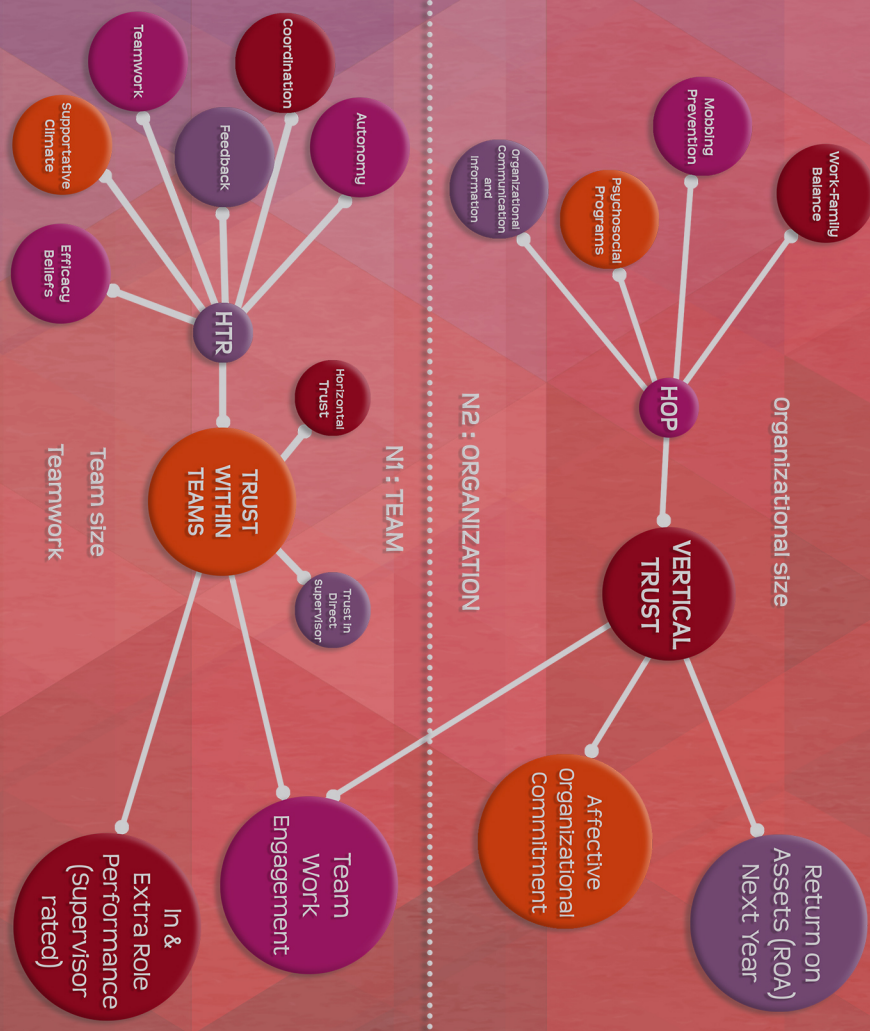


CEO's interview (n=14). HERO's definition mainly based on the health of the employees



Spanish & Chilean Sample

Trust your company: A multimethod approach based on The HERO Model – Hedy Acosta

# Trust your company: A multimethod approach based on The HERO Model

Hedy Carolina Acosta Antognoni  
PhD. Defense

**Promoters:**  
PhD. Marisa Salanova  
PhD. Susana Llorens

# **TRUST**

## **YOUR COMPANY :**

*A MULTIMETHOD APPROACH  
BASED ON THE HERO MODEL*

HEDY ACOSTA ANTOGNONI

2017

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# **TRUST YOUR COMPANY :**

## *A MULTIMETHOD APPROACH BASED ON THE HERO MODEL*

**HEDY ACOSTA ANTOGNONI**

Departament de Psicologia Evolutiva, Educativa, Social i Metodologia

Universitat Jaume I, Castelló de la Plana, Espanya.

The promoters of this thesis are:

First: Prof Ph.D. Marisa Salanova Soria

Second: Ph.D. Susana Llorens Gumbau

Invited professor: Ph.D Pascale M. Le Blanc



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Correspondence concerning this thesis should be addressed to Hedy Acosta Antognoni, Department of Social Psychology, Universitat Jaume I, Av. Sos Baynat s/n. +34 96472 9955. E-mail: hacosta@uji.es

'No puedes impedir una gran catástrofe o crisis, pero sí puedes construir una organización que esté dispuesta a luchar, con una moral alta, que sepa comportarse, que confíe en sí misma, donde las personas tengan confianza mutua... porque sin confianza, no lucharán'

***Peter Drucker***

'La técnica y la tecnología son importantes, pero incorporar confianza es la cuestión clave de la década'

***Tom Peters***



## ACKNOWLEDGEMENTS · AGRADECIMIENTOS · AGRAÏMENTS

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# TRUST YOUR COMPANY:

## *A MULTIMETHOD APPROACH BASED ON THE HERO MODEL*

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## PRÓLOGO (FOREWORD)

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### ¿QUÉ ES LA PSICOLOGÍA PARA MÍ?

Para mí, **es la ciencia del sentido común, que es el menos común de los sentidos**. Esta frase siempre me ha gustado porque estudiar psicología me permitió conocer sobre temas que todo el mundo en algún momento de la vida nos hemos preguntamos, por ejemplo: las emociones, la personalidad, el carácter, las motivaciones, el apego, entre otros. Creo que la mayoría de los psicólogos/as comenzamos por ahí...preguntándonos por el comportamiento humano.

Seguir este camino académico a partir de la psicología ha significado un viaje lleno de experiencias fascinantes. Mi foco de atención desde un principio fue la psicología del trabajo y las organizaciones, unido a la ilusión por mejorar la calidad de vida laboral me ha inspirado a lograr retos que no me hubiese imaginado.

El foco de esta tesis doctoral es la confianza organizacional desde una mirada positiva. Cuando comencé a estudiar este tema, quedé impresionada de las numerosas investigaciones que se han realizado desde diferentes disciplinas debido a su relevancia en la interacción social. Sin embargo, a pesar de esto no existe consenso en múltiples aspectos (p.e., definición, medidas, niveles). Dándome cuenta de su importancia en contexto organizacional y sumado al entusiasmo en aportar conocimiento, me embarque en este viaje, de la mano de grandes maestras y maestros que han apoyado mi andar. Esta mirada positiva, tanto teórica como metodológica, proviene de la Psicología Ocupacional Positiva. Y es a través del Modelo de Organizaciones Saludables y Resilientes que nos posicionamos para comprender este fenómeno psicosocial, sus antecedentes (cómo se genera confianza en las organizaciones y equipos) y sus consecuencias en el bienestar de los trabajadores/as y de la organización de acuerdo a los objetivos e hipótesis planteadas y desarrollados durante este camino.

El éxito de una organización y los equipos de trabajo que los integran depende de múltiples factores, y la confianza como proceso subyacente parece ser clave no solo para el éxito organizacional, sino que para el bienestar de todos sus integrantes.

Los invito entonces a seguir el camino que con esfuerzo y perseverancia se ha desarrollado para conocer el rol de la confianza organizacional en una Organización Saludable y Resiliente. Espero que esta tesis pueda ser de ayuda y también que lo disfruten.



## INTRODUCTION

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Nowadays, there is a deep crisis of values in our society regarding trust and transparency. However, this social crisis represents an invaluable opportunity to reflect on the importance of trust in different kinds of organizations, specially, in positive organizations. We consider organizational trust to mean "employees' willingness at being vulnerable to the actions of their organizations, whose behavior and actions they cannot control" (Tan & Lim, 2009, p. 46). From a positive organizational approach, the HEalthy & Resilient Organizations Model (HERO; Salanova, Llorens, Cifre, & Martínez, 2012), proposed that organizational trust is strongly re-emerging as an important topic of study because it is an essential ingredient, as an underlying mechanism, to develop a healthy work environment and organizational effectiveness. Some authors consider that, when trust flourishes within a given organization, it represents a competitive advantage (Andersen, 2005; Barney & Hansen, 1994). For this reason, understanding how organizational trust emerges, and what are its consequences from a positive organizational perspective, is a relevant topic of research in our days.

Trust is considered a key ingredient to develop and achieve well-being at the work place (Khodyakov, 2007). In this sense, cultivating optimal levels of trust is a competitive advantage for the contemporary organizations in terms of promoting happier and more productive workers, teams and overall positive psychosocial climate (Diener, 2016; Salanova & Llorens, 2016; Wright & Cropanzano, 2007). Modern workers have new needs and demands to be considered to guarantee their well-being, understood as their 'overall evaluations of their lives and their emotional experiences'. Furthermore, in a work-related wellbeing context, a healthy workplace is defined by the World Health Organization (WHO) as (2010, p. 11) 'one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of the workplace'.

The Global Plan of Action of WHO (2010) proposed a set of five objectives: (1) To devise and implement policy instruments on workers' health; (2) To protect and promote health at the workplace; (3) To promote the performance of, and access to, occupational health services; (4) To provide and communicate evidence for action and practice; (5) To incorporate workers' health into other policies.

Here, practices implemented by the organization have an important role to promote trust and well-being within organizations. And, if employees consider that their organizations are implementing actions to improve their well-being they will trust their organization and invest more effort in their work which leads to increased performance and goal achievement.

All in all, trust is an important ingredient to be considered in the recipe for organizational success. In a recent study, Fulmer and Gelfand (2012) conducted a systematic review showing that research on trust has scarcely explored the collective level. Hence, they claimed that there is still a lack of evidence on how to increase trust at multiple levels within organizations, and on the relationship between organizational and team trust and its outcomes. Organizations are inherently multilevel systems, and trust, like many other constructs, operates at different levels (i.e., individual, team and organizational levels of analysis). For this reason, this thesis project puts attention to different levels as a theoretical and empirical imperative. Thus, an integration of trust research across multiple levels and methods within organizations is much needed (Klein, Dansereau, & Hall, 1994).

Considering the critical scenario of world economic and political crisis, and the deep underlying value crisis behind it present in all kinds of organizations, both private and public. The study of the dynamics of trust from a positive perspective bears the opportunity to shed light on how this psychosocial phenomenon happens in the actual work context.

Consequently, the main goal of this thesis project is the study of organizational trust at different levels of analysis based on the Healthy & Resilient Organization Model. Salanova and her colleagues (2012, pp.788) defined HEROs as those organizations that make systematic, planned, and proactive efforts to improve employees' and organizational processes and outcomes. These efforts involve carrying out Healthy Organizational Resources and Practices aimed at improving the work environment on the following levels: (a) task (autonomy, feedback), (b) interpersonal (socialization, transformational leadership), and (c) organizational (HR practices, performance). The HERO Model represents a recent multilevel perspective that allow study individuals, groups, and organizations to understand organizational activities, and the underlying psychosocial processes involved. It refers to a combination of three main and interrelated components: (1) healthy organizational resources and practices (e.g., task resources, social resources, organizational practices from Human Resources

Management); (2) healthy employees (e.g., work engagement; efficacy beliefs, trust), and (3) healthy organizational outcomes (e.g., performance). One aspect of the model is that all dimensions included within it are tested at the collective (team or organizational) level by different stakeholder (e.g., CEOs, employees, supervisors, and clients). (Acosta et al., 2012; Meneguel, Salanova, & Martínez, 2016; Salanova y Llorens, 2016; Solares, Peñalver, Meneguel, & Salanova, 2016).

To summarize, this thesis project aims to evaluate organizational trust considering a multimethod approach based on The HERO Model, that is, healthy organizational practices and resources; healthy employees and healthy organizational outcomes at different levels of analysis. To achieve this, the thesis project included different samples (organizations sample both in Spain and Chile, and laboratory sample), different sources of information (i.e., CEO's, team perceptions, supervisor perceptions, financial indicators) as well as qualitative and quantitative analyses.



## RESEARCH QUESTIONS

Specific questions branch out from the main research question of this thesis. They will be answered by means of the different chapters that structure this thesis. Through a deeper review of trust within organizations, the first step is the theoretical review of the topic of organizational trust. This chapter encloses an overview of the concept and definition of trust within organizations, theories, measurement, and questionnaires, as well as its antecedents and consequences. From this theoretical chapter appear the gaps in the literature of trust that the current thesis project aims to solve.

Organizational trust has been studied from different disciplines (i.e., social sciences, economics, and organizational theories). These disciplines seem to agree on that trust has several important benefits for organizations. However, this multidisciplinary study on trust topic has not reached a consensus regarding its definition and there are also discrepancies related to the antecedents and consequences of trust within organizations (Dirk & Ferrin, 2001). Furthermore, there is a call from academics in the area to conduct more in-depth research about the drivers and the outcomes of trust within organizations considering a multilevel approach (Fulmer & Gelfand, 2012).

To approach the main topic of trust from a multimethod perspective is relevant to establish a solid and broad framework based on the perspective of key agents involved in the process of building and developing Healthy Organizations. The first step of this thesis project is to explore and analyze the concept of Healthy Organization from CEO's and Company leader's perspectives because they are responsible for developing actions and policies to successfully manage their organizations, for instance, implementing practices and developing resources to increase trust and actively promote a HERO (Salanova et al., 2012).

Sorge and van Witteloostuijn (2004) and Vanderberge et al. (2002) suggest that there is a broad corpus of knowledge on theories of healthy organizations but that this knowledge is not interconnected. According to these authors, this knowledge should be integrated through evidence based on consulting, as well as empirical evidence that would provide the groundwork for newer theoretical models. In this way, Positive Occupational Psychology (POP) focuses on studying the strengths of employees and people's optimal behavior within organizations (Luthans, Avolio, Avey, & Norman, 2007;

Peterson & Seligman, 2004; Salanova, Martinez, & Llorens, 2005; Seligman & Csikszentmihalyi, 2000), and thus the concept of 'healthy organizations' has been addressed using different approaches. From a psychosocial perspective, the HERO model takes a step further towards considering that a healthy organization encompasses the health of the employees not only in their work environment but also outside of work, affecting the community. Here is where the organizational resources and practices that the organization invests in them become a cornerstone in the development of HEROs.

The HERO Model is a heuristic theoretical model that makes it possible to integrate results about vast empirical and theoretically based evidence from research on job stress, Human Resource Management (HRM), organizational behavior and positive occupational health psychology (Llorens, del Líbano, & Salanova, 2009). According to this model, a healthy and resilient organization refers to a combination of three main and interrelated components: (1) resources and healthy organizational practices (e.g., job resources, healthy organizational practices), (2) healthy employees (e.g., trust, work engagement), and (3) healthy organizational outcomes (e.g., performance) (Salanova et al., 2012). A particular aspect of the model is that all dimensions included within it are tested at the collective level (i.e., teams or organizations). Since this model is considered a heuristic model, a test of the specific relationships among certain key elements is required. Consequently, as mentioned above, trust within organization emerges as a relevant topic to study in a HERO. For this reason, the next research questions are focused on organizational trust using a multimethod approach added on the HERO Model.

Based on this approach, CEOs are one of the most relevant actors to define and develop policies and actions that shape and drive the organization towards its goals of success and wellbeing of all stakeholders. Therefore, exploring the concept of a healthy organization from these key agent's perspective is a topic utmost relevance to understand trust and wellbeing at work. Hence, the first empirical chapter of this thesis project explores the meaning of healthy organizations from an empirical-theoretical perspective based on the healthy and resilient organization model through the Chief Executive Officers (CEOs) perceptions.

***First research question: From a qualitative perspective, what are the perceptions of CEOs about Healthy Organization?***

Having answered the first question and integrated the CEOs perspective to develop a more thorough approach to Healthy Organizations. The next step is to focus on Trust within organizations as a key psychosocial underlying mechanism. Previous research agrees that trust is a pivotal element, useful in organizational activities and a source of sustainable competitive advantages (Andersen, 2005; Barney & Hansen, 1994). Despite its relevance, few studies have focused on examining trust at the team level of analysis, especially when groups play a crucial role in contemporary organizations to achieve organizational goals (Tan & Lim, 2009) as well as to increase efficiency and competitiveness (Hodson, 1997), productivity (Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003) and health (Wilson, Dejoy, Vandenberg, Richardson, & McGrath, 2004). Moreover, as far as we know there is no previous empirical research focusing on the part that organizational trust plays in the relationship among healthy organizational practices and team work engagement. That is, considering the team perceptions as the referent of healthy organizational practices, organizational trust, and team work engagement. In the current study, we went one step further by studying the mediating role of organizational trust among healthy organizational practices and team work engagement in a higher-order level of analysis (i.e., teams). Teams are the structural unit of organizations, and constitute the social space where psychosocial constructs like trust comes alive. Furthermore, teams are responsible for developing and deploying practically all of the organizations processes and activities, so their collective perception of psychosocial factors is extremely important as an information asset to management. Given the relevance of teams within organizations, the objective of this study was to test the mediating role of organizational trust between healthy organizational practices and team work engagement using aggregated data at the work-unit level based on the HERO Model (HEalthy & Resilient Organizations Model; Salanova et al., 2012).

***Second research question: At the team level of analysis, what part does trust play in the relationship between healthy organizational practices and team work engagement?***

The next step in this thesis project was to evaluate the mediating role of trust at organizational level considering variables whose nature is organizational. Takeuchi, Chen, and Lepak (2009) posit that adopting a multilevel theoretical perspective, which considers aspects of the organization's social system, is needed to fully understand how

HRM practices relate to employee attitudes and behaviors. Adding the last rationale, Katou and Budhwar (2010) proposed that it is important to measure HRM practices to use the appropriate level of analysis. However, as far as we know there is no evidence about organizational trust taking into account: (1) the organization as a unit of analysis, (2) using the organization as a referent and (3) consider constructs (HRM Practices, Trust and Commitment) allocated at the organizational level.

The main idea in this study is that organizations implement HRM practices in order to take care of their employees. If employees trust in the HRM practices their organization develops to enhance their well-being, they will commit to the organization. In this way, trust has a mediator role between organizational resources and practices (i.e., Human Resources Management practices), employee well-being (i.e., work engagement), and organizational outcomes (i.e., performance) but this evidence is mainly centered at the individual and the team levels of analysis. Fulmer and Gelfand (2012) proposed that trust has different antecedents (i.e., HRM practices), and consequences (i.e., commitment) depending on the focus of the level of analysis. Following this rationale, to accost an organizational level of analysis on trust research is still needed because practices and resources implemented by organizations can have an impact on the collective well-being of the firm (i.e., trust and commitment). In this way, Ostroff and Bowen (2000) proposed that there is a gap in research regarding the level of analysis (i.e., organizational level) in specific relationship within organizations (i.e., HRM practices). Considering the aim of this study, and integrating the key theoretical ideas in this avenue the following research question is:

**Third research question: At the organizational level of analysis, how is trust related to healthy organizational practices and organizational affective commitment?**

In the next chapter, going a step further, a multilevel perspective is taken to explore the cross-level effect of organizational trust (i.e., vertical trust and horizontal trust) as is considered in the HERO Model on all dimension of team work engagement (i.e., team vigor, team dedication, team absorption).

There is plenty of research that supports the evidence of work engagement being an important indicator of employees' well-being both at the individual and team levels of analysis (Acosta, Salanova, & Llorens, 2012; Bakker & Demerouti, 2008; Bakker, Van Emmerik, & Euwena, 2006; Salanova, Agut, & Peiró, 2005; Harter, Schmidt,

& Hayes, 2002; Lin, 2010; Salanova, Llorens, & Schaufeli, 2011; Schaufeli & Bakker, 2004). However, there is a lack of research regarding the effects on each dimension of team work engagement (i.e., team vigor, team dedication and team absorption); and further investigation on the subject is still needed as proposed by Bakker and Leiter (2010). It's relevant to explore this potential differences when considering the diverse nature of experiences that represent each dimension and the practical implications this comprehends regarding policies and interventions. Considering the new proposed state of team work engagement proposed by Torrente, Salanova, Llorens, Schaufeli, (2013) this chapter aims to evaluate how is vertical trust related to team vigor, team dedication and team absorption, controlling by horizontal trust. Therefore, the following chapter entails the following question:

**Fourth research question: Considering a multilevel approach, what is the role of organizational trust on team work engagement?**

In order to extend the multilevel perspective in the study of organizational trust, the next chapter supposes a step further exploring both vertical trust and horizontal trust between healthy organizational resources & practices and healthy organizational outcomes. Trust within organizations is vital to organizational success and the well-being of employees (Fukuyama 1995; Kramer & Cook, 2004) and may foster innovative and prosocial behaviors that help create economic advantages (Dasgupta, 2000; Fairholm, 1994). Recent studies have proposed it is a mediator, linking organizational resources and practices to organizational effectiveness (Acosta, Salanova, & Llorens, 2012; Dirks & Ferrin, 2001, 2002; Kiffin-Petersen & Cordey, 2003; Mayer & Gavin, 2005; Walumbwa, Luthans, Avey, & Oke, 2011). However, further research on trust at different levels within companies is needed (Fulmer & Gelfand, 2012). In the present study, we look at the antecedents and consequences of trust on two levels (team and organization), in order to explore whether a similar process operates at both levels. In this way, this study pointed out that organizational trust is an explanatory mechanism behind the relationship between practices implemented by the organization and performance. Organizational trust is derived from alignment from having the organizations' systems, structures and rewards aligned with one consistent objective. When everything is aligned, trust is expected to grow (Covey, 2006). Creed and Miles (1996) pointed out that the design of HR practices, which yield a perception of common goals and provide common resources, should affect the perception of trust. Thus, resources and practices implemented by organizations at different levels (i.e., teams and organizations) are relevant to develop trust and obtain positive outcomes. The main

goal of this article is to extend the knowledge about the role of organizational trust in the relationship between Organizational Resources & Practices and outcomes using a multilevel framework (team and organization) based on the Healthy and Resilient Organization (HERO) Model (Salanova et al., 2012). Attending to this calling, the next research question arises:

**Fifth research question: Considering a multilevel and multi-referent mediation approach, how to explain organizational and team performance through the relation between trust and healthy organizational practices?**

Fruit of the reflection and inquiry in the previews studies on this thesis project and academia calling for longitudinal studies on the subject, the research questions of this thesis project rise. Based on Social Cognitive Theory (Bandura, 1999) and the HERO Model (Salanova, et al., 2012). As Salanova, Llorens, and Schaufeli (2011) state, Social Cognitive Theory extends the conception of individual human agency (i.e., self-efficacy) to "collective agency" (i.e., collective efficacy). Collective efficacy is an important predictor over time of organizational activities (LeBlanc, Schaufeli, Salanova, Llorens, & Nap, 2009). In this way, Stajkovic, Lee, and Nyberg (2009) conducted a meta-analysis that reveals a significant positive correlation between collective efficacy and group performance. However, the underlying mechanism between collective efficacy and group performance remains to be discovered. Regarding the evidence provided by the previous chapters, trust at team level of analysis appears to be a strong mediator between healthy team resources in terms of collective efficacy beliefs and healthy organizational outcomes in terms of performance. A longitudinal study design would be necessary to investigate dynamic and reciprocal relationships among collective efficacy beliefs and performance.

