). Madrid: Editorial Síntesis.

Salanova, M., Cifre, E., Llorens, S., Martínez, I. M., & Lorente, L. (2011). Psychosocial risks and positive factors among construction workers. In R. Burke, S. Clarke, & C. Cooper (Eds.), *Occupational health and safety: Psychological and behavioral challenges* (pp. 295–322). Surrey: Gower.

Salanova, M., Llorens, S., Torrente, P., & Acosta, H. (2013). *Positive interventions in positive organizations*. *Terapia Psicológica, 31*(1), 101–113. doi: 10.4067/S0718-48082013000100010.

Salanova, M., Llorens, S., Cifre, E., & Martínez, I. M. (2012). We need a HERO! Towards a validation of the Healthy & Resilient Organization (HERO) model. *Group & Organization Management, 37*(6), 785–822. doi:10.1177/1059601112470405.

Schaufeli, W. B., & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and engagement, and their relationships with efficacy beliefs. *Anxiety, Coping & Stress, 20*(2), 177–196. doi:10.1080/10615800701217878.

Schaufeli, W. B., & Salanova, M. (2010). How to improve work engagement? In S. L. Albrecht (Ed.), *Handbook of employee engagement. Perspectives, issues, research and practice* (pp. 399–415). Northampton: Edward Elgar.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *The American Psychologist, 55*(1), 5–14. doi:10.1037/0003-066X.55.1.5.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology: In Session, 65*(5), 467–487. doi:10.1002/jclp.20593.

Snyder, C. R., Feldman, D. B., Taylor, J. D., Schroeder, L. L., & Adams, V. (2000). The roles of hopeful thinking in preventing problems and promoting strengths. *Applied and Preventive Psychology: Current Scientific Perspectives, 9*(4), 249–269. doi:10.1016/S0962-1849(00)80003-7.

Swerissen, H., & Crisp, B. R. (2004). The sustainability of health promotion interventions for different levels of social organization. *Health Promotion International, 19*(1), 123–130. doi:10.1093/heapro/dah113.

Torrente, P., Salanova, S., Llorens, S., & Schaufeli, W. B. (2012). Teams make it work: How team work engagement mediates between social resources and performance in teams. *Psicothema, 24*(1), 106–112.

Verburg, R. M., Den Hartog, D. N., & Koopman, P. L. (2007). Configurations of human resource management practices: A model and test of internal fit. *International Journal of Human Resource Management, 18*(2), 184–208. doi:10.1080/09585190601102349.

Whitman, D. S., Van Rooy, D. L., & Viswesvaran, C. (2010). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology, 63*(1), 41–81. doi:10.1111/j.1744-6570.2009.01162.x.

Wilson, M. G., DeJoy, D. M., Vandenberg, R. J., Richardson, H. A., & McGrath, A. L. (2004). Work characteristics and employee health and well-being: Test of a model of healthy work organization. *Journal of Occupational and Organizational Psychology, 77*(4), 565–588. doi:10.1348/0963179042596522.