All in all, this chapter explores horizontal trust in the relationships between collective efficacy beliefs and group performance (leader-rated) over time; it tests how collective efficacy beliefs and group performance are reciprocally and indirectly related over time through their impact on horizontal trust:

The next chapter involves a very important statement of the HERO Model. Also, it refers to the fact that the three elements (i.e., healthy organizational resources and practices, healthy employee and healthy organizational outcomes) that compose the model are related between each other and can develop gain spirals over time. This rationale means that if the organization implements resources and practices in order to



improve the well-being of their employees, they'll invest their efforts on achieving better performance. Thus, the last research question of this thesis project emerges:

**Sixth research question: Using a longitudinal approach at team level, what are the dynamics between trust, efficacy, and performance over time?**

Last research question emerges during a working stay in Chile. In the context of the Master's Degree on Work and Organizational Psychology at Universidad Adolfo Ibáñez, we had the opportunity to test the HERO Model relationships proposed in this thesis project. Different sources of Chilean information (Santander - Centro UC Políticas Públicas, 2015) evidenced the low level of trust, especially at the collective level of analysis (i.e., teams). Given the evidence from research on public opinion about trust within organization in Chile (ICARE, 2015) and the importance of team resource on healthy organization it was interesting to evaluate how horizontal trust and team work engagement interact in a private organization as compared to the public sector. Furthermore, this project included another dimension of horizontal trust, that is, trust in the direct supervisor. Recently, several researchers (Costa, 2003; Frazier, Gooty, Little, & Nelson, 2015; Legood, Thomas, & Sacramento, 2016) have proposed that horizontal trust within organizations includes trust in colleagues and trust in the direct supervisor. To obtain support to this proposition the evaluation of trust in the HERO Model needs to be further tested. As well, the opportunity to expand and test de proposed models in a cross-cultural setting is a step towards a more thorough and complete knowledge while at the same time engaging in a valuable case study of Healthy Organizations study and development as an emerging trend in South American countries. Taking into account all the before mentioned arguments, emerges the following research question:

**Seventh research question: Same evidences about the role of trust in HERO Model, is found with Chilean Sample?**

**Specific research objectives: Thesis planning**

The main goal of this thesis project is to evaluate organizational trust considering a multimethod approach based on The HEalthy & Resilient organization Model (HERO; Salanova, Llorens, Cifre, & Martínez, 2012), and its implications for organization's management are discussed. Organizational trust is a key element in organizational activities and the evidence, until now, proposed that trust has a mediating role between organizational practices and resources, and organizational outcomes. Studying trust at different levels of analysis allows exploring which

organizational practices and resources increase or develop trust within organizations, that is, the trust in organizations as a whole (vertical trust) and trust in co-workers (horizontal trust), and what is the effect of trust on organizational outcomes. This goal was separated into several steps and specific goals. First, a theoretical and conceptual chapter was developed. The aim of this chapter was to offer the state-of-art on organizational trust. This review highlights the gaps on organizational trust research that represent the research questions developed in this thesis project. The content of the empirical chapters, and their specific goals and hypotheses are summarized in the following paragraphs:

**Chapter 2 (empirical study 1).** The aim of this study was to analyze the meaning of healthy organizations from an empirical and theoretical perspective based on the HERO Model (Salanova, et al., 2012). Through content analysis, 14 interviews with 14 CEO's or human resources managers were conducted and analyzed. Specifically, the information was codified using two analysis strategies: (1) one focused on defining a healthy organization; (2) another focused on the key element making up a healthy organization.

**Chapter 3. (empirical study 2).** The aim of this study was evaluating the mediating role of organizational trust between healthy organizational practices implemented by Human Resources Management (HRM) and team work engagement based on the HERO Model, using data aggregated at team level of analysis. Using Structural Equation Modelling (ESM) two models were tested, that is, Model 1: the fully mediating role of organizational trust between HRM practices and team work engagement, and Model 2: the partially mediating role of organizational trust and team work engagement.

**Chapter 4. (empirical study 3).** In this empirical study, trust between organizational antecedents and consequences was evaluated. In this chapter, only organizational level variables present by nature were considered, that means, organizational practices implemented by HRM, organizational trust, and organizational affective commitment. The aim of this study was to evaluate how is trust related to healthy organizational practices and organizational affective commitment.

**Chapter 5. (empirical study 4).** Given the results of the previous empirical studies a multilevel approach was incorporated. The aim of this study was to evaluate the cross-level relationship of organizational trust (vertical trust and horizontal trust) on the dimension of team work engagement. Concretely, the hypotheses were three. First, the hypothesis 1: organizational trust (vertical trust) has a positive cross level effect on

team vigor controlling by horizontal trust. Second, the hypothesis 2: organizational trust (vertical trust) has a positive cross level effect on team dedication controlling by horizontal trust. Finally, the hypothesis 3: organizational trust has a positive cross level effect on team absorption controlling by horizontal trust. Using Hierarchical Lineal Modelling the three hypotheses were evaluated considering HERO Model from a multilevel perspective.

**Chapter 6 (empirical study 5).** Focused on the multilevel perspective and given the results reported by the previous empirical studies 2, 3, and 4 the next research questions emerge. In this study, it was proposed a multilevel model of organizational trust focused on its two dimensions, that is, vertical trust and horizontal trust and its relationship with the three elements of the HERO Model. Furthermore, to develop this study three different source of information were included, that is, team perceptions, direct supervisor perceptions and a financial indicator. Eight hypotheses were developed. At the organizational level, we hypothesized that vertical trust has a fully mediating role between the relationship of healthy organizational practices evaluated on 2009 and Return on assets evaluated on 2010. At the team level, we hypothesized that horizontal trust has a fully mediating role between the relationship of healthy resources (in terms of autonomy, support climate, feedback, and coordination) considering as a dependent variable, at team level, the perceptions of the direct supervisor about team performance. Furthermore, we hypothesized cross-level relationships between: (1) healthy organizational practices and horizontal trust and team performance (assessed by supervisor), (2) vertical trust and team performance (assessed by supervisor).

**Chapter 7. (empirical study 6).** This empirical study aims to provide evidence to support an important underlying statement in the HERO Model. It refers to the gain spirals over time. HERO model proposed that the three elements that compose it are interrelated between each other and they develop positive spirals over time. Furthermore, Social Cognitive Theory gives strong evidence to consider efficacy beliefs as antecedents to develop gains spirals over time. For this reason, and considering the main topics of this research project, that is, trust, allows that the research questions emerge. The aim of this empirical study was to evaluate horizontal trust between collective efficacy beliefs and performance rated by team leader, all at the team level of analysis. Through Structural Equation Modelling hypothesized model was: (1) efficacy beliefs as a strong antecedent in gains spirals over time and (2) horizontal trust has a mediating role between the relationships of collective efficacy beliefs and performance perceptions rated by team leader.

**Chapter 8. (empirical study 7).** This empirical study aims to evaluate the relationship proposed by the HERO Model in a Chilean sample. In a positive way, this study hypothesized the role of trust as a fully mediator between team work and the core of work engagement (i.e., vigor and dedication). Two dimensions of horizontal trust was considered in this study, that is, trust in colleagues and trust in the direct supervised. In first place, this evidence could show that the relationship proposed by the HERO Model in a Spanish sample is replicated in a Chilean sample. In a Chilean context team work is an important resource to increase trust and engagement within teams.

**Chapter 9.** Finally, a summary of the findings of the empirical studies conducted in this thesis project is obtained. Theoretical implications are discussed based mainly on the HERO Model. Practical implications aim to give a highlight to Human Resources Management in order to develop trust within organizations. Furthermore, strengths and weaknesses of the empirical chapters of this thesis project in relation to future challenges and new goals associated to the organizational trust research.

## FINAL NOTE

This thesis project offers a multimethod approach to organizational trust. The role of trust within organizations as an underlying mechanism which mediates the relationship between resources and practices implemented by them and its outcomes is confirmed. It is achieved through a cross-sectional and over time perspective and using different samples and sources of information. From the results of the qualitative study, CEOs offer a vision of the healthy organization that focuses mainly on employee health. Also, new categories and subcategories to be included in the HERO Model have emerged. The quantitative empirical studies contained in this project contribute to understanding in-depth which antecedents and consequences are related to the dimensions of organizational trust. This information is an important resource relevant to CEO's in order to make decisions to develop trust in their organizations as an important competitive advantage in modern organizations to be a HERO.

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# **Theoretical Framework:**

Understanding  
Trust within  
Organizations





# 1. THEORETICAL FRAMEWORK:

## UNDERSTANDING TRUST WITHIN ORGANIZATIONS

HEDY ACOSTA, SUSANA LLORENS AND MARISA  
SALANOVA

UNIVERSITAT JAUME I,  
WANT -RESEARCH TEAM, SPAIN

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Correspondence concerning this article should be addressed to Hedy Acosta, Department of Social Psychology, Universitat Jaume I, Av. Sos Baynat, s/n. 12071. Castellón (Spain). Tel. +34 964729599. Fax +34 964729262. E-mail: hacosta@uji.es.



## INTRODUCTION

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Trust as research topic, has been considered a relevant construct from the perspective of different scientific disciplines. From the perspective of *biology* trust is one of the most important factors in human life. For example, the study of the oxytocin hormone and its relevance in the development of attachment and positive social relationships is the biological base of trust (Riedl & Javor, 2012). *Sociology* considers trust is a process with three dimensions: (1) *thick interpersonal* is the first level of trust that people develop in their lives, for example, towards their family members, relatives, and close friends; (2) *thin interpersonal trust* is the level of trust developed as a member of out-groups (other social groups than the nuclear family and close friends), for example sports teams; and (3) *trust in institutions* is the level of trust between people and the management of institutions and depends on their perceived legitimacy, technical competences, and ability to perform assigned duties efficiently (Khodykov, 2007). From this perspective, *thin interpersonal trust* and *trust in institutions* are the most important in the modern society because groups and institutions built on trust, can meet greater challenges, achieve higher goals, and improve wellbeing. From the *economic perspective*, low trust as the result of repeatedly breached trust, leads to a low rate of investments which in turn impedes new businesses and employment (Zak & Fakhar, 2006). From a *management and organizational psychology perspectives*, trust can lead to more effective and efficient cooperative behavior among individuals, groups, and organizations. Thus, there is a call to examine how trust emerges within organizations and what are its consequences (Hansen, Hoskisson, & Barney, 2008; Nilsson & Mattes, 2015).

### THE CONCEPT OF ORGANIZATIONAL TRUST

Despite the evidence on trust provided by different scientific disciplines, there is no conceptual consensus about what trust is. Durkheim (1973) considers that trust bears great importance in establishing social relationships. Blau (1964) proposed that trust is a necessary element for durable social relationships. In sum, we can understand that trust is a crucial element to cultivate positive relationships over time in different context (i.e., teams, organizations) (Neves & Caetano, 2006). An example of the lack of

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consensus is pointed out by Khodyakov (2007), who shows that confidence, reliability, faith, and trust are often used as synonyms.

Based on extensive research literature review (i.e., McKnight & Chervany, 2001; Seppänen, Blomqvist, & Sundqvist, 2007), trust has been often conceptualized as belief, attitude, or behavior intention. For example, if trust is conceptualized as a belief, the construct is operationalized along the characteristics of a trustee (e.g., ability, benevolence, and integrity). If trust is conceptualized as an attitude or behavioral intention, it is considered a process and there for operationalized as the individual or collective evaluation of past behaviors and their influence in future willingness to trust (e.g., organizational policies and practices by human resources management). In this study, we consider trust a psychosocial mechanism defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer, Davis, & Schoorman, 1995, p. 712).

**Table 1** show the most relevant definitions of trust across research:

<b>Definition</b>	<b>Author</b>
The conscious regulation of one’s dependence on another	Zand (1972)
The extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people	Cook and Wall (1980)
A state involving confidence positive expectations about another’s motives with respect to oneself in situations entailing risk	Boon and Holmes (1991)
The extent to which a person is confident in, and willing to act on the basis of, the words, actions and decisions, of others	McAllister (1995)
<b><i>The willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a</i></b>	<b>Mayer et al., (1995)</b>

<b><i>particular action important to the trustor, irrespective of the ability to monitor or control that other party</i></b>	
The specific expectation that an other's actions will be beneficial rather than detrimental and the generalized ability to take for granted...a vast array of features of the social order	Creed and Miles (1996)
Confident positive expectations regarding another's conduct in a context of risk...reflects an expectation or belief that the other party will act benevolently	Whitener at al., (1998)
A psychological state comprising the intention to accept vulnerability [to another] based upon positive expectations of the intentions or behavior of another	Rousseau et al., (1998)
'as a willingness to be vulnerable to another person based on the expectation that the other person will act positively	Cook & Wall (1980)

As you can see in Table 1, different definitions of trust have been developed to explain this construct. We can observe that they are sharing common elements' such as: willingness to be vulnerable, accept vulnerability, other (s) party have control of decisions and will perform positively. Based on these classic definitions, Tan and Lim (2009), proposed a definition of organizational trust as a multilevel phenomenon where is defined as "an employee's willingness to be vulnerable to the actions of the organization, whose behavior and actions he or she cannot control" (p. 46). Furthermore, researchers on trust within organizations show us key points about trust as an important aspect to be account, specially, in an organizational context.

**UNDERSTANDING TRUST WITHIN THE ORGANIZATION AND ITS KEY POINTS:**

In first place, an important point to understand trust is the characteristics of the trustee, these are: ability/competence, benevolence, and integrity/honesty (Mayer, Davis, & Shoorman, 1995; McKnight, Cummings, & Chervany, 1998). If a trustor



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believes in the trustworthiness of a trustee, he or she believes that the trustee: (a) has skills and competencies that are important for the relationship (ability), (b) means well toward the trustee aside from an egocentric profit motive (benevolence), and (c) adheres to a set of principles that the trustor finds acceptable (integrity). Therefore, willingness can be based on: (1) trusting the intentions of others or (2) trusting their ability, benevolence, and integrity. In the organizational setting, trust towards the organization and to the team, is crucial to well-being and organizational/team goal achievement (Costa & Anderson, 2011).

Secondly, another interesting point is the conditions necessary for trust to emerge. One of the most studied and relevant of them is risk, because it creates the opportunity to trust (Rotter, 1967). In this line, across disciplines (i.e., Psychology, Sociology, and Economics) risk is considered a key condition for trust to arise (Coleman, 1990; Williamson, 1993). Risk is defined as a perceived probability to loss (MacCrimmon, Wehrung, & Stanbury, 1986). This thesis was conducted under this condition, that means, the actual social and economic crises represent a global risk situation to organizations and workers. In fact, the work conditions, and the indicators of occupational health around the world have decreased during the last years (2009 - 2017). Therefore, the perceived probability to loss is a real condition in the contemporary societies and within organizations.

Finally, one last point to be considered in trust research is the different levels of perspective. As Khodyakov (2007) proposed these differences in the level of study of trust (i.e, individual, teams, organizations) could be conceptual or empirical. This rationale is in line with the calling of Fulmer and Gelfand (2012) who consider the study of trust at different levels as an imperative to understand its antecedents and consequences.

Based on the points mentioned above, this project focuses on the organizational setting to explore trust within organizations. To do this, we are based on the definition proposed by Mayer, Davis, and Schoorman (1995) and adapted to the organizational setting by Tan and Lim (2009) where trust is considered as a multilevel phenomenon and is defined as "an employee's willingness to be vulnerable to the actions of the organization, whose behavior and actions he or she cannot control" (p. 46). There is agreement about the importance of trust in positive interaction both in interpersonal and work life. Lewicki, McAllister, and Bies (1998) proposed that organizational trust is the positive perception of an employee or team about the

applications and policies of the organization even in risky situations and his support for the organization. In this line, Human Resource Management practices are important to develop trust within organizations because they establish the way to reach organizational effectiveness, organizational commitment and increasing performance (Musacco, 2000).

We understand that these practices are implemented at the organizational level and they have effects at different levels (i.e, organization, teams, employees). For this reason, the relevance of trust as a multilevel phenomenon, that is, as a -multilevel, multimethod, and multi-referent - perspective is critical in organizational psychology research. Since 1998, there is a call from different scholars (Fulmer & Gelfand, 2012; Rousseau, Sitkin, Burt, & Camerer, 1998;) to study trust considering key stakeholders within organizations (i.e., CEO's, employees, direct supervisor, customers) and using the adequate level of analysis to measure it. Following this rationale, the dimensions included in the organizational trust construct is an important aspect to consider in a multilevel approach.

## DIMENSIONS OF TRUST AT DIFFERENT LEVELS:

### **(1) Interpersonal dimensions of trust: Affective and cognitive trust.**

Affective and cognitive trust are recognized as stemming from theoretical different dynamics (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Schaubroeck, Pen, & Hannah, 2013). Affective trust connotes close ties emerging from positive interactions between parties, and supports the expression of care and concern between them. Cognitive trust stems from judgments about ability and dependability, and should facilitate task-related information exchange between supervisors and work group (Carter & Mossholder, 2015).

### **(2) Organizational dimensions of trust: Vertical trust and Trust within teams**

The organizational and management literature on trust is now extensive. And as we mentioned above, organizational trust is a fundamental ingredient to achieve organizational goals. Two dimensions of trust within organizations emerge from the

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literature on trust (Bachmann & Zaheer, 2006), we call them: *vertical trust and trust within teams*.

### (2.1) Vertical trust

Vertical trust is considered as "an employee's willingness to be vulnerable to the actions of the organization, whose behavior and actions he or she cannot control" (Tan & Lim, 2009, p. 46). In this way, Chenhall and Langfield-Smith (2003) suggest the relationships based on trust facilitate reaching goals either individual or organizational. Therefore, if trust is an important ingredient - within organizations - to achieve their goals, it's relevant to invest in practices and resources to increase trust (i.e., vertical trust) (Bruhn, 2001; Fredrickson & Dutton, 2008; Jain & Sinha, 2005; Kath, Magley & Marmet, 2010; Mone & London, 2010). In 1978 Gamson found that: first, groups with high level of vertical trust have strong faith in the authority and trust in management; and second, that groups with a low level of trust have negative feelings about the authority and consider the decisions made by the managers as threats. In this way, there is evidence that employees trust in their top managers if they perceive justice in the organizational practices and decisions (Dirks & Ferrin, 2002). These evidences enlighten us about the importance of building trust within organizations to promote positive outcomes.

### (2.2) Trust within teams: trust in the direct supervisor & trust in colleagues (horizontal trust)

Teams are the key-unit in the contemporary organizations, they play a crucial role to achieve organizational goals (Tan & Lim, 2009) as well as productivity (Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003) and health (Wilson, Dejoy, Vandenberg, Richardson, & McGrath, 2004). Research of trust within teams is important because organizations are moving towards flatter and more team-based structures (Costa & Anderson, 2011).

Inside teams, employees typically engage in multiple exchange relationships (Blau, 1964), benefit differently from each other, and respond to each relationship with different behaviors and attitudes (Dirk & Ferrin, 2002). Trust is built through interactions between organizations and employees or between coworker. Where the quality of the social exchange and the willingness to invest in social resources will increase trust. For

example, when there are high levels of trust in teams, they can develop innovative strategies, share values, beliefs and knowledge, and effective communication and participation in problem solving. On the other (dark) side, the lack of trust will reduce the likelihood of employees' proactive behaviors (Kramer, 1999).

From the literature reviewed, two dimensions are considered: *trust in the direct supervisor* and *trust in colleagues* (horizontal trust). Trust in the direct supervisor refers to employee's willingness to be vulnerable to the actions of his/her direct supervisor, whose behavior, and actions he or she cannot control. Here, the role of the leader to increase trust in their teams is not included. But trust is a crucial element of effective leadership behavior (Fleishman & Harris, 1962) and promoting trust can be important for leader effectiveness (Bass, 1985). Furthermore, trust within organization research have found antecedents and consequences relevant to the management decision but most of them consider the individual level, and few the team level of trust. We summary the main antecedents and consequences, of the organizational trust, bellow.

## ANTECEDENTS AND CONSEQUENCES OF ORGANIZATIONAL TRUST

Most of the studies on trust are based on the individual level and just a few have focused on the team level of analysis (Costa, 2001; Tan & Lin, 2009). A significant gap to be addressed is to evaluate and measure antecedents and consequences of trust at the correct level (e.g. organizational practices measured at the team level rather than at the individual level).

### **Antecedents.**

One of the most relevant antecedents of organizational trust is Practices or Policies implemented by the organizations. For instance, formal structures or mechanism implemented by organizations build trust (Tschannen-Moran & Hoy, 1997, 2000). Citizenship behavior is another important antecedent of trust (Colquitt et al., 2012; Setton & Mossholder, 2002). In this line, Lin (2009) showed evidence that corporate citizenship is an antecedent of organizational trust at the individual level. At the team level, social support is an important predictor to trust (Dunkel-Schetter, Folkman, & Lazarus, 1987; Mayer et al., 1995). In fact, in the research of Settoon and Mossholder

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(2002) found them correlated at .67 ( $p < .01$ ). Costa (2003) found that trust in teams is strongly related with team member's attitudes towards the organization.

### Consequences.

One of the most interesting outcomes of trust by the organizations is *performance* and *productivity*. For example, Musaco (2000) found a positive relationship between organizational trust and organizational productivity. Furthermore, Dresher, Korsgaard, Welpe, Picot, and Wigand (2014) proposed that trust is a critical mechanism, which leads to increased performance. Another important consequence of trust refers to the *wellbeing of employees/teams*; Lin (2009) showed that trust is positively related with the three dimensions of work engagement (vigor, dedication, and absorption) at the individual level. Individuals who trust their colleagues often engage in cooperative behaviors and do not monitor their work (Costa, Roe, & Taillieu, 2001). From leadership theories, trust has been linked to positive job attitudes, organizational justice, psychological contracts, effectiveness in terms of communication, organizational relationships and conflict management (Kramer, 2009).

Trust between team members is positively associated with attitudinal commitment and negatively with continuance commitment. Moreover, trust within teams was positively related with perceived task performance and with team satisfaction (Costa, 2001).

## HEALTHY AND RESILIENT ORGANIZATIONS MODEL AS THE THEORETICAL APPROACH

The specific model used in this study to investigate trust within organizations from a positive and multilevel approach is the HERO Model (**HE**althy & **RES**ilient **O**rganizations; Salanova, 2008, 2009). Based on theoretical premises about healthy and resilient organizations, the HERO Model is a heuristic theoretical model that makes it possible to integrate results about vast empirical and theoretically-based evidence from research on job stress, Human Resource Management (HRM), organizational behavior and positive occupational health psychology (Llorens, del Líbano, & Salanova, 2009).

This model defines a HERO's as "organizations that make systematic, planned and proactive efforts in order to improve employees' and organizational health through

Healthy Organizational Practices related to improve the job characteristics at three levels: (1) task level (e.g., task redesign in order to improve autonomy, feedback), (2) social environmental level (e.g., bidirectional communication in order to improve social relationships), and (3) organizational level (e.g., organizational strategies in order to improve healthy, work-family balance)" (Salanova, Llorens, Cifre, & Martínez, 2012, p.788). This model has three main and interrelated components: (1) resources and healthy organizational practices (e.g., team resources, healthy organizational practices), (2) healthy employees (e.g., trust, work engagement), and (3) healthy organizational outcomes (e.g., commitment, performance) (Salanova, Llorens, & Schaufeli., 2011). A particular characteristic of this model is that all dimensions included are tested at the collective level (i.e., teams or organizations).

The model has showed important empirical evidence that validate its theoretical proposal. For example, using different stakeholders (i.e., 14 CEOs, 710 employees, 84 work-units, their immediate supervisors, and 860 customers) the model showed that healthy organizational resources and practices predict healthy employee/teams and healthy organizational outcomes. Furthermore, using Structural Equation Model, healthy employee/teams was a full mediator between the rest of the elements of the HERO.

HERO model consider trust belong to the Healthy employee/team's element. From this rationale, we can understand that trust could play an important role between Healthy organizational practices and resources and healthy outcomes. Consequently, in the present thesis project, we focus on trust within organizations and its role in the HERO Model considering a positive, multilevel, multimethod and multielement approach.

## 1. Understanding Trust Within Organizations

Figure 1. Theoretical Model: Healthy & Resilient Organizations Model (HERO Model)



## FINAL NOTE

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As you could read in this chapter, different scientific disciplines had studied trust as an important ingredient in social interaction, specially, in the actual world crisis context. However, some gaps are to be addressed. This thesis project is based on a positive organizational approach, that is the HERO model, to answer to the gaps that different researchers proposed in the study of organizational trust. In summary, in this thesis we evaluate the role trust plays in the HERO model using multi-referent sources of information in seven empirical chapters (i.e, qualitative, quantitative, multilevel, longitudinal).

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**Healthy  
organization:**  
analyzing its  
meaning based  
on the HERO





**2. HEALTHY  
ORGANIZATION:  
ANALYZING ITS MEANING  
BASED ON THE HERO**

HEDY ACOSTA, VALERIA CRUZ-ORTIZ, MARISA  
SALANOVA, AND SUSANA LLORENS

WANT RESEARCH TEAM -  
UNIVERSITAT JAUME I, SPAIN

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## ABSTRACT

The aim of this study is to analyze the meaning of healthy organization from an empirical-theoretical perspective based on the HERO Model (HEalthy & Resilient Organizations). Analyses were performed by four independent judges on 14 interviews carried out with 14 CEOs or human resources managers in 14 Spanish organizations using content analysis. Qualitative results show: (1) a partial overlap in the categories proposed by the theoretical model (based on the concordance index, Cohen's Kappa and ICC); and (2) that the empirical definition mainly focuses on employees' psychosocial health as a key element of the meaning of healthy organization. Finally, categorical matrixes provide evidence of subcategories emanating from the key elements that comprise a healthy organization. Results as well as theoretical and practical implications are discussed based on the HERO Model.

*Keywords:* content analysis; qualitative methodology; healthy organization

## INTRODUCTION

The early contributions on 'organizational health' began to appear in the 1950s and 1960s (Argyris, 1958; Schein, 1965). According to Argyris (1958), a healthy organization is one that allows for optimal human functioning to arise. On the other hand, Schein (1965) identified five characteristics of a healthy organization: (1) sense of environmental change; (2) information reaching the right places; (3) processing and using information; (4) adaptation and transformation without destruction; and (5) getting information on the consequences of the transformations. These early contributions reveal that the indicators that were taken into account to evaluate a healthy organization (such as low absenteeism, production levels, industrial safety, loyalty, positive employee feelings) did not always lay an appropriate foundation for diagnosing them. Therefore, researchers' interest focused on further studying healthy organizations from different approaches. For example, in the field of human resources, studies have focused on identifying the characteristics of healthy organizations that generate high work performance and low costs related to safety at work (Arthur, 1994; Delery & Shaw, 2001; Huselid, 1995; Ostroff & Bowen, 2000). Other researchers have considered the organizational and/or contextual factors that generate malaise in



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organizations, such as stress (Cartwright, Cooper, & Murphy, 1995; Peterson & Wilson, 2002; Sparks, Faragher, & Cooper, 2001). In this same sense, researchers who promote health have been interested in examining the effects of relationships between the employee and organizational outcomes, such as leadership (Goetzel, Jacobson, Aldana, Vardell, & Yee, 1998; Ozminkowski et al., 1999).

Today, the Occupational Health Psychology is emerging as a discipline within psychology whose main goal, based on its interdisciplinary and cross-disciplinary nature, is to create a safe and healthy work environment which promotes healthy organizations, groups and people. This entails having a management team that is committed to both comprehensive health and the development and promotion of health at work (Salanova, Llorens, Torrente, & Acosta, 2013). Therefore, organizations are beginning to be viewed as a source of health and illness, and their working conditions are beginning to be assessed in that they can positively or negatively influence employees' health (Gómez, 2007). Specifically, Positive Occupational Psychology (POP) focuses on studying the strengths of employees and people's optimal behavior within organizations (Luthans, Avolio, Avey, & Norman, 2007; Peterson & Seligman, 2004; Salanova, Martinez, & Llorens, 2005; Seligman & Csikszentmihalyi, 2000), and thus the concept of 'healthy organizations' has been addressed using different approaches. For example, Bruhn (2001) analyses the definition proposed by the World Health Organization (WHO), which suggests that health is a state of physical, mental and social wellbeing and not just the absence of illness. This author takes this definition and posits that the health of an organization is: (1) body, referring to the structure, organizational design, communication processes and work distribution; (2) mind, referring to the underlying beliefs, objectives, policies and procedures that are implemented; and (3) spirit, that is, the core of an organization or what makes it strong. Another example is Corbett's contribution (2004), which states that a healthy organization stems from the company's behavior through a shared mission and effective leadership; this achieves a balance in the relations between the employees, the clients and the organization, which then results in its commitment to social responsibility in both its values and its results. Therefore, considering an organization healthy means taking a broad view of it, where aspects like the characteristics of the work systems, cultural values and organizational climate are taken into account (Wilson, DeJoy, Vandenberg, Richardson, & McGrath, 2004). One of the aspects that studies have pointed to as relevant when developing a healthy organization is the employees' health, in that this poses a competitive advantage for organizations and caring for employees therefore has positive consequences in its wellbeing in terms of organizational performance and the

organization's financial health (Cooper & Cartwright, 1994; Luthans et al., 2007; Salanova & Schaufeli, 2009; Shuck, Rocco, & Albornoz, 2011; Wright & McMahan, 1992).

In this sense, the mixed committee of the International Labour Organization (ILO) and the World Health Organization (WHO) suggested that the goal of health at work consists of successfully promoting and maintaining the highest degree of physical, mental and social wellbeing of employees in all jobs (ILO, 2003). Tarride, Zamorano, and Varela (2008) conducted a review of the definitions of healthy organization and concluded that work organizations are a system that involves a state of physical, mental and social wellbeing that is neither additive nor linear but that instead depends on the context of the organization and the people making it up. Therefore, physical, mental and social wellbeing belong to the organization, that is, to the system as a whole and not to its parts. Thus, we understand that encouraging the health of both the employees and the organization is a core factor in promoting healthy organizations. In this way, healthy organizations can simultaneously fulfil their mission and develop and encourage their employees' learning, growth and health.

From this, studies emerged that propose a comprehensive model of healthy organizations (DeJoy, Wilson, Vandenberg, McGrath-Higgins, & Griffin-Blake, 2010; Wilson et al., 2004). These studies try to test the heuristic model of healthy organizations which integrates employees' health as well as variables referring to the organization's context (such as work demands, tools and technologies and the social setting) and performance. These studies are an initial approach to understanding how an organization's practices are related to its employees' health. However, the validation of these initial comprehensive models of healthy organizations (DeJoy et al., 2010; Wilson et al., 2004) showed several limitations: (1) the data were gathered using the same source of information (employees) with the same measurement instruments, turning the common variance into potential bias in the data; and (2) the constructs were tested on the level of individual analysis, even though the premises underlying the concept of healthy organization require these models to be examined at a collective level of analysis. Following the same lines, other studies have considered organizations that invest in the health, resilience and motivation of their employees and work teams, as well as in the structure and control of work processes, and in healthy outcomes oriented at achieving income and excellence for society, to be healthy and resilient organizations (HEalthy & Resilient Organizations, HERO; Salanova, Llorens, Cifre, & Martinez, 2012). From a psychosocial perspective, the HERO model takes a step further towards considering that a healthy organization encompasses the health of the employees not

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only in their work environment but also outside of work, affecting the community. Here is where the organizational resources and practices that the organization invests in become a cornerstone in the development of HEROs.

Recently Salanova et al. (2012, p. 788) have defined HEROs as 'organizations that make systematic, planned and proactive efforts to improve the processes and results of their employees and of the organization. These efforts are related to organizational resources and practices and to the characteristics of the work at three levels: (1) job level (such as redesigning jobs to improve autonomy, feedback); (2) social level (such as transformational leadership); and (3) organizational level (such as work-family balance practices)'.

The HERO model is a heuristic theoretical model that integrates theoretical and empirical evidence coming from studies on work stress, human resources management, organizational behaviour and Positive Occupational Health Psychology (Llorens, del Líbano, & Salanova, 2009; Salanova, Llorens, Cifre, & Martínez, 2009; Vandenberg, Park, DeJoy, Wilson, & Griffin-Blake, 2002).

Based on these theoretical and empirical premises, we believe that a healthy, resilient organization combines three key elements that interact with each other: (1) healthy organizational resources and practices (such as leadership); (2) healthy employees (such as work engagement); and (3) healthy organizational outcomes (such as high performance) (Salanova, 2009; Salanova, Cifre, Llorens, Martínez, & Lorente, 2011; Salanova et al., 2012) (*see Figure 1*). Since it is a heuristic model, so far specific relationships between some variables of the key components of the HERO model have been tested using quantitative and qualitative methodologies. Some examples of quantitative studies reveal the mediating role: (1) of organizational trust between organizational practices implemented from Human Resources Management and team work engagement (Acosta, Salanova, & Llorens, 2012a); (2) of team work engagement between transformational leadership and performance (Cruz-Ortiz, Salanova, & Martínez, 2013); (3) of collective engagement between personal resources and service quality (Hernández, Llorens, & Rodríguez, 2014); and (4) of team work engagement between team resources and performance as evaluated by supervisors (Torrente, Salanova, Llorens, & Schaufeli, 2012). However, to our knowledge, no studies have been performed that qualitatively examine the definition and key elements of a healthy organization. Specifically, the studies on HEROs carried out by our team using the qualitative methodology have focused on: (1) evaluating the perceptions of healthy

organizations using a 10-point Likert scale which ranged from 0 ('not healthy') to 10 ('very healthy') (Salanova et al., 2011); (2) analysing healthy organizational practices and healthy organizational outcomes (Salanova et al., 2012); and (3) analysing the frequency of healthy organizational practices in small and medium-sized enterprises (SMEs) (Acosta, Salanova, & Llorens, 2012b). In this sense, Sorge and van Witteloostuijn (2004) and Vanderberg et al. (2002) suggest that there is a broad corpus of knowledge on theories of healthy organizations but that this knowledge is not interconnected. According to these authors, this knowledge should be integrated through evidence based on consulting, as well as empirical evidence that would provide the groundwork for newer theoretical models. Therefore, this study strives to go a step further by more deeply examining the definition and key elements of a healthy organization using a qualitative methodology using content analysis from both an empirical and theoretical approach based on the HERO model (HEalthy & Resilient Organization; Salanova et al., 2012).



## METHOD

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### PARTICIPANTS AND PROCEDURE

The sample was 14 key stakeholders (80% men) belonging to 14 Spanish organizations. The interviewees had to have thorough knowledge of their organizations. To ensure this, we considered two requirements: (1) their current position in the company, which should enable them to have a global view of the organization; and (2) their tenure in the company. We interviewed 11 (79%) CEOs and three (21%) human resources managers. The average number of years working in the company was 18 years ( $SD = 10$ ). Ten (77%) of the organizations belonged to the services sector (including education, retail, entertainment and leisure, research, tourism, financial services and non-governmental organizations) and four (23%) belonged to the production sector (including construction and manufacturing).

The organizations were chosen by convenience, and participation was voluntary. The contact with the key stakeholders was initially via telephone and later in person. They were told the objectives of the study and were guaranteed the confidentiality and anonymity of the information. Once they agreed to participate, two expert researchers held interviews lasting approximately 45 minutes. To avoid biases, with the consent of the key stakeholders the interview was recorded and later transcribed verbatim.

### HERO INTERVIEW

We used the interview that is part of the HERO battery of instruments (Salanova et al., 2012), which evaluates healthy and resilient organizations. Specifically, the interview script contains 27 open-ended and semi-structured questions divided into four sections: (1) history of the organization (such as achievements and organizational changes); (2) definition of a healthy organization; (3) healthy organizational practices (such as implementation of healthy organizational practices); and (4) healthy organizational outcomes (such as financial health). In this study, we focused on the second part of the interview, that is, the definition of a healthy organization. To date, no studies have been conducted that focus on defining a healthy organization based on the perception of CEOs and human resources managers in organizations.

## ANALYSIS OF THE INTERVIEWS

The interviews were analyzed using content analysis (Ahuvia, 2001). This technique is widely used to analyze categories and reach conclusions based on a previous theoretical framework (Denecke & Nejd, 2009; Dick, 2004). Furthermore, content analysis is a flexible technique which combines categories in a proposed theoretical model with sub-categories that emanate from the data analyzed (Hsieh & Shannon, 2005). This analysis is performed by trained, independent codifiers with the aim of creating a system of categories that are mutually exclusive, reliable and valid (Weick, 1985). Four judges were chosen to participate in the analysis of the information because they are experts in Positive Occupational Health Psychology. Two of them hold PhDs in psychology and two have a Master's in work and organizational psychology.

Specifically, the information was codified through two analysis strategies: (1) one focused on defining a healthy organization; and (2) another focused on the key elements making up a healthy organization. The first strategy enables us to identify categories related to the definitions of healthy organizations. Based on Cassell and Symon (2004), the four judges reached the consensus that they believed that the theoretical definition of a healthy organization contained two categories. The first of them, **practices**, included the following sub categories: job practices, social practices, organizational practices and individual practices. The second category, **results**, included employees' health results, financial results, excellence results and results associated with the environment and community with which the organization interacts. Afterward, utilizing inter-judge assessments, we identified the identical features in the proposed definitions of healthy organizations provided by the key stakeholders. To ascertain the degree of agreement among the judges, we calculated Cohen's Kappa statistic, which evaluates whether the degree of agreement among the judges is lower or higher than what could be expected at random (Kottner, 2009); it is a useful coefficient when the pattern of all responses is comparable to an already determined standard (Muñoz-Leiva, Montoro-Ríos, & Luque-Martínez, 2006). Values between .81 and 1 can be interpreted as 'very good'; those between .61 and .80 as 'good'; those between .41 and .60 as 'moderate'; and those between .21 and .40 'low'. Values under .21 are regarded as 'poor' agreement (Altman, 1991). Following these analyses, we calculated the concordance rate (CR). In this case, we considered evaluations to be concordant when the CR values of agreements ([agreements + disagreements]) is  $\geq .80$  (Tversky, 1977), which is more restrictive than Cohen's Kappa values. We also considered the percentage of agreement, calculated as (number of agreements/total possible agreements)/100. Finally, the

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judges evaluated the degree of fit between the theoretical definition proposed by the HERO model and the definition provided by the key stakeholders (Likert scale ranging from 0 = 'No match' to 6 = 'Total match'). In this case, since the variables are continuous, we used the SPSS programme (version 19.0) to calculate the Intraclass Correlation Coefficient (ICC; Bliese, 2000) with the goal of evaluating the consistency of the information yielded. The average reliability for this calculation of all the judges using the mean ICC was calculated applying the Spearman-Brown reliability correction (Wuensch, 2007). For the data saturation (Guest, Bunce, & Johnson, 2006), we used four principles proposed by Francis et al. (2010) for content analysis, namely: (1) initial sample; (2) stopping criterion (a criterion which considers whether the data saturation has happened); (3) independent judges; and (4) data saturation (Francis et al., 2010). Regarding the **practices** category, no new information emerged after the tenth interview. Specifically, the interviewees mentioned: job practices (e.g., strategic planning), social practices (e.g., interpersonal relations, leadership, teamwork and communication) and organizational practices (e.g., worker development, working conditions, work-family balance policies). Regarding the **results** category, just as in the previous category no new information emerged after the tenth interview. Specifically, the interviewees mentioned: individual health (e.g., workplace psychosocial wellbeing, and psychosocial wellbeing outside of work), financial health (e.g., production), excellence results (e.g., performance) and environmental results (e.g., reputation). The judges decided to include four more interviews with the goal of ensuring the data saturation process. After the 14 interviews analyzed, the judges found no new information coming from the data.

The second analysis strategy revolved around the key elements making up a healthy organization. It comprises the categorization and codification of information which the judges did using paper and pencil with template analysis (King, 2004) based on the three key elements proposed by the HERO model (healthy organizational resources and practices, healthy employees and healthy organizational outcomes; Salanova et al., 2012). Template analysis is a flexible technique which allows the qualitative information obtained to be organized, and which captures the codified data in an explanatory matrix. The same four expert judges categorized the 14 interviews by consensus. They used two criteria to codify the information: (1) each company was assigned a number (from 1 to 14); and (2) correlative numbers were assigned to each statement said by the key stakeholders from each company. The phrases were numbered from 1 to 50. Therefore, regarding the order of codification, the first number corresponds to the company and the second to the statement (such as 2:11). Later, the

judges made a category tree by consensus in order to make a category map of the information provided by the key stakeholders regarding the elements of a healthy organization.

## RESULTS

### RESULTS RELATED TO THE DEFINITION OF A HEALTHY ORGANIZATION

Table 1 shows the categories and agreement among the four expert judges (number of agreements) in the categories defining a healthy organization given by the key stakeholders. To reach this, we considered Cohen's Kappa alpha, the concordance rate (CR) and the percentage of agreement. The results reveal that the judges showed 'some' degree of agreement in the definition of a healthy organization given by the key stakeholders when comparing it to the theoretical definition, with the most agreement in the sample being 'the result of health inemployees'. In short, the judges stated that all the definitions of healthy organization given by the key stakeholders referred primarily to the health of the employees.

The degree of agreement that the judges showed regarding whether the empirical definition (given by the key stakeholders) fit the theoretical definition of healthy organization proposed by Salanova et al. (2012), the results (reached using the SPSS programme, version 19.0) show a 'high' level of agreement between the judges on the scores given to the fit between the definition of healthy organization provided (ICC: .74,  $p < .01$ ) and the theoretical definition. Furthermore the results showed a 'medium-low' agreement in the definition of a healthy organization ( $M = 3.21$ ,  $SD = 0.50$ ) with a response range from 0 ('No agreement') to 6 ('Total agreement').



## 2. Healthy Organizations

**Table 1**

Inter-judge agreement on the definition of healthy organization (N = 14).

	Yes	No	Number of agreements	Cohen's Kappa	CR	Percentage of agreements
<b>Definition of Healthy Organization</b>						
Job practices	4	7	11	.55*	.78	85%
Social practices	5	4	9	.39#	.64	69%
Organizational practices	5	3	8	.22#	.57	62%
Health of people	13	0	13	1.00****	.93****	100%
Financial healthy	2	8	10	.36#	.71	77%
Excellence results	1	10	11	.32#	.78	85%
Environmental results	1	11	12	.42*	.86****	92%

*Note:* "Yes": There are elements in the empirical definition on this category of the definition; "No": There are no elements in the empirical definition on this category of the definition; Cohen's Kappa: \*\*\* very good agreement (.91-1.00), \*\* good agreement (.61 y .80); \*moderate agreement (.41 y .60); # low agreement (.21 y .40); CR: \*\*\*\* $\geq$ .80.

## RESULTS FOCUSED ON THE ELEMENTS OF THE HERO MODEL

The results of the categorization based on the three key elements in the HERO Model (healthy organizational resources and practices, healthy employees and healthy outcomes) resulted in a category tree.

Regarding the first element, *healthy organizational resources and practices*, two sub-categories emerged: social resources and healthy organizational practices. The first sub-category, social resources, encompasses style of communication among the members of the organization, leadership, teamwork and interpersonal relationships. One example of this sub-category is: '*organizations with fluid, direct communication*' (7:26). The second sub-category, healthy organizational practices, encompasses the channels of communication used in the organization, strategic planning, traditional human resources

practices, working conditions and worker development. One example of this sub-category is 'organizations in which the worker has information on their jobs, their objectives' (7:23).

Regarding the second element, *healthy employees*, two sub-categories emerged: psychosocial wellbeing on the job and psychosocial wellbeing off the job. One example is: 'the kind [of company] in which people work in a healthy environment for individuals in both the physical and emotional sense' (4:13).

Regarding the third element, *healthy organizational outcomes*, two sub-categories emerged: intra-organizational outcomes (production and performance) and extra-organizational outcomes (reputation). One example is: 'companies with higher productivity' (9:39) (Figure 2).

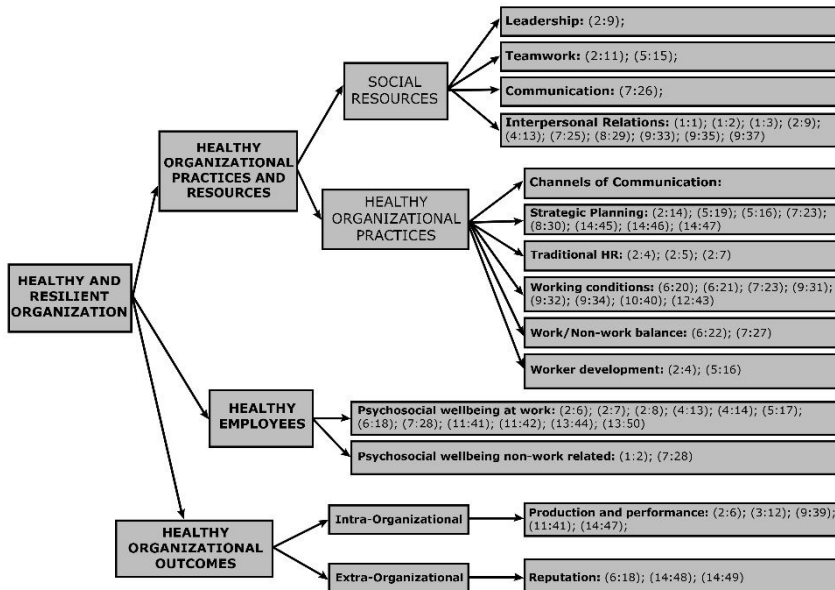


Figure 2. Category matrix of healthy organizations

## DISCUSSION

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The purpose of this study was to analyze the meaning of healthy organization from both an empirical and theoretical approach based on the HERO Model (HEalthy & Resilient Organization; Salanova et al., 2012) in 14 Spanish organizations. This study provides a specific view of the perceptions of key stakeholders from 14 Spanish organizations regarding how they define a healthy organization and what the elements that they believe comprise one are. These conclusions lead us to discuss different theoretical implications regarding how CEOs and human resources managers conceptualize a healthy, resilient organization, as well as practical implications for management and human resources.

### THEORETICAL IMPLICATIONS

The results of the content analysis focused on definitions show that there is a 'partial' fit between the definition proposed theoretically by the HERO Model (Salanova et al., 2012) and the empirical definition provided by the key stakeholders, as the latter offered a much more restrictive definition in which employees' health is at the core of the discourse. This agreement between the judges regarding employees' health (both work and non-work) as a core aspect in the information provided by the key stakeholders fit studies in POP which state the importance of caring for employees (e.g., Luthans et al., 2007) in the performance and productivity of the organization. Unquestionably, this information is extremely important given that employees' health is a factor in achieving the organizational objectives (Shuck et al., 2011), especially in these times of change and crisis, because employees are a competitive advantage (Cifre & Salanova, 2004). However, this empirical point of view ignored other basic factors such as healthy organizational practices, which the theoretical definition does include. Healthy organizational practices are the cornerstone in developing HEROs (Acosta, Salanova, & Llorens, 2013; Salanova et al., 2012). A study performed by Acosta et al. (2012a) showed that healthy organizational practices (e.g., work-family balance, mobbing prevention, psychosocial health and communication programmes) are positively related to the wellbeing of work teams (e.g., organizational trust and team work engagement).

Secondly, the results of the content analysis focused on the elements comprising a HERO expand and specify each key element of the model (healthy organizational resources and practices, healthy employees and healthy organizational outcomes). Specifically, it pinpoints the element of *healthy organizational resources and practices*, where social resources emerge, such as kind of communication, leadership, teamwork and interpersonal relationships. These kinds of resources are important in organizations because they serve two purposes (Schaufeli & Bakker, 2004): first, they increase psychosocial wellbeing (healthy employees) and healthy organizational outcomes, and secondly they decrease psychosocial impairment (such as burnout and stress). Furthermore, channels of communication, strategic planning, traditional human resources practices (such as hiring and recruitment) and working conditions (such as kind of contract) emerge specifically as organizational practices.

Another theoretical contribution is to extend the concept of *healthy organizational outcomes*, which considers three intra-organizational outcomes (e.g., intra role performance) and extra-organizational outcomes (e.g., good relations with the community). The former stress production and financial results, while the latter emphasize organizational reputation. Different studies (e.g., Cooper & Cartwright, 1994; Salanova, 2008, 2009; Wright & McMahan, 1992) have stressed the organization's financial health as a core subject; however, the fact that the organization's reputation emerged as a new element opens up a new perspective on the importance of how others (clients, community, society) perceive an organization. This aspect is not included in the theoretical definition of a healthy organization. For this reason, based on the results obtained we suggest including organizational reputation in the definition and considering it within the key component called healthy organizational outcomes.

### PRACTICAL IMPLICATIONS

From a practical point of view, the results of this study reveal the limited vision that key stakeholders (CEOs or human resources managers) have compared to how the literature defines a healthy organization and the elements that comprise it, as they largely limit their definitions to employees' health without including the factors that could cause or maintain this health.

## 2. Healthy Organizations

Therefore, the results of this study could be used to share the importance of basic factors like organizational resources and practices when developing a HERO. In this sense, organizations can develop themselves in a healthy manner through positive interventions (Llorens, Salanova, Torrente, & Acosta, 2013; Salanova, Llorens, Acosta, & Torrente, 2013; Salanova, Llorens, Torrente, & Acosta, 2013), such as by implementing training in specific skills sets (e.g., leadership skills), communication practices (e.g., intranet) and healthy practices (e.g., mobbing prevention practices) (Acosta et al., 2012a; Shuck et al., 2011) which would have positive repercussions on the employees, such as by increasing the levels of work engagement and teamwork performance (Salanova & Schaufeli, 2009).

## LIMITATIONS AND FUTURE RESEARCH

First, the sample is made up of 14 key stakeholders belonging to 14 Spanish organizations. However, the sample size is appropriate for performing contentanalysis. In fact, previous studies published in scholarly journals have considered this same number of companies when performing qualitative studies (e.g., Salanova et al., 2012). Following this idea, we should stress that the companies that participated in the study come from different economic sectors. Therefore, the perceptions of the key stakeholders are varied and provide a perspective of the concept being study from both the services and production sub-sectors.

On the other hand, the analysis focused on qualitative information. Further studies could combine qualitative and quantitative methodologies, which would enable us to triangulate the information, such as through self-reporting questionnaires or daily studies by employees, supervisors and customers of the organization. These different sources of information would provide a more integrated, comprehensive view of what is meant by a healthy organization and provide specific proposals for future interventions (such as training).

## FINAL NOTE

This study enabled us to analyse the meaning and key components of a healthy organization from both an empirical and a theoretical approach based on the HERO Model (Healthy & Resilient Organization; Salanova et al., 2012) in 14 Spanish organizations. Today, in times of crisis and profound changes, knowing and developing these HEROs may be the key to emerging from this situation healthy and strengthened.

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**How organizational  
practices predict  
team work  
engagement:**  
the role of  
organizational  
trust





**3. HOW ORGANIZATIONAL  
PRACTICES PREDICT TEAM  
WORK ENGAGEMENT: THE ROLE  
OF ORGANIZATIONAL TRUST**

HEDY ACOSTA, MARISA SALANOVA, AND SUSANA  
LLORENS

WANT RESEARCH TEAM. UNIVERSITAT JAUME I,  
SPAIN

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## ABSTRACT

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The current study aims to contribute to our understanding of the relationship between healthy organizational practices, organizational trust and team work engagement. It is based on the *HEalthy & Resilient Organizations Model* (Salanova, Llorens, Cifre, & Martínez, 2012) and examines 518 employees nested in 55 teams from 13 small-and medium-sized enterprises using data aggregated at the work-unit level. Healthy organizational practices, organizational trust and team work engagement were aggregated from team members' perceptions using the Intraclass Correlation Coefficient (ICC<sub>1</sub> and ICC<sub>2</sub>) taking the group as the referent. Structural Equation Modeling by AMOS revealed that, as expected, organizational trust plays a full mediating role among healthy organizational practices and team work engagement at the team. Theoretical and practical contributions based on the *HEalthy & Resilient Organizations Model* are discussed.

*Key words:* Organizational practices, organizational trust, team work engagement



### 3. Practices, Trust and Engagement

Global economic conditions, faster changes in labor market, and the social and economic crisis are making it increasingly more important to promote positive experiences in organizations, such as organizational trust. It is understood as “employees’ willingness at being vulnerable to the actions of their organizations, whose behavior and actions they cannot control” (Tan & Lim, 2009, p.46). Organizational trust is important in working life and organizational effectiveness (Cardona & Calderón; Dirks & Ferrin, 2001; Kiffin-Petersen & Cordey 2003; Mayer & Gavin, 2005) and has received substantial attention in the management and social science literature (Wong, Ngo, & Wong, 2003). In this way, previous research agrees that trust is pivotal, useful in organizational activities and a source of sustainable competitive advantage (Andersen, 2005; Barney & Hansen, 1994).

Despite its relevance, few studies have focused on trust at the team level, especially when groups play a crucial role in contemporary organizations to achieve organizational goals (Tan & Lim, 2009) as well as to increase efficiency and competitiveness (Hodson, 1997), productivity (Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003) and health (Wilson, Dejoy, Vandenberg, Richardson, & McGrath, 2004). Moreover, as far as we know there is no previous empirical research focusing on the role that organizational trust plays in the relationship among healthy organizational practices and team work engagement. That is, considering the team perceptions as the referent of healthy organizational practices, organizational trust and team work engagement. In the current study, we go one step further by studying the mediating role of organizational trust among healthy organizational practices and team work engagement in a higher-order level of analysis (i.e., teams). Specifically, the objective of our study is testing the mediating role of organizational trust among healthy organizational practices and team work engagement using aggregated data at the work-unit level based on the *HERO Model (HEalthy & Resilient Organizations Model)*; Salanova et al., 2011).

#### **The Theoretical Background: The Healthy & Resilient Organizations Model**

Nowadays organizations differ not only in the investment they make in health, resilience and motivation of their employees (and teams), but also in the structure and the management of the work processes implemented (e.g., organizational practices) and in healthy outcomes oriented toward achieving incomes and excellence for society (Landsbergis, 2003; Wilson et al., 2004). These organizations are healthy and resilient because the focus on health and resilience is based not only on individuals (i.e.,

employees) but also on teams and on the organization as a whole. There is evidence to believe that HERO's are those which are resilient when it comes to coping economic and financial crises and important changes, and thus become stronger than unhealthy organizations (Cooper & Cartwright, 1994). In a similar way, Salanova (2008, 2009) and Salanova et al. (2011, p.7) define HERO's as "those that make systematic, planned and proactive efforts in order to improve employees' and organizational health through Healthy Organizational Practices related to improve the job characteristics at three levels: (1) task level (e.g., task redesign in order to improve autonomy, feedback), (2) social environmental level (e.g., bidirectional communication in order to improve social relationships), and (3) organizational level (e.g., organizational strategies in order to improve healthy, work-family balance)".

Based on theoretical premises about healthy and resilient organizations, HERO Model is a heuristic theoretical model that makes it possible to integrate results about vast empirical and theoretically-based evidence from research on job stress, Human Resource Management (HRM), organizational behavior and positive occupational health psychology (Llorens, del Líbano, & Salanova, 2009). According to this model, a healthy and resilient organization refers to a combination of three main and interrelated components: (1) resources and healthy organizational practices (e.g., job resources, healthy organizational practices), (2) healthy employees (e.g., trust, work engagement), and (3) healthy organizational outcomes (e.g., performance) (Salanova et al., 2011). A particular aspect of the model is that all dimensions included within it are tested at the collective level (i.e., teams or organizations). Since this model is considered a heuristic model, a test of the specific relationships among certain key elements is required. Consequently, in the present study, we focus on two specific components of the HERO Model: (1) resources and healthy organizational practices (i.e., healthy organizational practices) and (2) healthy employees (i.e., organizational trust, team work engagement) tested at the team level of analysis.

#### **Healthy Organizational Practices**

Healthy organizational practices are a key component in the HERO Model. They are one of the elements included in the resources and healthy organizational practices component. We refer to organizational practices that are developed by HRM in order to achieve organizational goals (Wright & McMahan, 1992) as well as to increase

### 3. Practices, Trust and Engagement

the psychological and financial health at the staff, team and organizational level (Salanova et al., 2011). Healthy organizational practices are defined as “the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals” (Wright & McMahan, 1992, p. 298).

The rationale to focusing on organizational practices is that they are highly relevant in organizations. In fact, organizations which attempt to implant organizational practices display more positive experiences in their employees (and teams) (e.g., organizational trust; Bruhn, 2001; Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010) and healthy outputs such as organizational commitment (Mayers & Smith, 2000), competitiveness (Calderón, 2003) and organizational performance (Bacon & Hoque, 2005). All in all, organizational practices enhance the appeal of the organizations and help them to be perceived as a great place to work (Carlsen, 2008), and consequently, they should be included in business strategy (Budhwar & Debrah, 2001; Zapata, 2009).

Recent research based on the European Project ERCOVA (2004) shows that there are eight main practices from HRM based on Corporate Social Responsibility (CSR): work-family balance, mobbing prevention, skills development, career development, psychosocial health, perceived equity, communication, and corporate social responsibility (Salanova et al., 2011). These studies provide evidence that these organizational practices can have a positive impact on employees’ well-being. Specifically, in a sample of 710 employees nested within 84 groups from 14 small and medium-sized enterprises (SMEs) results show that, in general terms, resources and healthy organizational practices (i.e., healthy organizational practices and job resources) had a positive impact on employees’ health (i.e., collective efficacy, work engagement and resilience), which in turn had a positive impact on healthy outcomes (i.e., performance, commitment and excellent results) (Salanova et al., 2011). Also, Acosta, Salanova, and Llorens (2013) show that organizational practices can also enhance organizational trust at the team level of analysis, specifically skill development and communication strategies. However, the few studies that have been conducted on the topic offer different results regarding which organizational practices exert the greatest effect on employees’ psychological health and well-being (Budhwar & Debrah, 2001). We agree with Fredrickson and Dutton (2008) who state that the positive impact of healthy organizational practices on employees’ health only occurs when workers perceive that those practices are being implemented in the organization correctly, that is, when employees trust in their organization.

## **Organizational Trust**

Organizational trust is considered one of the key elements of the HERO Model. Specifically, it is a psychological construct included within the category of “healthy employees”. Healthy employees refer to employees with positive psychological resources (e.g., organizational trust, self-efficacy, mental and emotional competences, organizational-based self-esteem, optimism, hope, resilience) which are positively related to well-being (e.g., work engagement) (e.g., Lorente, Salanova, Martínez, & Schaufeli, 2008; Luthans, Youssef, & Avolio, 2007).

As mentioned above, we consider organizational trust to mean “employees’ willingness at being vulnerable to the actions of their organizations, whose behavior and actions they cannot control” (Tan & Lim, 2009; p. 46). This definition is focused on vertical trust, that is, the trust between supervisors/top managers and employees (or teams). In this way, healthy and resilient organization need to look at how to build organizational trust by mean of different antecedents (e.g., healthy organizational practices). Suarez, Caballero, & Sánchez (2009) in a sample composed by 214 Chilean employees suggested that trust is pivotal in work processes such as cooperation. Different scholars have shown that, in order to increase trust in an organization (i.e., vertical trust), investment in healthy organizational practices is needed (Acosta et al., 2013; Bruhn, 2001; Fredrickson & Dutton, 2008; Jain & Sinha, 2005; Kath, Magley & Marmet, 2010; Mone & London, 2010). In this way, there is evidence that employees trust in their supervisor and top managers if they perceive justice in the organizational practices and decisions (Dirks & Ferrin, 2002).

Furthermore, there is research evidence in favor that organizational trust influences employee well-being, specifically work engagement (Lin, 2010) measured at the individual level. Compared to employees with low levels of organizational trust, employees who trust in the organization experience more vigor, dedication and absorption at work. One innovation of the present study is that work engagement is considered at the team level. Research has evidenced that teams plays an important role to increase efficiency and competitiveness (Hodson, 1997), productivity (Salanova et al., 2003) and psychosocial health (Wilson et al., 2004). Despite the relevance of testing teams, the vast majority of scholars have focused on work engagement at the individual level; in consequence, little attention has been given to teams (Richardson & West, 2010; Simpson, 2009; Whitman, Van Rooy, & Viswesvaran, 2010).

#### **Team Work Engagement**

Traditionally, work engagement has been described as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 72). Vigor suggests the willingness to invest effort in one’s work, persistence in the face of difficulties, and high levels of energy and mental resilience while working. Dedication refers to a particularly strong work involvement and identification with one’s job. The final dimension of engagement, absorption, denotes being fully concentrated and engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from the task.

Since the well-established work engagement at the individual level (e.g., Llorens, Bakker, Schaufeli, & Salanova, 2006; Llorens, Schaufeli, Bakker, & Salanova, 2007; Salanova & Llorens, 2009; Seppälä et al., 2009), a recent shift in the study of work engagement considers it a psychosocial collective construct, at the team level. That is because some authors propose that emotional contagion occurs (Hatfield, Cacioppo, & Rapson, 1994). It is the main crossover mechanism behind the emergence of a shared-state such as team work engagement. Although only few studies have focused on collective engagement, important results have been found. Generally speaking, collective work engagement increases: (1) business-unit outcomes (Harter, Schmidt, & Hayes, 2002), (2) task performance in students working in groups (Salanova et al., 2003), (3) service climate and performance in service employees (Salanova, Agut, & Peiró, 2005), (4) collective positive affect and collective efficacy by positive spirals (Salanova, Llorens, & Schaufeli, 2011), and (5) work engagement at the individual level (Bakker, Van Emmerik, & Euwena, 2006; Lin, 2010). Team work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by team work vigor, dedication and absorption which emerges from the interaction and shared experiences of the members of a work team (Salanova et al., 2003, p. 47).

Basically, work engagement at the collective level has been tested by a collective version of the Utrecht Work Engagement Scale (Salanova et al., 2003; Salanova et al., 2011) by means of 18 items referred to: collective vigor, collective dedication and collective absorption. Also, in Salanova et al. (2011) the whole HERO Model was validated by second order factor analyses, in which team work engagement (with the long version with 18 items) showed a good factorial structure and was considered one of the key elements in the ‘healthy employees’. Based on this, recently,

Torrente, Salanova, Llorens, and Schaufeli (2013) offered a validation of the team work engagement scale proposed in Salanova et al. (2011) in order to construct a shorter measure. The Team Work Engagement scale is composed by nine items which considers three dimensions: team work vigor (three items), team work dedication (three items), and team work absorption (three items). Although these three dimensions are considered traditionally measures of work engagement at individual level, previous empirical studies showed that the core of engagement is composed by vigor and dedication (Llorens et al., 2007; Lorente et al., 2008; Schaufeli & Bakker, 2004). Absorption is also part of other psychologist construct (e.g., Flow at work; Workaholism). This would explain that this dimension is not clearly related to work engagement (Rodríguez-Sánchez, Salanova, Cifre, & Schaufeli, 2011; Taris, Schaufeli, & Shimazu, 2010). In the present study, we try to delete this gap in the literature by using team work engagement by aggregated data at work-unit level of analysis, considering its core dimensions.

#### **The Current Study**

Taking previous research, the objective of our study is to test, for the first time, the role of organizational trust (i.e., vertical trust) among healthy organizational practices and team work engagement (team work vigor and team work dedication) by aggregating data at the team level. Specifically, we test the mediating role of organizational trust (i.e., vertical trust) among healthy organizational practices and team work engagement (i.e., team work vigor and team work dedication) considering the aggregated perception of the team members. At this point, we expect that organizational trust fully mediates the relationship among healthy organizational practices and team work engagement (i.e., team work vigor and team work dedication).

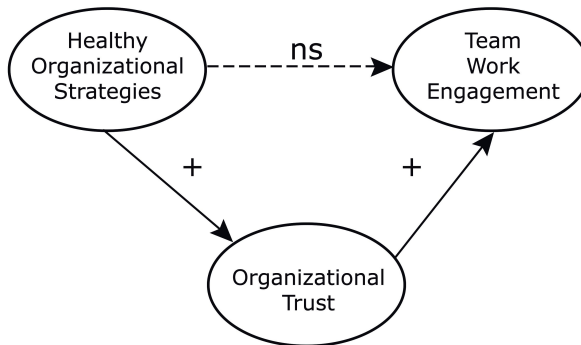


Figure 1. Research model: The proposed full mediated model.

## METHOD

### SAMPLE AND PROCEDURE

A convenience sample was used for this study consisting of 518 employees (response rate was 58%) nested within 55 work-units from 13 SMEs in Spain. Of these employees, 77% belonged to the service and 23% to the industry sub-sectors. Additionally, 53% were women and 70% had permanent contracts. The average tenure in the current job was 5 years ( $SD = 3.47$ ), 7 years working in the same company ( $SD = 5.57$ ), and 10 years working in general ( $SD = 7.67$ ). Finally, work-units had an average of 7 team members each (mean = 7.60,  $SD = 3.5$ ).

Once agreed in their participation, enterprises provided to their employees with information regarding the project by different means (e.g., meetings, bulletin board, intranet). Also, researchers conducted information meetings to further explain the project to employees and supervisors. Participants completed a self-report questionnaire regarding their work-units. We use the work-unit definition of George (1990), according to which a work-unit is an entity consisting of a group of workers who work together under the same supervisor and share collective responsibility for performance outcomes.

The questionnaire was distributed to the different team members in the company by the researchers themselves and took approximately 30 minutes to be filled in. In order to prevent bias, only workers with more than six months of organizational tenure were considered for the analyses. According to McCarthy (1992) at least six months are needed to new workers get settled into their job and the organization.

As for the ethical issues considered in this research, WONT research team ensured strict compliance with applicable regulations, especially with regards to the utmost confidentiality in handling data, ensuring at all times that the guidelines governing this were based on the usual rigor of scientific research.

## MEASURES

Healthy Organizational Practices were assessed by nine items included in the HERO questionnaire (Salanova et al., 2011) which, as mentioned above, considers eight strategies: work-family balance (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to facilitate the work-family balance and the private lives of its employees'*), mobbing prevention (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to prevent mobbing at work'*), skills development (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to facilitate the development of workers' skills'*), career development (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to facilitate workers' career development'*), psychosocial health (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to ensure well-being and quality of life at work'*), perceived equity (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to ensure that workers receive rewards'*), organizational communication (two items; *'In the last year, mechanism and practices have been introduced in this organization in order to facilitate communication from management to workers'; 'In the last year, mechanism and practices have been introduced in this organization in order to ensure that information about the organizational goals is given to everyone who needs to know about them'*), and corporate social responsibility (one item; *'In the last year, mechanism and practices have been introduced in this organization in order to ensure issues concerning corporate social responsibility are dealt with'*). Internal consistencies for the scale achieved the



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cut-off point of .70 (alpha = .87) (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*). In order to lead respondents' attention from the individual level to the team level, all the variables were focused on team perceptions by aggregated data at the work-unit level.

Organizational Trust was assessed by four items based on Huff and Kelley's scale (2003) that were included in the HERO questionnaire (Salanova et al., 2011). An example of the item is: '*In this organization, subordinates have a great deal of trust in their supervisors and top managers*'. Internal consistencies for the scale reached the cut-off point of .70 (alpha = .88) (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*). Again, in order to lead respondents' attention from the individual level to the team level, all the items focused on team perceptions so that they could be aggregated at team level.

Team Work Engagement Scale was assessed by the core dimensions (six items) (i.e., team work vigor and team work dedication) of a team work engagement scale (Salanova et al., 2003) validated by Torrente et al. (2013). Specifically, we tested: team work vigor (three items; e.g. '*During the task, my team feels full of energy*'; alpha = .78) and team work dedication (three items; e.g. '*My team is enthusiastic about the task*'; alpha = .84). Internal consistencies for two dimensions achieved the cut-off point of .70 (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*). In order to lead respondents' attention from the individual level to the team level, all the items focused on team perceptions by aggregated data at team level.

## DATA ANALYSES

Firstly, we calculated internal consistencies (Cronbach's  $\alpha$ ) for individual data using the PASW 18.0 software application. Secondly, Harman's single factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) was computed for the variables in the study in order to test for bias due to common method variance, also using individual data. Thirdly, since the variables in the study (i.e., healthy organizational practices, organizational trust, and team work engagement) were measured at the team level, we computed agreement at the team level for each scale (for the procedure used to

aggregate, see Chen, Mathieu, & Bliese, 2004). To do so, we used a consistency-based approach by computing Intraclass Correlation Coefficient ( $ICC_1$  and  $ICC_2$ ) (Bliese, 2000; Glick, 1985) using the PASW 18.0. Thus, it is concluded that when  $ICC_1$  and  $ICC_2$  were higher than .12 and .60, respectively (Bliese, 2000; Glick, 1985). Different Analyses of Variance (ANOVA) were computed in order to ascertain whether there was statistically significant between-group discrimination for the average scales. Fourthly, we computed descriptive statistics and intercorrelations among the scales by means of data aggregated at the team level. Finally, AMOS 18.0 (Analyses of MOment Structures; Arbuckle, 1987) software program was used to implement different Structural Equation Models to test for the relationships among healthy organizational practices, organizational trust and team work engagement using aggregated data at the work-unit level. Two plausible models were compared following Baron and Kenny (1986): M1, the full mediated model, in which organizational trust is fully mediating the relationship among healthy organizational practices and team work engagement; M2, the partial mediated model, in which organizational trust partially mediates the relationship among healthy organizational practices; that is, there is also a direct relationship from healthy organizational practices and team work engagement.

Maximum likelihood estimation methods were used in which the input for each analysis was the covariance matrix of the items. We assessed two absolute goodness-of-fit indices to evaluate the goodness-of-fit of the models: (1) the  $\chi^2$  goodness-of-fit statistic; and (2) the Root Mean Square Error of Approximation (RMSEA). The  $\chi^2$  goodness-of-fit index is sensitive to sample size, for this reason is recommended to use relative goodness-of-fit measures (Bentler, 1990; Marsh, Balla, & Hau, 1996). So then, four relative goodness-of-fit indices were used: (1) Comparative Fit Index (CFI), (2) Normed Fit Index (NFI); (3) Tucker-Lewis Index (TLI, also called the Non-Normed Fit Index); and (4) Incremental Fit Index (IFI). Finally, the AIC (Akaike Information Criterion) index was also computed to compare non-tested models. For RMSEA, values smaller than .05 are considered as indicating an excellent fit, .08 are considered as indicating an acceptable fit whereas values greater than .1 should lead to model rejection (Browne & Cudeck, 1993). For the relative fit indices, values greater than .90 are indicative of a good fit (Hu & Bentler, 1999). The lower the AIC index, the better the fit is (Akaike, 1987; Hu & Bentler, 1995).

## RESULTS

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### AGGREGATION AND DESCRIPTIVE ANALYSES

Firstly, the results of the Harman's single factor test (Podsakoff et al., 2003) on the individual database ( $N = 518$ ) reveals a bad fit to the data,  $\chi^2(14) = 267.779$ ,  $p = .000$ , RMSEA = .187, CFI = .776, NFI = .768, TLI = .665, IFI = .778, AIC = 295.779. In order to avoid the problems related to the use of Harman's single factor test (see Podsakoff et al., 2003), we compared the results of the one latent factor model with a model considering three latent factors. Results show significantly lower fit of the model with one single factor when compared to the model with multiple latent factors, Delta  $\chi^2(2) = 204.617$ ,  $p < .001$ . Consequently, we may consider that the common method variance is not a serious deficiency in this dataset.

Table 1 shows the means, standard deviations, intercorrelations and aggregation indices of all the study variables aggregated at work-unit level ( $N = 55$ ) using the PASW 18.0. Based on the aggregated data at work-unit level ( $N = 55$ ), the ICC<sub>1</sub> and ICC<sub>2</sub> indices ranged from .12 to .41 and from .60 to .86 for the variables in the study, respectively. Thus, aggregation results provide support to conclude that within-group agreement in the study's work-units is sufficient to aggregate unit members' perceptions to the work-unit level (Chen et al., 2004). We also tested a one-way ANOVA to ascertain whether there was statistically significant between-group discrimination in average variables among employees. Results on aggregated scales among employees shows statistically significant between-group discrimination in healthy organizational practices,  $F(54, 457) = 4.44$ ,  $p < .001$ ; vertical trust,  $F(54, 455) = 7.55$ ,  $p < .001$ ; team work vigor,  $F(54, 457) = 2.37$ ,  $p < .001$  and team work dedication,  $F(54, 457) = 2.71$ ,  $p < .001$ . Consequently, there is a significant degree of between-group discrimination which supported the validity of the aggregate healthy organizational practices, organizational trust and team work engagement (i.e., team work vigor and team work dedication) got support from it. Finally, intercorrelations among healthy organizational practices, organizational trust and team work engagement by aggregated data at work-unit level ( $N = 55$ ) shows that, as expected, variables correlate positively and significantly among each other (100%) ranging from .30 to .94 ( $p < .001$ ).

**Table 1**

*Means, standard deviations and intercorrelations by aggregated data (N = 55)*

Variables	Mean	DS	ICC <sub>1</sub>	ICC <sub>2</sub>	1	2	3	4	5
1. Healthy organizational strategies (8 strategies)	2.89	1.33	.28	.79	-				
2. Healthy organizational strategies (4 strategies)	2.87	1.48	.31	.81	.94***	-			
3. Organizational trust	3.23	1.49	.41	.87	.57***	.54***	-		
4. Team work vigor	4.28	1.04	.12	.60	.33***	.34***	.30***	-	
5. Team work dedication	4.48	1.14	.15	.63	.38***	.38***	.36***	.68***	-

\*\*\*  $p < .001$

### MODEL FIT: STRUCTURAL EQUATION MODELING

For the Structural Equation Modeling (SEM) we used the aggregated database (N = 55); consequently, the aggregated scales at work-unit level for healthy organizational practices, organizational trust, and team work engagement were considered as latent variables. Healthy organizational practices comprise eight indicators: work-family balance, mobbing prevention, skill development, career development, psychosocial health, perceived equity, communication and corporate social responsibility. Organizational trust comprised one indicator. Finally, team work engagement comprised two indicators regarding the core dimensions of engagement: team work vigor and team work dedication. Since organizational trust is only composed by one indicator, the error variance of vertical trust indicator was constrained in all the models in order to avoid unidentified problems by using the formula,  $(1-\alpha) * \sigma^2$  (Stephenson & Holbert, 2003).

Table 2 shows the results of the SEM conducted to test the relationship among healthy organizational practices, organizational trust and work team engagement by aggregated data at the work-unit level. The findings of these analyses indicate that the proposed model (M1) in which organizational trust fully mediates the relationship among healthy organizational practices and team work engagement fitted not well to the data,  $\chi^2(43) = 153.884$ ,  $p = .000$ , RMSEA = .22, CFI = .67, NFI = .61, TLI = .58, IFI = .68, AIC = 199.88. Similar results were obtained for the partial mediation model (M2),  $\chi^2(42) = 153.381$ ,  $p = .000$ , RMSEA = .22, CFI = .67, NFI = .61, TLI = .57, IFI = .68, AIC = 201.38. Consequently, none of these two models showed adequate goodness-of-fit indices, thus not giving support for the proposed model when the healthy organizational practices are tested with the original nine items.

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To deal with this unexpected finding, an item reduction procedure consisted on keeping the items with the highest factor loading was applied to the original healthy organizational practices indicators in order to ensure the quality of the scale (see Schaufeli, Shimazu, & Taris, 2009; Torrente et al., in press). For instance, skill development, career development, perceived equity and corporate social responsibility were leave out of the model. Consequently, a short version scale of the healthy organizational practices (five items) distributed by four strategies was obtained ( $\alpha = .82$ ): work-family balance (one item), mobbing prevention (one item), psychosocial health (1 item), and organizational communication (two items). Thus, a revised model in which organizational trust mediates among healthy organizational practices (a short version that was composed by five items distributed in four practices) and team work engagement fit the data with all fit indices satisfying the criteria. Chi-square tests between *Full Mediated Model Revised (M1<sub>R</sub>)* and the original model 1 (M1) show a significant difference between both models,  $\Delta \chi^2(29) = 135.69, p < .001$ .

Consequently, in the following analyses, the short version of the healthy organizational practices is included in the analyses using aggregated data at the work-unit level.

As Table 2 shows, the Full Mediated Model Revised (M1<sub>R</sub>) fit the data with all fit indices satisfying the criteria for a good fit. Chi-square tests between M1<sub>R</sub> and the *Partial Mediated Model Revised (M2<sub>R</sub>)*, show a non-significant difference,  $\Delta \chi^2(1) = 3.67, ns$ . These results give evidence for the M1<sub>R</sub> since: (1) it is more parsimonious than M2<sub>R</sub>, (2) for M2<sub>R</sub> the direct path between healthy organizational practices and team work engagement was not significant ( $p = .08$ ) and more important, (3) also for M2<sub>R</sub>, the regression weight between organizational trust and work team engagement was non-significant ( $p = .293$ ).

Firstly, it is important to note that all the manifest scales loaded significantly on the intended latent factors. An inspection of the output revealed that all the indicators of healthy organizational practices, organizational trust and team work engagement loadings were higher than .69. Secondly, a revision of the regression weights of the proposed M1<sub>R</sub> reveals that, as expected, healthy organizational practices has a positive and significantly influence on organizational trust ( $\beta = .58, p < .001$ ), which in turn positively and significantly influences team work engagement ( $\beta = .41, p < .05$ ). It is interesting to note that, healthy organizational practices explain the 33% of the variance

on organizational trust ( $R^2 = 33\%$ ), which in turn explain the 16% of the variance on team work engagement ( $R^2 = 16\%$ ).

**Table 2**

*Fit Indices for Structural Equation Models by aggregated data (N = 55)*

Models	$\chi^2$	gl	p	RMSEA	CFI	NFI	TLI	IFI	AIC	$\Delta\chi^2$	$\Delta gl$	$\Delta RMSEA$	$\Delta CFI$	$\Delta NFI$	$\Delta TLI$	$\Delta IFI$	$\Delta AIC$
M1	153.88	43	.000	.22	.67	.61	.58	.68	199.88								
M2	153.38	42	.000	.22	.67	.61	.57	.68	201.38								
Diff. M2 -M1										.50	1	.00	.00	.00	.01	.00	1.50
M1 <sub>R</sub>	17.69	13	.17	.08	.97	.91	.96	.97	47.69								
M2 <sub>R</sub>	14.02	12	.30	.05	.98	.93	.98	.98	46.02								
Diff. M1 -M1 <sub>R</sub>										135.69	30	.01	.03	.03	.39	.29	153.76
Diff. M2 <sub>R</sub> -M1 <sub>R</sub>										3.68	1	.03	.01	.02	.02	.01	1.68

*Notes.*  $\chi^2$  = Chi-cuadrado; gl = grados de libertad; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; NFI = Normed Fit Index, TLI = Tucker-Lewis Index; IFI = Incremental Fit Index; AIC = Akaike information Criterion. Dif. = diferencia.

### 3. Practices, Trust and Engagement

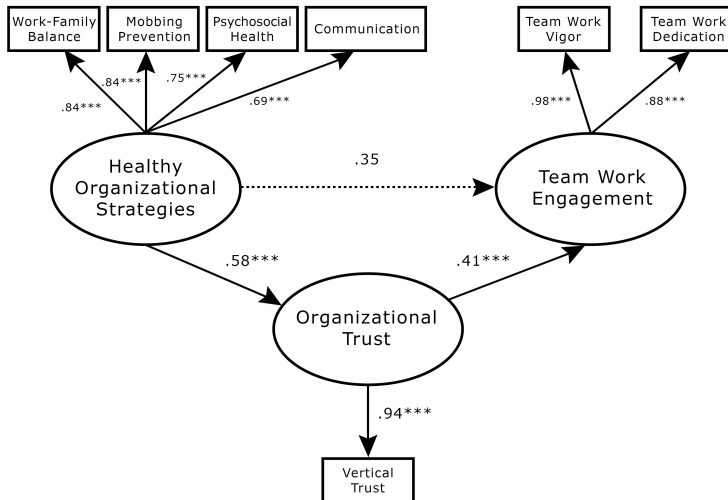


Figure 2. SEM analyses about healthy organizational strategies, organizational trust and team work engagement in the aggregated database (N = 55). Only the significant coefficients are displayed at \*\*\* $p < .001$  and \*\* $p < .01$ .

## DISCUSSION

The aim of our study was to evaluate, for the first time, the relationship among healthy organizational practices, organizational trust and team work engagement by aggregating data at the team level. Specifically, we tested the mediating role of organizational trust (i.e., vertical trust) between healthy organizational practices and the core of team work engagement (i.e., team work vigor, team work dedication) by considering the aggregate perceptions from the team members in SMEs. We hypothesized that the organizational trust fully mediated the relationship between healthy organizational practices and work engagement when data were aggregated at the team level.

The current study contributes to our understanding of the relationship among two of the elements of the HERO Model, that is, resources and healthy organizational

practices (in terms of healthy organizational practices) and healthy employees (i.e., organizational trust and team work engagement) using data aggregated at the work-unit level. In a sample of 518 employees nested within 55 work-units from 13 SMEs in Spain, we tested the relationship among healthy organizational practices (four strategies), organizational trust (i.e., vertical trust) and the core of team work engagement (team work vigor and team work dedication) at the team level included in the HERO questionnaire (Salanova et al., 2011).

Results of the Structural Equation Modeling with data aggregated at the work-unit level of analyses revealed that, unexpectedly, the model with the eight original items of healthy organizational practices did not fit to the data (neither for the full nor for the partial mediation model). Based on an iterative process, the original scale was reduced to five items distributed on four practices. This result gives evidence to consider these four practices are the main ones related to organizational trust (i.e., vertical trust). On the other hand, we expect that the rest of practices (i.e, skill development, career development, perceived equity, and corporate social responsibility) could be relevant to other healthy employee's phenomenon (e.g., efficacy beliefs, optimism, resilience) and healthy organizational outcomes (e.g., commitment, excellent results). The hypothesized models with the short version of healthy organizational practices fit significantly better to the data than the original model with the eight healthy organizational practices. Structural Equation Modeling showed that organizational trust fully mediated the relationship among healthy organizational practices (four practices) and the core of team work engagement (team work vigor and team work dedication) tested at the work-unit level. These results are in line of previous research, in which the organizational trust has a key role among organizational practices and employees' well-being (Bruhn, 2001; Jain & Shina, 2005; Kath, Magley, & Marmet, 2010; Lin, 2010; Suárez, Caballero, & Sánchez, 2009). However, in the present study we go one step more, since the relationships among healthy organizational practices, organizational trust and team work engagement have been considered at team level. In fact, it seems that only when teams perceived that organizations are implementing healthy practices in the organization, the team work engagement is increasing. Thus, vertical trust is a pivotal element to feel good at work. We can conclude that organizations must foster trust between employees and supervisors or top managers because healthy practices implemented by Human Resources Management will impact positively on teams work engagement if there is organizational trust. All in all, results give support to our hypothesis and we can say that the objective of the study has been reached.



## LIMITATIONS AND FURTHER RESEARCH

The present study has several limitations. The first one is that the data were obtained by self-report instruments. However, aggregate rather than individual perceptions of teams have been considered for healthy organizational practices, organizational trust and the core of the team work engagement. Consequently, the use of these data aggregated at the team level of analyses enabled us to minimize the common method variance bias.

Secondly, a convenience sample is used in the present study. However, it is a wide sample, including different teams from different enterprises which belong to different economical sectors.

Another limitation is that we used team perceptions on organizational phenomena (i.e., healthy organizational practices and organizational trust). Further step in research should consider the aggregation of data at organizational level and to test the relationship among healthy organizational practices and organizational trust (aggregated at organizational level) on team work engagement (aggregated at team level) by means of hierarchical linear modeling (Hox, 2002) to explore cross-level effects and interactions between organizational and team levels. However, in the present study we can assume that the group level of analyses is adequate to test organizational trust as well as healthy organizational practices. Attending to the organizational trust, in the present study we focus on specific type of organizational trust: vertical trust, that is, the trust between employees and supervisor and top managers. Based on this, team perception of their supervisor and top managers are needed to know more about organizational trust. Attending to the healthy organizational practices we used data aggregated at the team level of analysis since we considered that the sharing perceptions of employees working in teams are determinant in order to perceive the practices implemented by the organizations and their quality (Richardson & West, 2010). Moreover, we assume that in this process of perception and evaluation of the quality of the practices implemented by the organization, supervisors plays a key role. In fact, in the present study we concluded that not only the healthy practices are important but the trust in the supervisor is relevant in work teams. If we consider this, we expect differences in perceptions and quality of organizational practices implemented and consequently, the evaluations of this phenomenon at the team level are also crucial.

Furthermore, it should be interesting to test this model using multiple organizations (not only Spanish SME) in cross-cultural and with longitudinal studies in order to explore the existence of positive spirals over time. According to HERO Model, the three elements (i.e., healthy organizational practices, healthy employee, and healthy outcomes) are assumed to be related to each other over time by a gain spiral (Llorens et al., 2007).

Another step in the study should be to test the model including healthy organizational outcomes, for example organizational commitment (aggregated at organizational level), work-unit productivity (measured by the supervisor opinion) and loyalty by customers (aggregated at organizational level). This would bring the opportunity to test the effect between healthy organizational practices and organizational trust on healthy outcomes considering the three key elements of the HERO Model.

## THEORETICAL AND PRACTICAL IMPLICATIONS

The present study shows some implications for future research and practice. At the theoretical level, the present study extends the corpus of knowledge about the key role of organizational trust in the relationship between healthy organizational practices and team work engagement tested by data aggregated at work-unit level in SMEs. The positive relationship lends support to HERO Model (Salanova et al., 2011) because it analyzes the relationship proposed by the model between resources and healthy organizational practices (i.e., healthy organizational practices) and healthy employees (i.e., organizational trust and team work engagement) a higher level of analyses (i.e., teams). Furthermore, a shorter and more parsimonious scale on healthy organizational practices is found when constructs are tested at team level.

From the practical point of view, results can be used by HRM in order to foster and develop organizational trust in their teams from a perspective based on continuous prevention and promotion actions (Salanova, Cifre, Martínez, & Llorens, 2007). Specifically, results show the relevance of investing in work-family balance, mobbing prevention, psychosocial health, and organizational communication in organizations. Investment in these practices should be interpreted by teams as a sign that the organization is concerned about its employees, and consequently trust in the

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organization will be enhanced. As a result, well-being of teams will be improved by increasing team work engagement.

#### FINAL NOTE

This study has tested the relationship between HRM, organizational trust and team work engagement in teams by aggregated data. Healthy organizational practices and team work engagement are related through organizational trust, given support for the premises of the HERO Model for the team-level of analyses. This study enhances the role that HRM plays in order to improve healthy employees in terms of organizational trust and team work engagement. Researchers and practitioners should use these results about the role of organizational trust among healthy organizational practices and team work engagement in order to enhance HEROs. Maybe, this will be the first step to know how organizational trust influences organizational practices and team work engagement.

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**How Healthy  
Organizational  
Practices are  
related to  
Affective  
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The Power of  
Organizational  
Trust





**4. How Healthy  
Organizational Practices are  
related to Affective  
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The power of Organizational  
Trust**

HEDY ACOSTA, MARISA SALANOVA, AND SUSANA LLORENS

WANT RESEARCH TEAM. UNIVERSITAT JAUME I, SPAIN

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Correspondence concerning this article should be addressed to Hedy Acosta, Department of Social Psychology, Universitat Jaume I, Av. Sos Baynat, s/n., 12071 Castellón (Spain). Tel. +34 964729569. Fax +34 964729262. E-mail: [hacosta@uji.es](mailto:hacosta@uji.es).



## ABSTRACT

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The current study contributes to our understanding of the relationship between HOP implemented by HRM, organizational trust and organizational commitment based on the *HEalthy & Resilient Organizations Model (HERO Model; Salanova, Llorens, Cifre, & Martínez, 2012)*. The sample is composed of 2,097 employees nested within 73 companies using data aggregated at the organizational level. Specifically, the study tests whether organizational trust plays a fully mediating role between HOP and organizational commitment. Variables were aggregated from employees' perceptions at the organizational level using Intraclass Correlation Coefficients (ICC<sub>1</sub> and ICC<sub>2</sub>). Bootstrapping analysis with AMOS enabled us to confirm the main hypothesis, that is, organizational trust mediated the relationship between HOP and organizational commitment. Theoretical and practical implications based on the *HERO Model* are discussed.

*Key words:* HOP, organizational trust, organizational commitment.

## HOW HEALTHY ORGANIZATIONAL PRACTICES ARE RELATED TO ORGANIZATIONAL COMMITMENT: THE POWER OF ORGANIZATIONAL TRUST

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Contemporary organizations need to be healthy and resilient in order to survive in a social and economic context of crisis. In this scenario, organizational trust emerges as a crucial element in organizational success because trust is a highly important ingredient in the long-term stability of the organization and the well-being of its members (Cook & Wall, 1980). Economic, organizational and social approaches, for example, have found evidence that trust plays a mediating role between the relationship of organizational practices and resources, and organizational outcomes (Acosta, Salanova, Llorens, & LeBlanc, 2017). Human Resources Management (HRM) practices are thus signalled as a relevant factor with which to create trust in organizations (Yilmaz & Giderler, 2009). Therefore, the main idea in this study is that organizations implement HRM practices as a means to maximize firms' competitive advantage (e.g. Guthrie, 2001). In this regard, research has pointed out that HRM practices can help organizations leverage their human capital towards improving organizational performance (Hall & Ketchen, 2006; Datta, Guthrie, & Wright, 2005; Guthrie, 2001). HRM practices implemented by organizations foster an environment within them that elicits employee behaviours and attitudes (Collins & Smith, 2006) such as trust and commitment. In this line, Takeuchi, Chen, and Lepak (2009) proposed that HRM practices (i.e. recruitment and selection procedures, incentive compensation, incentive compensation, performance management, training) implemented by the organization influence employee attitude and motivation results (i.e. satisfaction and commitment). In sum, we could understand HRM practices as being a positive way to improve the organizational processes.

However, Tremblay, Cloutier, Simard, Chenevart and Vandenberghe (2010) argued that HRM practices do not have a direct effect on organizational outcomes (i.e. organizational climate and the adoption of extra-role behaviours). Following this rationale, we can understand that it is important to consider that there are underlying psychological mechanisms, for example, organizational trust, that act as mediating mechanisms in the relationship between HRM practices and organizational outcomes. Thus, Acosta, Salanova and Llorens (2012) found that, at the team level of analysis, organizational trust fully

mediates the relationship between HRM practices and the well-being of the team in terms of work engagement.

Hence, Takeuchi, Chen, and Lepak (2009) posited that adopting a multilevel theoretical perspective, which considers aspects of the organization's social system, is needed to fully understand how HRM practices relate to employee attitudes and behaviours. Adding the last rationale, Katou and Budhwar (2010) proposed that, to measure HRM practices, it is important to use the appropriate level of analysis. However, as far as we know there is no evidence that takes into account: (1) the organization as a unit of analysis, (2) the use of the organization as a referent, and (3) constructs (HRM practices, trust and commitment) of an organizational nature. In this way, our study takes as its framework the Healthy & Resilient Organizations (HEROs) Model proposed by Salanova and her colleagues (2012). This heuristic model proposed that HEROs are those organizations that make systematic, planned and proactive efforts to improve both their employees' and the organizational processes and outcomes. This means that organizations develop these specific practices from HRM in order to increase the resources available to their employees and the organization as a whole. These efforts involve carrying out Healthy Organizational Resources and Practices aimed at improving the work environment at the (a) task (autonomy, feedback), (b) interpersonal (socialization, transformational leadership), and (c) organization (HRM practices) levels. Salanova and her colleagues (2012) proposed a model that combines three main and interrelated components: (1) healthy organizational resources and practices (HORP) (e.g. work-family balance); (2) healthy employees (e.g. trust), and (3) healthy organizational outcomes (e.g. affective commitment). Thus, the first element in the HERO Model, that is to say HORP, not only represents the implementation of HRM practices in order to comply with the law, but also refers to healthy organizational practices (HOP) that go beyond the law and could develop the well-being of their employees and the organization as a whole.

Furthermore, the HERO Model has two other particular aspects: first, all dimensions included within it are tested at the collective (team or organizational) level and, second, the healthy employee component of the HERO Model plays a mediator role between healthy organizational resources and practices, and healthy organizational outcomes.

Another important statement proposed by the HERO Model is the idea that the element 'healthy employees' plays a key role as a full mediator between healthy organizational resources and practices, and healthy organizational outcomes. This idea



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refers to an underlying psychosocial mechanism (i.e. trust) which relates HOP and organizational outcomes. Thus, if employees trust the HRM practices their organization carries out to enhance their well-being, they will become more committed to the organization. This statement is in line with Tremblay et al. (2010), where HRM practices are claimed to have an indirect effect on organizational outcomes. Hence, in this study, we evaluate the three key elements of the HERO Model, that is, we evaluate the mediating role of healthy employees (in terms of trust) between the relationship of healthy organizational resources and practices (in terms of HOP) and healthy organizational outcomes (in terms of commitment) at the organizational level of analysis.

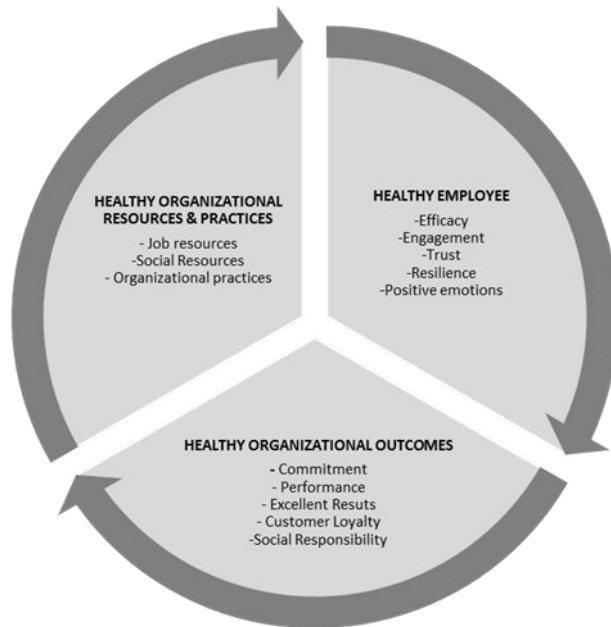
Accordingly, the recent academic interest in Healthy Organizations provides us with a golden opportunity to evaluate the role of trust in this kind of organizations. Trust as a variable included in the element 'healthy employees' plays a mediator role between organizational resources and practices (i.e. HOP), employee well-being (i.e. work engagement) and organizational outcomes (i.e. performance) but this evidence is mainly focused on the individual and the team levels of analysis. At the individual level, for example, using a sample of 428 employees, Lin (2010) found that organizational trust fully mediates the relationship between corporate citizenship behaviour and work engagement. At the team level, the study conducted by Acosta, Salanova, and Llorens (2012) using aggregated data at the team level of analysis found that organizational trust fully mediates the relationship between HOP (i.e. work-family balance, mobbing prevention programmes, psychosocial programmes, organizational information and communication) and work engagement.

Recently Fulmer and Gelfand (2012) pointed out that research on trust has been conducted mainly at the individual level. They proposed that trust has different antecedents (i.e. HRM practices) and consequences (i.e. commitment) depending on the focus of the level of analysis. Following this rationale, adopting an organizational level of analysis on trust research is relevant to deepen our understanding of the construct because practices and resources implemented by organizations can have an impact on the collective well-being of the firm (i.e. trust and commitment). In this line, Ostroff and Bowen (2000) proposed that there is a gap in the research regarding the importance of considering the level of analysis (i.e. organizational level) in specific relationships within the organization (i.e. HRM practices).

As mentioned above, there are two important reasons for considering the organizational level of analysis in this study: (1) research on trust has been conducted

mainly at the individual and team levels, and (2) there is a gap in the research regarding the importance of considering the organizational level of analysis. Specifically, we have considered HRM practices, organizational trust and organizational affective commitment.

For this reason, the aim of this study is to test the role of organizational trust in the relationship between HOP and affective commitment using aggregate data at the organizational level based on the HERO Model (Salanova, Llorens, Cifre, & Martínez, 2012). To do so, we consider (1) the organization as a unit of analysis, (2) the use of the organization as a referent, and (3) constructs (HRM practices, trust and commitment) of an organizational nature.



#### HEALTHY ORGANIZATIONAL RESOURCES AND PRACTICES

Healthy Organizational Resources and Practices (HORP) are considered highly relevant in organizations, as a pillar on which to build HEROs, because when organizations

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implement resources and practices they display more positive experiences among employees and teams (e.g. organizational trust; Bruhn, 2001; Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010) and healthy outputs such as organizational commitment (Mayers & Smith, 2000) and organizational performance (Bacon & Hoque, 2005; Schneider, Hanges, Smith, & Salvaggio, 2003). In this study we focus on HOP as an important element of HOPR. These practices are defined as “the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals” (Wright & McMahan, 1992, p. 298). We are referring, specifically, to HOP, which are developed by HRM in order to achieve organizational goals as well as to increase psychological and financial health at employee, team and organizational levels (Salanova et al., 2012). All in all, in this study we focus on HRM practices because these practices enhance the appeal of the organization and help it to be perceived as a great place to work (Carlsen, 2008) and, consequently, they should be included in the business strategy (Budhwar & Debrah, 2001). We consider these practices ‘healthy organizational practices’ because when employees and teams have positive perceptions of these practices, they also have positive levels of well-being, positive attitudes towards the organization (Alfes, Shantz, & Truss, 2012), and higher levels of task performance, organizational citizenship behaviour, and lower levels of intention to leave the organization (Kuvaas, 2008; Kuvaas & Dysvik, 2010).

Research on HRM and occupational health psychology provides evidence on how they are connected to healthy employees (i.e. trust) and healthy outcomes (i.e. organizational affective commitment). For example, Ostroff and Bower (2004) proposed that practices implemented by HRM are believed to result in more productive, motivated, satisfied, and committed employees, who in turn promote a more effective firm. In this way, HOP increases the quality of the human capital pool and elicits valuable behaviours from employees. Research based on the European Project EQUAL (2004) presents eight main practices from HRM based on Corporate Social Responsibility (CSR) that can be considered healthy HRM practices, namely: work-family balance, mobbing prevention, skills development, career development, psychosocial health, perceived equity, communication, and corporate social responsibility (Salanova et al., 2012). Several studies provide evidence that implementing these HOP can have a positive impact on employees’ well-being. Specifically, Salanova and colleagues (2012), with a sample of 710 employees nested in 84 groups from 14 small and medium-sized enterprises (SMEs), showed that HOP (i.e. work-family balance, mobbing prevention, psychosocial health programmes and organizational information and communication) have a positive impact on employees’ health (i.e. collective efficacy, engagement and resilience), which in turn

had a positive impact on healthy outcomes (i.e. performance, commitment and excellence results). Moreover, Acosta and her colleagues (2012) showed that organizational practices implemented by HRM can enhance organizational trust, specifically work-family balance, mobbing prevention, psychosocial health and communication at the team level of analysis. Furthermore, as stated by Fredrickson and Dutton (2008), the positive impact of HOP on employees' health only occurs when workers perceive that they are being implemented in the organization correctly, that is, when employees trust in their organization.

### ORGANIZATIONAL TRUST

Organizational trust refers to "employees' willingness to be vulnerable to the actions of their organizations, whose behaviour and actions they cannot control" (Tan & Lim, 2009, p. 46). As proposed by Costa (2003), trust is not only a psychological state, but also a manifestation of behaviour. We consider trust in the organization to be a shared state that emerges from employees' and teams' work interactions that create perceptions about the organizations. This means that when employees trust their organization, they will give their best efforts in their everyday work activities because they feel part of their organization (i.e. affective commitment). In this study, we consider trust focused on the organization as a whole, in this particular case, the trust between top managers and employees (or teams) because we are considering trust as a shared state and all the variables in this study are taken at the organizational level of analysis. In this way, healthy and resilient organizations need to look at how to build organizational trust by means of different antecedents (e.g. HOP). Research shows that in order to increase trust in an organization, investment in HOP is needed (Acosta et al., 2012; Bruhn, 2001; Fredrickson & Dutton, 2008; Jain & Sinha, 2005; Kath, Magley, & Marmet, 2010; Mone & London, 2010). As mentioned above, trust is a highly important ingredient in the long-term stability of the organization and the well-being of its members (Cook & Wall, 1980) and it is considered a competitive advantage (Andersen, 2005; Barney & Hansen, 1994; Dirks & Ferrin, 2001). For example, trust enhances employee motivation and commitment (Brockner, Siegel, Daly, Tyler, & Martin, 1997; Tyler, 2000). However, so far, there is a lack of research that focuses on the organization as a unit of analysis and this study aims to provide evidence about the mediating role of trust between HRM practices and commitment at the organizational level. Furthermore, this research advocates the practical involvement of Chief Executive Officers (CEOs) in order to develop trust and healthy outcomes in their organizations through HOP implemented by HRM.

#### 4. Organizational Trust

Regarding the mediator role of trust in organizational processes (i.e. between HOP implemented by HRM and employee well-being), Hughes, Avey and Norman (2008) found that trust plays a mediating role between supportive climate and engagement at the team level of analysis. In the same way, but at the individual level, Lin (2010) showed that trust plays a mediating role between corporate citizenship and work engagement. Additionally, Rispens, Greer and Jehn (2006) used bootstrapping analysis to show that group trust plays a mediating role between task and relationship conflict and performance at the team level of analysis. With this study, we go one step further by testing the HERO Model at the organizational level and observing the mediating role of trust between HOP and healthy organizational outcomes, that is, organizational affective commitment.

#### AFFECTIVE ORGANIZATIONAL COMMITMENT

Organizational commitment is a relevant topic in work and organizational psychology and it has received substantial attention from organizational behaviour as a potential outcome variable in studies focusing on specific HRM practices (Meyer & Smith, 2000). Organizational commitment is the strength of an individual's identification and involvement with a particular organization. It has three psychological factors: (1) a desire to remain in the organization, (2) willingness to exert considerable effort on its behalf, and (3) belief in and acceptance of its goals and values (Porter, Steers, Mowday, & Boulian, 1974). Following Allen and Meyer's (1990) model, organizational commitment has three components, that is, normative commitment, continuance commitment, and affective commitment. In this study, we focus on affective commitment because previous research has provided evidence to suggest that HRM practices might have their greatest impact on affective commitment when organization is motivated by the desire to create a climate of concern and caring (Kinicki, Carson, & Bohlander, 1992). Affective commitment refers to employees' emotional attachment to, identification with, and involvement in the organization. Employees with strong affective commitment remain with the organization because they want to do so (Allen & Meyer, 1996). Furthermore, recent research has pointed out that only affective commitment has its focus at the organizational level, whereas normative and continuance commitment, on the other hand, are related to specific forms of behaviour, for example, intention to leave (Solinger, van Olffen, & Roe, 2008). Adding to this evidence, Arciniega and González (2006) proposed that affective commitment has expected behavioural consequences related to lower turnover, reduced absenteeism, improved performance and increased organizational citizenship behaviour.

In this study, we have considered affective commitment as a state that emerges from collective perceptions. Following this rationale, collective affective commitment refers to a mindset and a psychological state shared among a specific collective of individuals regarding their employer which are typified by feelings of loyalty and a desire to invest mental and physical energy in helping the organization achieve its goals (Garden, Wright, and Moynihan, 2011; Kanter, 1968; Meyer & Allen, 1997).

## THE CURRENT STUDY

This study, as far as we know, represents a novelty in trust research because to date this has been investigated mainly at the individual and team levels of analysis. Furthermore, there is a gap in the research regarding the importance of considering the level of analysis, which in this study is the organizational level of analysis. Therefore, we consider (1) the organizational level of analysis, (2) organization as a referent, and (3) constructs that have an organizational nature. The objective of our study is to test the role of organizational trust between HOP and affective commitment by testing the HERO Model using data aggregated at the organizational level (i.e. the company). At this point, we expect to be able to confirm the following hypothesis: organizational trust fully mediates the relationship between HOP (i.e. work-family balance, mobbing prevention, psychosocial health programs and communication) and organizational affective commitment.

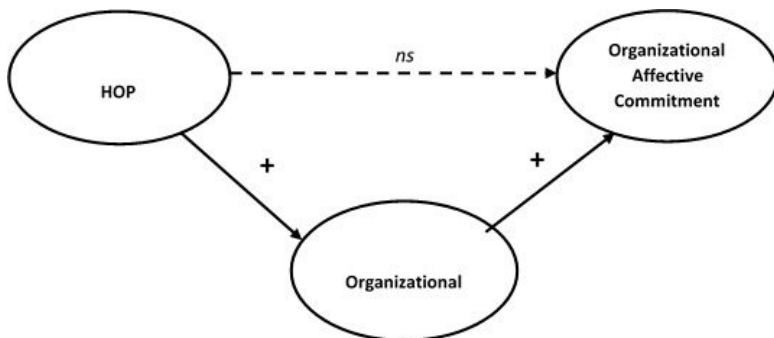


Figure 1. Research model: The proposed fully mediated model.

## METHOD

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### SAMPLE AND PROCEDURE

The sample used in this study was composed of 2,097 employees from 73 Spanish companies. Organizations also differed in terms of economic sector: 86% service sector (3% scientific and technical activities, 5% non-governmental organizations, 8% financial activities, 13% entertainment activities, 15% education, 18% commerce, and 38% tourism), 8% industry sector (manufacturing activities), and 6% construction sector. Of the employees, 62% were women; 80% had a tenured contract. Their average tenure in the company was 8 years ( $SD = 4.75$ ). Organizational size ranged from 4 to 250 employees ( $M = 51.37$ ,  $SD = 42.34$ ).

The CEOs of the participating organizations used different means to provide their employees and team supervisors with information regarding the project (e.g. meetings, bulletin board, intranet). In addition, the researchers further explained the project to managers, supervisors and employees through information meetings. Employees completed a self-report questionnaire regarding organizational perceptions that was distributed by the researchers themselves and took approximately 30 minutes to fill in. In order to guarantee that workers knew the functioning of the organization, only workers with more than six months' organizational tenure participated in the study, since at least three or four months are needed for new employees to get settled into their organization (Feldman, 1988). Confidentiality of the responses was guaranteed. In this way, the research team ensured strict compliance with applicable regulations, especially with regard to the utmost confidentiality in handling data.

### MEASURES

*Healthy Organizational Practices (HOP)* were assessed by five items that represent four practices included in the validated HERO questionnaire (Salanova et al., 2012). Each practice is assessed by one item, with the exception of organizational communication, which is assessed by two items. Respondents answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*), thinking about the last year. Although in the original survey eight practices are included, a previous study conducted by Acosta et al. (2012) demonstrated that four of these are positively related to trust, i.e. work-family

balance (*'In the last year, practices and strategies have been introduced in this organization in order to facilitate the work-family balance and the private lives of its employees'*), mobbing prevention (*'In the last year, practices and strategies have been introduced in this organization in order to prevent mobbing at work'*), psychosocial health (*'In the last year, practices and strategies have been introduced in this organization in order to ensure well-being and quality of life at work'*) and organizational communication (*'In the last year, practices and strategies have been introduced in this organization in order to facilitate communication from management to workers'*; *'In the last year, practices and strategies have been introduced in this organization in order to ensure that information about the organizational goals is given to everyone who needs to know about them'*).

*Organizational Trust* was assessed by four items based on the vertical trust scale by Huff and Kelley (2003) that were also included in the HERO questionnaire (Salanova et al., 2012). An example item is: *'In this organization, subordinates have a great deal of trust in their supervisors and top managers'*. Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*).

*Organizational affective commitment* was assessed by three items (e.g. *'In my team we really feel as if this organization's problems are our own'*;  $\alpha = .80$ ) adapted from Allen and Meyer's Commitment Scale (1996) and validated by Salanova et al. (2012). Employees answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*).

## CONTROL VARIABLES

*Organizational size* (i.e. total number of employees per organization) at the organizational level of analysis was included, because in this study we are considering enterprises of different sizes.

## DATA ANALYSES

Since the questionnaire used in this study involved organizational-level variables, the variables (practices, trust and commitment) were aggregated to the organizational



#### 4. Organizational Trust

level from the lower level of shared perceptions. To do this, interrater reliability indices had to be computed (Lebreton & Senter, 2008). Specifically, the agreement of employees was assessed following a consistency-based approach, ICC<sub>1</sub> and ICC<sub>2</sub> (Bliese, 2000; Glick, 1985) using PASW 22.0. Thus, it was concluded that organizational agreement existed when ICC<sub>1</sub> and ICC<sub>2</sub> were higher than .12 and .60, respectively (Bliese, 2000; Glick, 1985). All the variables included in this study have achieved the cut-off for ICC<sub>1</sub> (from .13 to .62) and ICC<sub>2</sub> (from .68 to .91). Therefore, from a consistency approach we can conclude that all variables included in this study (i.e. practices, trust and commitment) met the criteria to be aggregated at the organizational level.

Analyses of Variance (ANOVA) were also computed in order to ascertain whether there was significant between-group discrimination for the measures at the organization level. ANOVA analyses indicated a significant discrimination of variables between organizations, practices,  $F(72, 1942) = 5.74, p < .001$ ; trust,  $F(72, 1922) = 8.13, p < .01$ ; commitment,  $F(72, 1961) = 7.15, p < .001$ .

The Average Deviation Index was computed (ADM(J)); Burke, Finkelstein, & Dusig, 1999) from a complementary, consensus-based approach, whereby agreement among organization members was concluded when ADM(J) was equal to or less than 1 for 7-point Likert-type scales (Burke et al., 1999). ADM(J) indices showed values lower than 1 (average ADM(J) was .74). Therefore, from a consensus approach we can conclude that all the variables in this study met the criteria to be aggregated at the organizational level. Finally, we computed descriptive statistics and correlations among the scales based on data aggregated at the individual and at the organizational level, respectively (see Table 1).

Secondly, we calculated internal consistencies (Cronbach's  $\alpha$ ) for individual data using the PASW 22.0 software application. Thirdly, Harman's single factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) was performed using AMOS 22.0 (Analyses of MOment Structures; Arbuckle, 1987) for the employee variables in the study using individual data in order to test for bias due to common method variance. Furthermore, we computed descriptive statistics and correlations among the scales based on data aggregated at the individual and at the organizational level, respectively (see Table 1).

Finally, the bootstrapping procedure was applied to test our mediating hypothesis (see Cheung, Lau, 2008; MacKinnon et al., 2002; Preacher and Hayes, 2004) using AMOS 22.0. This method is recommended for examining mediation in small-size samples (Shrout

& Bolger, 2002) and offers an empirical method for determining the significance of statistical estimates (Efron & Tibshirani, 1993). The procedure involves repeated random sampling observations with replacement from the data and calculating the statistic of interest in each resample. In our case, we consider a resample of  $N = 500$ . Two plausible models were compared following Baron and Kenny (1986): M1, the fully mediated model, in which organizational trust is fully mediating the relationship among HRM practices and organizational affective commitment; and M2, the partially mediated model, in which organizational trust partially mediates the relationship among HRM practices; that is, there is also a direct relationship from HRM practices and organizational affective commitment.

## RESULTS

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Internal consistency for all scales reached the cut-off point of .70 ( $\alpha = .90$ ) (Nunnally & Bernstein, 1994). In order to lead respondents' attention from the individual level to the organizational level, all scales used in this study were focused on organizational perceptions.

Means, standard deviations, Cronbach's alphas and correlations among the variables at the individual, and at the organizational level are displayed in Table 1. As expected, all study variables were positively and significantly correlated. The results of Harman's single factor test (Podsakoff et al., 2003) on the individual database ( $N = 871$ ) revealed a bad fit to the data,  $\chi^2(13) = 125.621$ ,  $p = .000$ , RMSEA = .101, CFI = .376, NFI = .387, TLI = .365, IFI = .378. Further analysis using CFA revealed a good fit to the data for three factors, that is, HRM practices, trust and commitment,  $\chi^2(13) = 122.569$ ,  $p = .146$ , RMSEA = .065, CFI = .906, NFI = .887, TLI = .865, IFI = .878. Consequently, we may consider that common method variance is not a serious deficiency in this dataset.

#### 4. Organizational Trust

**Table 1**

*Means, standard deviations, aggregation indices, and correlations among the study variables at the individual (N = 2097) and organizational levels (N = 73)*

Variables	M	SD	$\alpha$	ICC <sub>1</sub>	ICC <sub>2</sub>	AD <sub>(0)</sub>	1	2	3	4
1. HOP	3.41	1.51	.84	.13	.68	.88	-	.63***	.78***	-.31ns
2. Trust	3.82	1.42	.90	.44	.81	.46	.78***	-	.58***	-.46ns
3. Affective Commitment	3.36	1.41	.80	.62	.91	.39	.67***	.74***	-	-.21ns
4. Organizational Size	51.37	42.34	-	-	-	-	-.07	-.16***	-.07***	-

Note: Correlations are presented at the individual level (below the diagonal) and at the organizational level (above the diagonal)  
 \*\* $p < .01$ . \*\*\* $p < .001$ , ns = non-significant.

## MEDITATION RESULTS

To test our Hypothesis, in which trust mediates the relationship between practices and commitment at the organizational level, we used a bootstrapping procedure, while also controlling for organizational size. Results of the bootstrapping analysis indicated that trust fully mediated the relationship between HOP and affective commitment. Specifically, the non-significant direct relationship between practices and commitment indicated that there is indeed full mediation. The 95% confidence interval of the mediation model does not include 0, which indicates that the proposed model is statistically significant (Preacher & Hayes, 2004) (see Table 6). To confirm the mediation effects, we performed the Sobel Test (Sobel, 1988), which showed a significant result (*Sobel*  $t = 2.52$ ,  $p = .001$ ). A revision of the regression weights of the proposed M1 reveals that, as expected, HOP are positively and significantly related to organizational trust ( $\beta = 0.82$ ,  $p < 0.001$ ), which in turn positively and significantly influences organizational affective commitment ( $\beta = 0.57$ ,  $p < 0.01$ ). Finally, it is interesting to note that, healthy practices explain 68% of the variance on trust ( $R^2 = 68\%$ ), which in turn explains 32% of the variance on affective commitment ( $R^2 = 32\%$ ).

**Table 2**

Bootstrapping for HOP, organizational trust and organizational affective commitment (OAC). Mediation model aggregated data (N = 73)

Indirect effects	Bootstrap		BC 95% CI		P
	Estimate	SE	CI Lower	CI Upper	
OAC	.57	.12	.28	.86	.002
HOP	.82	.25	.74	.90	.002

Notes. Number of bootstrap resamples = 500; BC= Bootstrapping Confidence; CI= Confidence Interval; SE= Standard Error; P= Probability

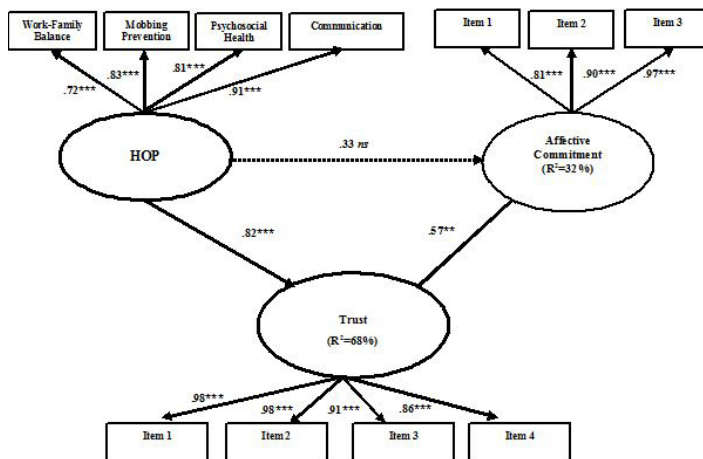


Figure 2. Bootstrapping analysis of HOP, organizational trust and organizational affective commitment in the aggregated database (N = 73). Only the coefficients significant at

\*\*\* $p < .001$  and \*\* $p < .01$  are displayed.

## DISCUSSION

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Our aim was to test the mediating role of organizational trust between HOP and organizational affective commitment at the organizational level of analysis. Specifically, the current study offers evidence of the fully mediated role of organizational trust between HOP and organizational affective commitment.

Through Bootstrapping analysis with AMOS with data aggregated at the organizational level, we have confirmed our Hypothesis, that is, the fully mediating role of trust between the relationship of HOP implemented by HRM (i.e. work-family balance, mobbing prevention, psychosocial health and communication) and organizational affective commitment. This result is in line with previous studies that pointed out that: (1) when organizations develop practices oriented towards improving the well-being of their employee's trust emerges (Acosta et al., 2012; Covey, 2006; Wright & McMahan, 1992), (2) trust plays a mediating role in organizational processes (i.e. Hughes, Avey, & Norman, 2008; Kinicki, Carson, & Bohlander, 1992; Lin, 2010; Rispens, Geer, & Jehn, 2006). Overall, the results of this study show us that trust plays a mediating role at different levels of analysis. This means that for contemporary organizations investing in organizational resources and practices it is important to develop trust and positive outcomes within them.

### THEORETICAL AND PRACTICAL IMPLICATIONS

The present study shows important implications. At the theoretical level, with this study we contribute to the knowledge on trust by emphasizing its mediating role at the organizational level. Particularly, with this study we confirm that trust is the psychological mechanism between HOP implemented by HRM and affective organizational commitment at the organizational level. This means that HOP will have an impact on employees if they trust in the organizations (Hughes, Avey, & Norman, 2008). In this way, trust emerges when employees perceive that organizations are implementing practices that are sustained over time so as to improve their well-being.

Our finding suggests that if organizations invest in HOP, such as work-family balance, mobbing prevention, psychosocial health programmes and communication, they are developing trust in their organization. This means that the organization's members

should perceive what the organization is carrying out for them, and consequently trust in their organization will be enhanced. The positive relationship lends support to the HERO Model (Salanova et al., 2012) because it analyses the relationship proposed by the model between healthy organizational resources and practices (i.e. HOP implemented by HRM), healthy employees (i.e. organizational trust), and healthy organizational outcomes (organizational affective commitment) at the organizational level of analysis. Furthermore, the current study contributes to our understanding of the relationship among three components of the HERO Model at the organizational level of analysis, that is, healthy organizational resources and practices (in terms of HOP), healthy employees (i.e. trust) and healthy organizational outcomes (i.e. commitment). According to the HERO Model, healthy employees are the component that mediates the relationship between healthy organizational resources and practices and healthy organizational outcomes. In this way, trust (as an element of healthy employees) confirms its mediating role between practices (as an element of healthy organizational resources and practices) and commitment (as an element of healthy organizational outcomes) thus supporting the heuristic HERO Model.

From the practical point of view, in order to develop HEROs in terms of increased trust and commitment, which is accomplished through positive interventions acting upon healthy organizational resources and practices, it is important to provide CEOs with relevant information (Llorens, Salanova, Torrente, & Acosta, 2013; Salanova, Llorens, Acosta, & Torrente, 2013). This involves investing in HOP, such as work-family balance, mobbing preventions programmes, psychosocial health programmes and information and communication channels within the organization. For example, positive interventions such as a work-family balance practices (e.g. telework) allow employees/teams to arrange their private lives and jobs so as to better adjust to each other (Cifre & Salanova, 2004; Salanova et al., 2013; Llorens et al., 2013). In this sense, when employees manage to reach a balance between work and non-work life they could attain positive states in terms of trust in their organizations and positive feelings in terms of organizational commitment. In sum, if employees perceived that organizations are implementing practices in order to improve their well-being, they will trust in their organization and feel affectively more committed to their own organization.

### LIMITATIONS AND FURTHER RESEARCH

The present study has several limitations. The first one is that the data were obtained by self-report instruments. However, aggregate perceptions at the organizational level from individual perceptions have been considered. Secondly, this study mainly considers the service sector. Nevertheless, different kinds of organizations in the services sector participated, their distribution being: 3% scientific and technical activities, 5% non-governmental organizations, 8% financial activities, 13% entertainment activities, 15% education, 18% commerce, and 38% tourism. Further study could include a fairer sample in order to conduct multigroup analyses. Finally, another limitation of the study is its cross-sectional nature, which means causal relationships among the variables are limited. Future research should make up for this shortcoming by providing an opportunity to test the longitudinal relationships over time between healthy organizational resources and practices, organizational trust (i.e. vertical trust and horizontal trust) and healthy organizational outcomes, which are the three key elements of the HERO Model.

### FINAL NOTE

This study has tested the relationship between the three elements of the HERO Model, that is, healthy organizational resources and practices (i.e. HOP implemented by HRM), and healthy employee (i.e. organizational trust) and healthy organizational outcomes (i.e. organizational affective commitment) by means of aggregated data at the organizational level. Organizational trust is the underlying mechanism which fully mediates the relationship between HOP and organizational affective commitment. Researchers and practitioners should use these results concerning the role of organizational trust in order to enhance HEROs. This is a tool to be considered by those who wish to know how organizational trust influences HOP and resources and organizational healthy outcomes.

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**La confianza  
es pasión:**

La relación entre  
confianza  
organizacional  
y engagement de  
los equipos





## 5. LA CONFIANZA ES PASIÓN: LA RELACIÓN ENTRE CONFIANZA ORGANIZACIONAL Y ENGAGEMENT DE LOS EQUIPOS

HEDY ACOSTA, PEDRO TORRENTE, SUSANA LLORENS  
Y MARISA SALANOVA

EQUIPO INVESTIGACIÓN WANT, UNIVERSITAT JAUME I

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La correspondencia sobre este artículo debe enviarse a Hedy Acosta, Departamento de Psicología Social, Universitat Jaume I, Av. Sos Baynat, s/n. 12071. Castellón (España). Tel. +34 964 72 9569. Fax +34 964 729262. E-mail: hacosta@uji.es.





## RESUMEN

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El objetivo de esta investigación es examinar la relación entre la confianza organizacional (i.e., confianza vertical y confianza horizontal) en las dimensiones del *engagement de los equipos* (i.e., vigor, dedicación, y absorción de los equipos) basado en el modelo *HEalthy & Resilient Organizations* (HERO; Salanova, Llorens, Cifre, y Martínez, 2012). La muestra está compuesta por 1.358 empleados agrupados en 220 equipos de trabajo de 41 PyMEs. Las variables se agregaron a nivel organizacional (confianza vertical) y a nivel de equipos (confianza horizontal y *engagement de los equipos*) en base al Coeficiente de correlación Intraclase (CCI<sub>1</sub> y CCI<sub>2</sub>). Como esperábamos, los resultados de los modelos de regresión multinivel utilizando Lisrel 8.8 (Jöreskog y Sörbom, 2006) muestran que: (1) la confianza horizontal se relaciona positiva y significativamente con las tres dimensiones del *engagement* de los equipos; (2) la confianza vertical tiene un efecto transnivel positivo y significativo en las tres dimensiones del *engagement* de los equipos controlando por la confianza horizontal, (3) no existen resultados significativos en función de la interacción de confianza vertical y confianza horizontal. Los resultados de este estudio sugieren que desarrollar confianza organizacional (i.e., vertical y horizontal) contribuye a fomentar equipos de trabajos vigorosos, dedicados y absortos. Se discuten los resultados y las implicaciones teóricas desde el Modelo HERO.

*Palabras clave:* confianza organizacional, dimensiones del *engagement* de los equipos, multinivel.

## LA CONFIANZA ES PASIÓN: LA RELACIÓN ENTRE CONFIANZA ORGANIZACIONAL Y ENGAGEMENT DE LOS EQUIPOS

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La confianza organizacional está cobrando gran relevancia debido a la actual crisis económica, social y de valores que viven las organizaciones a nivel mundial. Resulta entonces relevante conocer cuáles son los efectos de la confianza organizacional en el bienestar de sus miembros. Especialmente hoy en día que las organizaciones requieren trabajadores que confíen en la dirección y entre los mismos compañeros, así como también equipos de trabajo vigorosos, dedicados y absortos (Salanova, 2009). La confianza organizacional ha sido definida por Tan y Lim (2009, p. 46) como "la voluntad de los empleados a ser vulnerables a las acciones de su organización, sin que los empleados tengan control sobre estas acciones y conductas". Por tanto, la organización tiene un papel clave a la hora de que la confianza emerja, así como también en el desarrollo del bienestar de sus equipos (i.e., *engagement* de los equipos).

Por otro lado, los miembros de una organización interactúan entre sí y comparten percepciones, expectativas y normas de comportamiento con sus colegas respecto a su equipo de trabajo y a la organización como un todo (Anderson & West, 1998). Es por ello que resulta imperativo estudiar las percepciones compartidas de los colaboradores de la organización (i.e., nivel organizacional y nivel de equipos) con respecto a los fenómenos organizacionales, lo que resulta una innovación del presente estudio. Es aquí donde el Modelo de Organizaciones Saludables y Resilientes propuesto por Salanova, Llorens, Cifre, y Martínez (2012) da respuesta a esta necesidad ya que evalúa a las organizaciones desde una aproximación colectiva, integradora, y positiva. El Modelo HERO constituye un modelo heurístico que integra evidencia teórica y empírica que proviene de las investigaciones sobre estrés laboral, Dirección de Recursos Humanos (DRH), comportamiento organizacional y aquéllos provenientes de la Psicología de la Salud Ocupacional Positiva (Llorens, del Líbano & Salanova, 2009). Otra fortaleza de este modelo es su adecuación para dar explicación a resultados de investigación que requieren un análisis de datos a distintos niveles de análisis, o multinivel.

En este sentido, los empleados dentro de las organizaciones se encuentran agrupados en equipos de trabajo (Van Mierlo, Vermunt, & Rutte, 2009). Las ventajas del

trabajo en equipo son muy diversas, por ejemplo: (1) permiten un mayor cumplimiento de las estrategias organizacionales (Cohen & Bailey, 1997); (2) promueven la gestión e implementación de la calidad en las organizaciones (West, 2002); (3) tienen un efecto positivo en el desempeño financiero de la organización (Macy & Izumi, 1993); (4) tienen impacto en el bienestar de los trabajadores/as (Gilson, Maynard, Jones-Young, Vartiainen, & Hakonen, 2015); y (5) facilitan el logro de las metas organizacionales (Açıkgöz, Günsel, Bayyurt, & Kuzey, 2014; Kozlowski, Gully, Nason, & Simith, 1999). Sin embargo, hasta ahora las evaluaciones en las organizaciones se han basado en un nivel individual de análisis, es decir, a través de cuestionarios de autoinformes en los que los trabajadores/as responden pensando en sus percepciones individuales de fenómenos colectivos para luego ser agregados a niveles superiores de análisis (p.e., equipos y/o organizaciones; Klein, Conn, Smith, & Sorra, 2001). Por tanto, este estudio va un paso más allá al investigar la relación entre la confianza organizacional (i.e., confianza vertical y confianza horizontal) y el *engagement* de los equipos (i.e., vigor, dedicación y absorción) a través de un modelo multinivel siguiendo las recomendaciones de diversos autores en el campo (Bakker & Leiter, 2010; Bijlsma & van de Bunt, 2003; Fulmer & Gelfand, 2012). Estos autores invitan a: (1) estudiar los consecuentes de la confianza organizacional desde una perspectiva multinivel ya que no pueden simplemente deducirse de las investigaciones a nivel individual y, (2) estudiar los efectos que tienen los antecedentes del *engagement* de los equipos (Torrente, Salanova, Llorens, & Schaufeli, 2013), en sus dimensiones (esto es, vigor, dedicación y absorción de los equipos).

En suma, este estudio tiene por objetivo evaluar la relación de la confianza organizacional (i.e., confianza vertical y confianza horizontal) en las dimensiones del *engagement* de los equipos (vigor, dedicación y absorción) a través de modelos transnivel basándose en el modelo de Organizaciones Saludables y Resilientes (HERO; Salanova et al., 2012).

#### MODELO DE ORGANIZACIONES SALUDABLES Y RESILIENTES (HERO)

Las HERO se definen como "aquellas organizaciones que hacen esfuerzos sistemáticos, planificados y proactivos para mejorar la salud de sus empleados y de la organización a través de prácticas organizacionales saludables que se relacionan con la

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mejora de las características del trabajo a tres niveles: (1) nivel de tarea (e.g., rediseño de tareas para mejorar la autonomía, *feedback*), (2) nivel del ambiente social (e.g., liderazgo), y (3) nivel organizacional (e.g., estrategias organizacionales para la mejora de la salud, la conciliación trabajo-familia” (Salanova, 2009). De acuerdo con este modelo, una organización saludable y resiliente combina tres componentes clave que interaccionan entre sí: (1) recursos y prácticas organizacionales saludables (e.g., estrategias organizacionales saludables), (2) empleados saludables (e.g., confianza organizacional, *engagement* de los equipos) y (3) resultados organizacionales saludables (e.g., desempeño) (Salanova et al., 2012).

Todas las dimensiones del modelo HERO se evalúan a nivel colectivo, esto es, a nivel organizacional y/o nivel de equipos. Hasta ahora el modelo HERO aporta evidencia en cuanto a las relaciones propuestas a nivel teórico centrándose en el nivel de equipos. Algunos ejemplos son los siguientes: (1) Acosta, Salanova y, Llorens (2012) evidenciaron que la confianza organizacional (i.e, confianza vertical) media de forma total la relación entre las prácticas organizacionales implementadas por la Gestión de Recursos Humanos (i.e, conciliación vida laboral-vida privada, prevención del *mobbing*, programas de salud psicosocial y comunicación e información organizacional) y el *engagement* de los equipos; (2) Torrente, Salanova, Llorens, y Schaufeli (2012) evidenciaron que el *engagement* de los equipos media de forma total la relación entre los recursos del equipo (i.e, trabajo en equipo, clima de apoyo y coordinación) y el desempeño evaluado por el supervisor directo (3) Cruz-Ortiz, Salanova, y Martínez (2013) evidenciaron que el *engagement* de los equipos media de forma total la relación entre liderazgo transformacional y desempeño del equipo evaluado por el supervisor directo; y (4) Meneghel, Salanova, y Martínez (2014) evidenciaron que la resiliencia de los equipos media la relación entre las emociones positivas del equipo y el desempeño evaluado por el supervisor directo.

Estas evidencias a nivel de equipos resultan relevantes pero dado que el modelo HERO es un modelo heurístico, se requiere mayor análisis de las relaciones específicas de sus componentes y, en este caso, nos centraremos en el componente ‘Empleados Saludables’. En este sentido, entendemos empleados saludables como aquellos empleados con recursos psicológicos positivos (e.g., confianza organizacional, *engagement* de los equipos) que se relacionan positivamente con el bienestar laboral (e.g., *engagement* en el trabajo) (e.g., Lorente, Salanova, Martínez, & Schaufeli, 2008; Luthans, Youssef, & Avolio, 2007). En concreto este estudio evaluará la relación de dos

elementos del componente empleados saludables, esto es, la confianza organizacional y su relación con el *engagement* de los equipos.



Figura 1. Modelo HERO

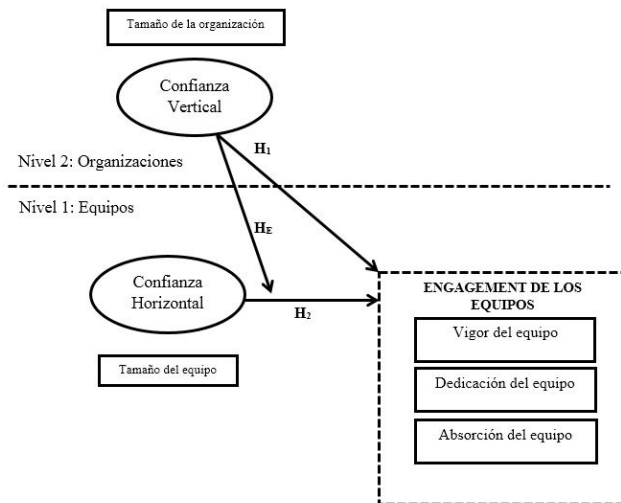


Figura 2. Modelo de Investigación

## CONFIANZA ORGANIZACIONAL

Entendemos confianza organizacional como 'la voluntad de los empleados a ser vulnerables a las acciones de su organización, sin que los empleados tengan control sobre estas acciones y conductas' (Tan & Lim, 2009, p. 46). Esta definición pone de manifiesto la voluntad de los empleados/grupos de trabajo de confiar en la organización a la cual pertenecen. Sin embargo, para que emane la voluntad de confiar, las organizaciones deben realizar acciones consistentes en el tiempo (i.e., prácticas y recursos organizacionales saludables) orientadas a mejorar el bienestar de sus colaboradores y de la organización como un todo. Acosta, Salanova, y Llorens (2012) proponen que la confianza emergerá si los trabajadores/equipos de trabajo perciben que estas acciones (i.e., conciliación vida privada – vida laboral) les ayudan a su bienestar.

La actual crisis mundial está poniendo de manifiesto que no sólo es una crisis económica sino que es una crisis de valores dónde la confianza organizacional se manifiesta como un ingrediente fundamental para el desarrollo y la supervivencia organizacional (Costa, 2000; 2003); para el bienestar de los trabajadores/equipos de trabajo (Acosta et al., 2012); y para el éxito organizacional (Cardona & Calderón, 2010; Dirk & Ferrin, 2001; Kiffin-Petersen & Cordey, 2003; Mayer & Gavin, 2005). En este sentido, la confianza evidencia ser un mecanismo subyacente central en los procesos organizacionales (Tan & Lim, 2009). Por ejemplo, a nivel individual, Lin (2010) evidencia que la confianza se relaciona positiva y significativamente con las tres dimensiones del *engagement* en el trabajo. A nivel de equipos, la investigación realizada por Costa (2000) señala que la confianza tiene un rol mediador entre el desempeño del equipo y la efectividad organizacional. Asimismo, la confianza organizacional representa una ventaja competitiva para las organizaciones (Andersen, 2005; Barney & Hansen, 1994). Podemos entender entonces que si la confianza representa una ventaja competitiva esto significa que la organización puede ser capaz de afrontar dificultades y obstáculos de una mejor forma debido a que al existir confianza los trabajadores/equipos de trabajos darán la milla extra para cumplir los objetivos organizacionales.

De acuerdo al Modelo HERO la confianza organizacional está compuesta por dos dimensiones, estas son: confianza vertical y confianza horizontal. La confianza vertical se refiere a la confianza entre los trabajadores/equipos de trabajo y la organización como un todo, es decir, hacia la gestión de la gerencia/supervisores de la organización. Esta confianza se encuentra a un nivel de análisis organizacional debido a que el referente es la organización, por tanto, las percepciones de los

trabajadores/equipo de trabajo se refieren al funcionamiento organizacional. La confianza horizontal se refiere a la confianza entre los compañeros/as de equipo. Esta confianza se encuentra a un nivel de análisis de equipo debido a que el referente es el equipo, por tanto las percepciones de los trabajadores/equipos se refieren al funcionamiento del equipo al cual pertenecen. Siguiendo las recomendaciones de Bliese (2000) ambas dimensiones de la confianza organizacional representan diferentes niveles de análisis y diferentes referentes que permiten distinguir con mayor claridad sus antecedentes y consecuentes tal como proponen Fulmer y Gelfand (2012).

### **Engagement de los equipos**

Entendemos *engagement* de los equipos como un estado mental positivo relacionado con el trabajo que se caracteriza por vigor, dedicación y absorción en equipos de trabajo, que emerge de la interacción y las experiencias compartidas de los miembros del equipo de trabajo (Salanova et al., 2003; Torrente et al., 2012). Un equipo vigoroso se caracteriza por altos niveles de energía y resistencia mental mientras se trabaja por lo que son persistentes ante las dificultades y capaces de motivar con su conducta al resto de miembros para conseguir los objetivos del equipo. Un equipo dedicado muestra una alta implicación laboral, junto con la manifestación y expresión hacia sus compañeros y compañeras de un sentimiento de significación, entusiasmo, inspiración, orgullo y reto por el trabajo. Finalmente, un equipo que experimenta absorción está totalmente concentrado/a en su trabajo, experimenta fuertes dosis de disfrute y concentración cuando están totalmente focalizado/a en la tarea que el equipo esté llevando a cabo.

Las investigaciones previas utilizando el modelo de demandas y recursos laborales (Bakker, 2011; Bakker & Demerouti, 2007) han aportado información contundente con respecto a rol del *engagement* en el trabajo (a nivel individual) en los procesos organizacionales, concretamente como un indicador relevante del bienestar de los empleados y del desempeño (e.g., Llorens, Bakker, Schaufeli, & Salanova, 2006; Llorens, Schaufeli, Bakker, & Salanova, 2007; Halbesleben, 2010; Salanova & Llorens, 2009). Actualmente, el estudio del *engagement* en el trabajo se ha dirigido a un fenómeno organizacional de nivel colectivo, concretamente a nivel de equipos. Torrente y cols. (2012; 2013) y; Costa, Passos, y Bakker (2014a,b) proponen que el mecanismo psicológico que explica que el *engagement* en el trabajo emerja a nivel de equipos



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podría ser el contagio emocional (Hatfield, Cacioppo, & Rapson, 1994) y/o los procesos de equipo a través de la interacción (Marks, Mathieu, & Zaccaro, 2001).

Los pocos estudios que se han centrado en el *engagement* de los equipos señalan que incrementa: (1) los resultados de las unidades de negocios (Harter, Schmidt, & Hayes, 2002), (2) el desempeño en la tarea en estudiantes que trabajan en grupos (Salanova et al., 2003); (3) el clima de servicio y el desempeño de los empleados de servicios (Salanova, Agut, & Peiró, 2005); (4) el afecto positivo y la eficacia colectiva a través de espirales positivas (Salanova, Llorens, & Schaufeli, 2011); y (5) *engagement* en el trabajo a nivel individual (Bakker, Van Emmerik, & Euwena, 2006; Lin, 2010).

### LA CONFIANZA ORGANIZACIONAL EN RELACIÓN CON EL *ENGAGEMENT* DE LOS EQUIPOS

Hasta ahora, la evidencia científica en cuanto a la relación entre confianza organizacional y *engagement* en el trabajo (a nivel individual y a nivel de equipos) nos informa de una relación positiva y significativa (Lin, 2010; Acosta, Salanova, y Llorens, 2012). Sin embargo, este estudio pretende dar un paso innovador en el estudio de la relación entre ambas variables considerando las dimensiones de la confianza organizacional (confianza vertical y confianza horizontal) de acuerdo a sus referentes y los niveles de análisis a través de una aproximación multinivel que considere a su vez las relaciones transnivel entre ambas variables. Concretamente, las hipótesis de este estudio son:

H<sub>1</sub>: Se espera que la confianza horizontal (a nivel de equipos) se relacione positiva y significativamente con las dimensiones del *engagement* de los equipos (i.e., vigor, dedicación y absorción de los equipos).

H<sub>2</sub>: Se espera que la confianza vertical (a nivel organizacional) se relacione positiva y significativamente con las dimensiones del *engagement de los equipos* (i.e., vigor, dedicación y absorción de los equipos), controlando esta relación por la confianza horizontal.

De forma exploratoria en este estudio se ha considerado evaluar la interacción de la confianza vertical y la confianza horizontal en las dimensiones del *engagement* de los equipos debido a que la confianza organizacional (i.e., confianza vertical y confianza

horizontal) tiene un rol como mecanismo subyacente en los procesos organizacionales y tienen un impacto positivo en el bienestar de los trabajadores (Tan & Lim, 2009; Lin, 2010).

He: Se espera que la interacción entre confianza vertical y confianza horizontal se relacione positivamente con las dimensiones del engagement de los equipos (i.e., vigor, dedicación y absorción de los equipos).

## EL PRESENTE ESTUDIO

En el presente estudio, vamos un paso más allá al evaluar la relación transnivel de la confianza organizacional en términos de confianza vertical (i.e., confianza entre los empleados/equipos y la organización como un todo; nivel organizacional) y la confianza horizontal (i.e., confianza entre los compañeros de trabajo; nivel de equipos) en las dimensiones del *engagement* de los equipos (i.e., vigor, dedicación y absorción de los equipos) utilizando una aproximación multinivel.

## MÉTODO

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### PARTICIPANTES Y PROCEDIMIENTO

La muestra está compuesta por 1.358 empleados agrupados en 220 equipos de trabajo pertenecientes a 41 Pequeñas y Medianas Empresas (PyMEs) de España. El 64% de las PyMEs evaluadas pertenecían al sector servicios y el 36% al sector productivo. El 61% de los empleados fueron mujeres y el 84% tenía contrato indefinido. En cuanto a la antigüedad laboral, el promedio en el puesto actual de trabajo fue de 6 años ( $dt = 4.47$ ), 5 años trabajando en la misma empresa ( $dt = 4.21$ ) y 14 años trabajando en general ( $dt = 8.12$ ). Por último, el promedio del tamaño de los equipos fue de 6 miembros ( $dt = 3.5$ ).

Tras la aceptación de participación por parte de la dirección de las empresas, se pidió a los trabajadores su colaboración en la investigación mediante reuniones, tablón de anuncios y/o intranet. A petición de las empresas los investigadores realizaron reuniones informativas a trabajadores y supervisores sobre el proyecto. Los

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participantes cumplimentaron de forma voluntaria un cuestionario de autoinforme referente al equipo de trabajo al que pertenecían. Los cuestionarios fueron distribuidos por los propios investigadores a los miembros de los equipos en la empresa. El proceso de administración del cuestionario tuvo una duración aproximada de 30 minutos. Para evitar sesgos, sólo los trabajadores con más de 6 meses en la empresa se consideraron en los análisis. De acuerdo con McCarthy (1992) seis meses de tiempo son necesarios para que los nuevos trabajadores logren adaptarse a su trabajo y a la organización.

En cuanto a aspectos éticos considerados en este estudio, el equipo de investigación WANT Prevenció Psicosocial y Organizaciones Saludables garantizó el estricto cumplimiento de la normativa aplicable, especialmente en lo que concierne a la más absoluta confidencialidad en el manejo de datos, garantizando en todo momento que las pautas que regían la presente acción se basaban en el rigor de la investigación científica.

### MEDIDAS

*Confianza Organizacional.* Se evaluó mediante dos dimensiones, esto es, la confianza vertical y la confianza horizontal incluidas en el cuestionario HERO (Salanova et al., 2012). La confianza vertical se evaluó mediante cuatro ítems que corresponden a una adaptación de la escala de confianza vertical de Huff y Kelly (2003). Por ejemplo, *“En esta empresa/organización los subordinados tenemos una enorme confianza en los supervisores y en la dirección”*. La consistencia interna de la escala alcanzó el criterio de .70 (alfa = .84) (Nunnally & Bernstein, 1994). Los empleados respondieron utilizando una escala Likert de 7 puntos de anclaje con un rango de 0 (*‘Totalmente en desacuerdo’*) a 6 (*‘Totalmente de acuerdo’*). Todos los ítems hacían referencia a las percepciones de la organización con el objetivo de ser agregados a nivel organización. La confianza horizontal se midió mediante cuatro ítems que corresponden a una adaptación del cuestionario de McAllister (1995). Un ejemplo de ítem es *“En esta organización podemos compartir nuestras ideas, emociones y esperanzas”* (alfa = .79). Los empleados respondieron utilizando una escala de Likert de siete puntos de anclaje con un rango que oscila de 0 (*Totalmente en desacuerdo*) a 6 (*Totalmente de acuerdo*). Todos los ítems hacían referencia a las percepciones del equipo con el objetivo de ser agregadas a nivel de equipo.

*Engagement de los equipos.* Se evaluó mediante las tres dimensiones validadas en el cuestionario HERO (Salanova et al., 2012; Torrente et al., 2013). Específicamente, evaluamos vigor del equipo (tres ítems; e.g. 'En nuestro trabajo nos sentimos llenos de energía'; alfa = .88); dedicación del equipo (tres ítems; e.g. 'Estamos entusiasmados con nuestro trabajo'; alfa = .87); y absorción del equipo (tres ítems; e.g., 'Cuando trabajamos olvidamos todo lo que pasa alrededor'; alfa = .74). Los empleados respondieron utilizando una escala Likert de 7 puntos de anclaje que oscila de 0 (*Nunca*) a 6 (*Siempre*). Todos los ítems se basaron en las percepciones de equipo mediante la agregación de los datos a nivel de equipo.

*Variables control.* Al ser un estudio multinivel de modelos transnivel y basado en evidencias previas (Acosta et al., 2012; Torrente et al., 2012) se incluyeron como variables control el tamaño del equipo y el tamaño de la organización. Además, investigaciones en el ámbito del contagio de emociones y de percepciones compartidas, indican que estos procesos pueden verse contrarrestados a mayor tamaño del equipo (Bowers, Pharmer, & Salas, 2000; Torrente, Salanova, & Llorens, 2013).

## ANÁLISIS DE DATOS

En primer lugar, se calcularon las consistencias internas ( $\alpha$  de Cronbach) mediante la base de datos individual utilizando el programa IBM Statistics 22.0. En segundo lugar, y dado que las variables del estudio (i.e., confianza organizacional y *engagement* de los equipos) se midieron a nivel organizacional y a nivel de equipo, se calcularon índices de acuerdo para cada escala (Chen, Mathieu, & Bliese, 2004). Para ello, utilizamos la aproximación basada en la consistencia, calculando los Coeficientes de Correlación Intraclase (CCI<sub>1</sub> y CCI<sub>2</sub>) (Bliese, 2000; Glick, 1985). Existe acuerdo entre equipos cuando los índices CCI<sub>1</sub> y CCI<sub>2</sub> son superiores a .12 y .60, respectivamente (Bliese, 2000; Glick, 1985).

A través de modelos multinivel o modelos jerárquicos lineales (Gavin & Hofmann, 2002) pusimos a prueba nuestras hipótesis. En primer lugar, se comprobó que el Coeficiente de Correlación Intraclase (CCI) en el contexto de análisis multinivel para cada variable dependiente o criterio considerada en este estudio, esto es, vigor, dedicación y absorción de los equipos. El cálculo del CCI se lleva a cabo en un Modelo Nulo o Modelo ANOVA, que representa el primer paso de los cálculos de modelos de

regresión multinivel. Este modelo se interpreta como una medida de no-independencia (Bliese, 2000), el cual permite descomponer la varianza total de la variable dependiente en varianza intra-equipos y varianza entre-equipos. Se trata de un modelo inicial o base en el que se asume que los interceptos varían aleatoriamente a través de los equipos (González-Romá, 2008). Esto quiere decir, que el porcentaje de CCI indica la proporción de varianza de la variable dependiente o criterio que se debe a diferencias entre equipos sugiriendo la adecuación en el uso de modelos multinivel. El CCI debe representar una variabilidad adecuada en la variable dependiente que permite integrar en los modelos hipotetizados variables de un nivel superior de análisis (e.g., a nivel organizacional). Por tanto, el Modelo ANOVA o Modelo Nulo fue llevado a cabo para evaluar la no-independencia de las variables dependientes (vigor, dedicación y absorción de los equipos de trabajo). Este modelo es usado en modelos multinivel como un procedimiento de comparación de modelos que permite observar el porcentaje de varianza explicada por un nivel superior de análisis (Hox, 2010).

Además del Modelo ANOVA o Modelo Nulo, y para cada variable dependiente o criterio incluida en este estudio (i.e, vigor, dedicación y absorción de los equipos de trabajo), tres modelos fueron probados siguiendo el procedimiento paso a paso y utilizando el paquete estadístico LISREL 8.8 (Jöreskog & Sörbom, 2006). Primero, se probó, el **modelo de coeficientes de regresión aleatorios** (Modelo 1). En este modelo, los coeficientes aleatorios quedan como parámetros libres que pueden variar entre equipos y organizaciones. La confianza horizontal y el tamaño del equipo fueron los predictores incluidos en esta ecuación multinivel. Este modelo aporta información con respecto a los predictores de nivel 1 (i.e., nivel equipos) tomando en cuenta la estructura agregada de los datos y controlando por las covarianzas del nivel de equipos. El segundo modelo evaluado es el **modelo de interceptos como resultados** (Modelo 2). Este modelo incluye variables de nivel 2 (i.e., confianza vertical y tamaño de la organización) y las variables de nivel 1 (i.e., confianza horizontal y tamaño del equipo) como predictores del intercepto de la ecuación. En este estudio, este modelo hace posible poner a prueba el efecto y covarianzas de variables de nivel organizacional (nivel 2) sobre variable de nivel de equipos (nivel 1) y, al mismo tiempo controla este efecto y covarianzas por variables de nivel de equipos y organizacionales. Finalmente, y como análisis exploratorios se llevó a cabo, para cada variable dependiente, el **modelo de interceptos y pendientes como resultados** (Modelo 3), este modelo se incluye, además de las variables consideradas en el Modelo 1 y Modelo 2, la interacción de las variables predictoras de nivel 1 (nivel de equipos, confianza horizontal) y nivel 2 (nivel organizacional, confianza vertical).

Otros aspectos a considerar en los modelos multinivel es el estimador  $\chi^2$  o chi cuadrado. Este estimador debe representar una mejora significativa al incorporar variables en cada modelo. Por tanto, al probar cada modelo hipotetizado el estimador  $\chi^2$  debe disminuir significativamente (González-Romà, 2008). En cuanto al centrado de las variables que forman parte del estudio, en el Modelo 1, las variables a nivel de equipo (i.e., confianza horizontal y tamaño del equipo) fueron centradas a la media del grupo. Este procedimiento se realiza para ajustar el estimador de la varianza entre los equipos, haciendo más adecuada y fácil su interpretación (Hofmann, Griffin, & Gavin, 2000). Para el Modelo 2, las variables a nivel organizacional (i.e., confianza vertical y tamaño de la organización) fueron centradas a la gran media dado que esto permite una estimación con menos sesgos en regresiones multivariadas (Bliese, 2002). El centrado a la gran media también permite disminuir los efectos de la multicolinealidad, reduciendo la correlación entre los estimadores del intercepto y las pendientes entre los niveles de análisis (Hofmann & Gavin, 1998). Para el Modelo 3, considerado como un modelo exploratorio, se creó una variable que representa la interacción entre confianza vertical (a nivel organizacional) y la confianza horizontal (a nivel de equipos) utilizando las variables centradas al grupo (confianza horizontal) y a la gran media (confianza vertical).

## RESULTADOS

### ANÁLISIS DESCRIPTIVOS Y AGREGACIÓN

En primer lugar, la Tabla 1 muestra la media, la desviación típica, la consistencia interna y las intercorrelaciones de todas las variables incluidas en el estudio. Dado que las variables del estudio emergían de la percepción compartida de los miembros del equipo, aplicamos una aproximación basada en la consistencia (Chen et al., 2004). En los datos agregados a nivel de equipo ( $N = 220$ ), los índices  $CCI_1$  y  $CCI_2$  oscilaron entre .08 a .21 y entre .60 a .84, respectivamente para confianza horizontal y las tres dimensiones de *engagement* de los equipos (i.e, vigor, dedicación y absorción). En los datos agregados a nivel organizacional ( $N= 41$ ), los índices  $CCI_1$  y  $CCI_2$  oscilaron entre .11 y .68 respectivamente para la confianza vertical.

Por tanto, los resultados de la agregación dan apoyo para concluir que el acuerdo inter-grupo es suficiente para agregar las percepciones de los miembros de las

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unidades a un nivel de equipos y a nivel organizacional (Chen et al., 2004). Finalmente, las intercorrelaciones entre confianza vertical (agregada a nivel organizacional; N= 41); confianza horizontal y las dimensiones del *engagement* de los equipos agregadas a nivel de equipo (N = 220) mostraron que, tal y como se esperaba, las variables correlacionan de forma positiva y significativa entre ellas (100%) oscilando entre .30 y .70 ( $p < .001$ ) (ver Tabla 1).

**Tabla 1.**

*Medias, desviaciones típicas, alfas de cronbach, CCI<sub>1</sub> y CC<sub>2</sub>, intercorrelaciones para las variables a nivel equipo (N=220) y las variables a nivel organizacional (N=41).*

Variables	Media	dt	$\alpha$	CCI <sub>1</sub>	CCI <sub>2</sub>	1	2	3	4	5	6	7
1. Confianza vertical	3.92	.69	.84	.11	.68	-	.37***	.30***	.37***	.36***	-.16*	-.47**
2. Confianza horizontal	4.16	.73	.79	.08	.60		-	.36***	.44***	.38***	-.17***	-.16*
3. Vigor del equipo	4.38	.52	.88	.17	.84			-	.68***	.53***	-.15*	-.10
4. Dedicación del equipo	4.83	.63	.87	.21	.72				-	.70***	-.17*	-.21**
5. Absorción del equipo	4.14	.57	.74	.10	.62					-	-.18**	-.22***
6. Tamaño del equipo	5.87	3.20	-	-	-						-	.28***
7. Tamaño de la organización	47.53	39.67	-	-	-							-

## MODELOS TRANSNIVEL

### VIGOR DEL EQUIPO

En la Tabla 2 se muestran los tres modelos transnivel que evidencian la relación confianza organizacional vertical en la dimensión de vigor del equipo. En primer lugar, el Modelo Nulo o Modelo ANOVA, nos informa que la varianza explicada del vigor del equipo por un nivel superior de análisis es del 10% y el  $F(2, 335.40) = 3.33$  ( $p = .03$ ). Esta información nos permite seguir adelante con los modelos hipotetizados. En segundo lugar, el modelo de coeficientes de regresión aleatorios (Modelo 1), nos informa que la confianza horizontal se relaciona positiva y significativamente con el vigor del equipo ( $\beta = .25$ ,  $p = .000$ ). La variable control tamaño de equipo no fue significativa ( $\beta = -.01$ ,  $p = ns$ ). La diferencia entre el modelo nulo y el modelo de coeficientes de regresión aleatorios (Modelo 1), reporta una disminución significativa del estimador  $F(2, 335.40) = 33.82$ ,  $p = .000$ . En tercer lugar, el modelo de interceptos como resultados (Modelo 2), nos informa que la confianza vertical tiene un efecto transnivel positivo en el

vigor del equipo ( $\beta = .16$ ,  $p = .000$ ), controlando esta relación por la confianza horizontal ( $\beta = .21$ ,  $p = .05$ ). Las variables control, tamaño del equipo y tamaño de la organización, no fueron significativas ( $\beta = -.01$ ,  $p = ns$ ;  $\beta = .00$ ,  $p = ns$ ; respectivamente). La diferencia entre el modelo de coeficientes de regresión aleatorios (Modelo 1) y el modelo de interceptos como resultados (Modelo 2), reporta una disminución significativa del estimador  $\chi^2$ ; esto es,  $\chi^2(2) = 5.83$ ,  $p = .05$ . En cuarto lugar, en el modelo exploratorio, los resultados del modelo de interceptos y pendientes como resultado (Modelo 3), indican que la interacción entre la confianza vertical y confianza horizontal no tiene una relación significativa ( $\beta = .01$ ,  $p = ns$ ) con el vigor del equipo. Además, la diferencia entre el modelo de interceptos como resultados (Modelo 2) y el modelo de interceptos y pendientes como resultados (Modelo 3), no reporta una disminución significativa del estimador  $\chi^2$ ; esto es,  $\chi^2(3) = 0.55$ ,  $p = ns$ . Esto nos indica que el Modelo 2 es el que mejor se ajusta a los datos, siendo la varianza explicada de la confianza vertical en la dimensión de vigor del equipo del 50% ( $R^2 = 50\%$ ). Así, la confianza en la dirección se asocia positivamente a un estado de vigor y persistencia en los equipos, controlando por el efecto positivo de la confianza entre los compañeros de trabajo.

**Tabla 2.**

Modelo multinivel vigor del equipo

Parámetros	Modelo Nulo	Modelo 1	Modelo 2	Modelo 3
Intercepto	4.40***(0.04)	4.40***(0.03)	4.39***(0.03)	4.38***(0.04)
Confianza Horizontal (CH)		0.25***(0.00)	0.21***(0.05)	0.20***(0.05)
Tamaño del equipo		-0.01(0.04)	-0.01(0.00)	-0.00(0.00)
Confianza Vertical (CV)			0.16***(0.06)	0.16***(0.06)
Tamaño de la Organización			0.00(0.00)	0.00(0.00)
Interacción CV*CH				0.01(0.07)
$\sigma^2$ nivel equipo	0.25***(0.01)	0.20***(0.00)	0.21***(0.02)	0.21***(0.02)
$\sigma^2$ nivel organizacional	0.02*(0.02)	0.03*(0.05)	0.01(0.01)	0.01(0.01)
$\chi^2$	335.40	301.58	295.75	295.17
$\Delta \chi^2$		33.82***	5.83**	0.55
<i>gl</i>	3	5	7	10



## DEDICACIÓN DEL EQUIPO

En la Tabla 3 se muestran los tres modelos transnivel que evidencian la relación transnivel de la confianza vertical en la dimensión de dedicación del equipo. En primer lugar, el *Modelo Nulo o Modelo ANOVA*, nos informa que la varianza explicada de la dedicación del equipo por un nivel superior de análisis es 13% y el  $F(2, 412.97)$  es 412.97 (3). Esta información nos permite seguir adelante con los modelos hipotetizados. En segundo lugar, el *modelo de coeficientes de regresión aleatorios* (Modelo 1), nos informa que la confianza horizontal se relaciona positiva y significativamente con la dedicación del equipo ( $\beta = .39, p = .000$ ). La variable control tamaño de equipo no fue significativa ( $\beta = -.01, p = ns$ ). La diferencia entre el *modelo nulo* y el *modelo de coeficientes de regresión aleatorios* (Modelo 1), reporta una disminución significativa del estimador  $F(2, 53.55)$ ; esto es,  $F(2) = 53.55, p = .000$ . En tercer lugar, el *modelo de interceptos como resultados* (Modelo 2), nos informa que la confianza vertical tiene un efecto transnivel positivo en la dedicación del equipo ( $\beta = .17, p = .01$ ), controlando esta relación por la confianza horizontal ( $\beta = .34, p = .000$ ). Las variables control, tamaño del equipo y tamaño de la organización no fueron significativas ( $\beta = -.00, p = ns$ ;  $\beta = -.00, p = ns$ ; respectivamente). La diferencia entre el *modelo de coeficientes de regresión aleatorios* (Modelo 1) y el *modelo de interceptos como resultados* (Modelo 2), reporta una disminución significativa del estimador  $F(2, 14.36)$ ; esto es,  $F(2) = 14.36, p = .05$ . En cuarto lugar, en el modelo exploratorio, los resultados del *modelo de interceptos y pendientes como resultado* (Modelo 3), indican que la interacción entre la confianza vertical y confianza horizontal no tiene una relación significativa ( $\beta = .00, p = ns$ ) con la dedicación del equipo. Además, la diferencia entre el *modelo de interceptos como resultados* (Modelo 2) y el *modelo de interceptos y pendientes como resultados* (Modelo 3), no reporta una disminución significativa del estimador  $F(3, 0.11)$ ; esto es,  $F(3) = 0.11, p = ns$ . Esto nos indica que el Modelo 2 se ajusta a los datos, siendo la varianza explicada de la confianza vertical en la dimensión de dedicación del equipo de 100% ( $R^2 = 62\%$ ). Así, la confianza en la dirección se asocia positivamente a un estado de dedicación y apego emocional en los equipos, controlando por el efecto positivo de la confianza entre los compañeros de trabajo.

Tabla 3.

Modelo multinivel dedicación del equipo

Parámetros	Modelo Nulo	Modelo 1	Modelo 2	Modelo 3
Intercepto	4.87***(0.05)	4.89***(0.05)	4.86***(0.04)	4.86***(0.05)
Confianza Horizontal (CH)		0.39***(0.00)	0.34***(0.05)	0.34***(0.05)
Tamaño del equipo		-0.01(0.00)	-0.00(0.00)	-0.01(0.01)
Confianza Vertical (CV)			0.17***(0.07)	0.16***(0.07)
Tamaño de la Organización			-0.00(0.00)	0.00(0.07)
Interacción CV*CH				0.00(0.06)
$\sigma^2$ nivel equipo	0.34***(0.01)	0.26***(0.02)	0.27***(0.03)	0.26***(0.02)
$\sigma^2$ nivel organizacional	0.04*(0.02)	0.05*(0.05)	0.03(0.01)	0.03(0.02)
$\chi^2$	412.97	359.09	344.73	344.62
$\Delta \chi^2$		53.55***	14.36*	0.11
<i>gl</i>	3	5	7	10

### ABSORCIÓN DEL EQUIPO

En la Tabla 4 se muestran los tres modelos transnivel que evidencian la relación transnivel de la confianza vertical en la dimensión de absorción del equipo. En primer lugar, el *Modelo Nulo o Modelo Base ANOVA*, nos informa que la varianza explica de la absorción del equipo por un nivel superior de análisis es 27% y el  $\chi^2$  es 358.18 (3). Esta información nos permite seguir adelante con los modelos hipotetizados. En segundo lugar, el *modelo de coeficientes de regresión aleatorios* (Modelo 1), nos informa que la confianza horizontal se relaciona positiva y significativamente con la absorción del equipo ( $\beta = .30$ ,  $p = .000$ ). La variable control tamaño de equipo fue significativa ( $\beta = -.00$ ,  $p = ns$ ). La diferencia entre el *modelo nulo* y el *modelo de coeficientes de regresión aleatorios* (Modelo 1), reporta una disminución significativa del estimador  $\chi^2$ ; esto es,  $\chi^2(2) = 41.49$ ,  $p = .000$ . En tercer lugar, el *modelo de interceptos como resultados* (Modelo 2), nos informa que la confianza vertical tiene un efecto transnivel positivo en la absorción del equipo ( $\beta = .16$ ,  $p = .01$ ), controlando esta relación por la confianza horizontal ( $\beta = .27$ ,  $p = .000$ ). Las variables control, tamaño del equipo y tamaño de la organización no fueron significativas ( $\beta = -.01$ ,  $p = ns$ ;  $\beta = -.00$ ,  $p = ns$ ; respectivamente). La diferencia entre el *modelo de coeficientes de regresión aleatorios* (Modelo 1) y el *modelo de interceptos como resultados* (Modelo 2), reporta una disminución significativa del estimador  $\chi^2$ ; esto es,  $\chi^2(2) = 15.47$ ,  $p = .000$ . En cuarto lugar, en el modelo exploratorio, los resultados del *modelo de interceptos y pendientes como resultado*

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(Modelo 3), indican que la interacción entre la confianza vertical y confianza horizontal no tiene una relación significativa ( $\beta = -.05, p = ns$ ) con la dedicación del equipo. Además, la diferencia entre el *modelo de interceptos como resultados* (Modelo 2) y el *modelo de interceptos y pendientes como resultados* (Modelo 3), no reporta una disminución significativa del estimador  $\chi^2$ ; esto es,  $\chi^2(3) = 0.58, p = ns$ . Esto nos indica que el Modelo 2 se ajusta mejor a los datos, siendo la varianza explicada de la confianza vertical en la dimensión de absorción del equipo de 71% ( $R^2 = 71\%$ ). Así, la confianza en la dirección (i.e., confianza vertical) se asocia positivamente a un estado de absorción y concentración en los equipos, controlando por el efecto positivo de la confianza entre los compañeros de trabajo.

**Tabla 4.**

Modelo multinivel absorción del equipo

Parámetros	Modelo Nulo	Modelo 1	Modelo 2	Modelo 3
<b>Intercepto</b>	4.17*** (0.05)	4.17*** (0.05)	4.15*** (0.04)	4.16*** (0.05)
<b>Confianza Horizontal (CH)</b>		0.30*** (0.00)	0.27*** (0.04)	0.27*** (0.05)
<b>Tamaño del equipo</b>		-0.00 (0.00)	-0.00 (0.00)	-0.00(0.01)
<b>Confianza Vertical (CV)</b>			0.16** (0.07)	0.17** (0.07)
<b>Tamaño de la Organización</b>			-0.00(0.00)	0.00(0.07)
<b>Interacción CV*CH</b>				-0.05 (0.07)
<b><math>\sigma^2</math> nivel equipo</b>	0.26*** (0.02)	0.25*** (0.02)	0.21*** (0.02)	0.21*** (0.02)
<b><math>\sigma^2</math> nivel organizacional</b>	0.07** (0.03)	0.06* (0.02)	0.05 (0.02)	0.05** (0.02)
<b><math>\chi^2</math></b>	358.18	316.69	301.22	300.64
<b><math>\Delta \chi^2</math></b>		41.49***	15.47***	0.58
<b>gl</b>	3	5	7	10

## DISCUSIÓN

El objetivo de nuestro estudio era evaluar la relación de la confianza organizacional (i.e., confianza vertical y confianza horizontal) en cada una de las dimensiones del *engagement* de los equipos (vigor, dedicación y absorción) a través de modelos multinivel basándose en el modelo de Organizaciones Saludables y Resilientes (HERO; Salanova et al., 2012). El presente estudio contribuye a nuestra comprensión

sobre la relación entre dos componentes del elemento *Empleados Saludables* del Modelo HERO, esto es, la confianza organizacional y el *engagement* de los equipos utilizando datos agregados a nivel organizacional (N=41) y a nivel de equipos (N=220).

Los resultados de los Modelos multinivel evidenciaron que la confianza vertical y la confianza horizontal se relacionan positiva y significativamente con las tres dimensiones del *engagement* de los equipos (i.e., vigor, dedicación y absorción de los equipos). De este modo, a mayor confianza vertical y horizontal de los equipos de trabajo mayores son sus niveles de vigor, dedicación y absorción como equipos. Estos resultados responden a la invitación realizada por diferentes autores (Bijlsma & van de Bunt, 2003; Fulmer & Gelfand, 2012) quiénes acentúan la necesidad de estudiar los fenómenos organizacionales desde una perspectiva multinivel. Se ha considerado la estructura natural de las variables medidas, en este estudio, los dos componentes de la confianza organizacional (i.e., confianza vertical y confianza horizontal) y los tres componentes del *engagement* de los equipos (i.e., vigor, dedicación y absorción). Por tanto, este estudio también responde al llamado realizado por Bakker y Leiter (2010), que señalan la necesidad de estudiar separadamente las dimensiones del *engagement* de los equipos.

### IMPLICACIONES TEÓRICAS Y PRÁCTICAS

A nivel teórico, el presente estudio amplía el conocimiento sobre la relación transnivel de la confianza organizacional en el *engagement* de los equipos utilizando datos agregados a nivel de equipo y a nivel organizacional. Hasta ahora teníamos evidencia sobre el rol mediador de la confianza en el *engagement* en el trabajo a nivel individual (Lin, 2010) y a nivel de equipos (Acosta et al., 2012), sin embargo, en este estudio se han probado modelos multinivel que evalúan el efecto de variables de nivel organizacional (i.e, confianza vertical) en variables a nivel de equipos (i.e, confianza vertical, *engagement* de los equipos). Las hipótesis planteadas han sido confirmadas. En concreto, la confianza vertical tiene un efecto transnivel positivo en las tres dimensiones del *engagement* de los equipos controlando esta relación por la confianza horizontal. En concreto, estos resultados nos informan que las dos dimensiones de la confianza organizacional tienen un rol relevante en el vigor, la dedicación y la absorción de los equipos de trabajo. Esto quiere decir, que cuando los equipos de trabajo confían en su organización (confianza vertical) y en los miembros de su equipo de trabajo (confianza horizontal); éstos se sentirán con más energía, más concentrados en sus tareas y

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sentirán que el tiempo les pasa volando. Esto tiene sentido si pensamos que la confianza tiene un papel clave en el funcionamiento organizacional. Cuando confiamos, en este caso en nuestra organización y en nuestros compañeros de trabajo, somos voluntariamente vulnerables a las acciones de la organización/ equipo de trabajo, debido a que confiamos en que las acciones que lleva a cabo la organización o nuestro equipo están orientadas a mejorar nuestro bienestar y funcionamiento organizacional, por tanto damos lo mejor de nosotros.

Por otro lado, si miramos los estimadores *Beta* de los resultados del Modelo 2 para cada una de las dimensiones del *engagement* de los equipos podemos evidenciar que estos son similares, lo que podría llevar a plantearnos la relevancia de investigar en detalle los efectos de las variables en las dimensiones del constructo *engagement* de los equipos. Sin embargo, la información proporcionada en este estudio va en línea con la invitación efectuada por Bakker y Leiter (2010).

En cuanto al modelo exploratorio (Modelo 3) puesto a prueba en este estudio referido a la interacción de la confianza vertical y confianza horizontal en las dimensiones del *engagement* de los equipos no tuvieron apoyo. Estos resultados nos dan información valiosa con respecto a que las dimensiones de la confianza organizacional (i.e., confianza vertical y confianza horizontal) que se relacionan de manera separada con el bienestar de los equipos de trabajo, lo que indica que ambos son procesos subyacentes que actúan paralelamente sobre el bienestar de los equipos.

En cuanto a las variables control utilizadas en el estudio, esto es, tamaño de la organización y tamaño del equipo, los resultados mostraron que no tienen una relación significativa con las variables de interés en nuestro estudio en ninguno de los modelos transnível puestos a prueba en este estudio. Sería lógico pensar que a mayor tamaño de los equipos y las organizaciones es más difícil llegar a compartir un mayor grado en las percepciones de confianza o a un mayor nivel de contagio en el estado de *engagement* de los equipos (Bower, Pharmed, & Salas, 2000; Torrente et al., 2013). Sin embargo, nuestros datos no apoyan esta idea. Esto va en línea con la evidencia aportada por Acosta y cols. (2012) y Torrente y cols. (2012) donde no existen diferencias significativas en función del tamaño del equipo en los modelos puestos a prueba por estos autores.

Los resultados encontrados ofrecen apoyo al Modelo HERO (Salanova et al., 2012) de dos variables que integran el componente empleados saludables. Es decir,

analiza la relación de la confianza vertical (agregada a nivel organizacional) en el vigor, dedicación y absorción de los equipos (agregada a nivel de equipos) controlando esta relación por la confianza horizontal (agregada a nivel de equipos). No obstante, también sería necesario investigar con más profundidad el rol de ambas dimensiones de la confianza entre los tres elementos que componen el Modelo HERO (i.e., recursos y prácticas organizacionales saludables, empleados saludables y resultados organizacionales saludables) con el objetivo de comprobar si sus relaciones son diferentes dependiendo del nivel de análisis utilizado. A su vez, este estudio ha permitido evidenciar que las dimensiones consideradas en la confianza organizacional están en diferentes niveles de análisis. Por tanto, la confianza vertical se encuentra en un nivel organizacional de análisis y la confianza horizontal en un nivel de equipos. Esto significa un aporte al modelo, debido a que es necesario identificar a qué nivel está cada variable que integra cada elemento del Modelo HERO. Asimismo, este estudio evidencia la relación transnivel de variables que están dentro de uno de los componentes del Modelo HERO, esto es, el componente empleado saludable. Sin duda, estudiar estas relaciones también aporta información que enriquece al modelo heurístico HERO debido a que permite identificar antecedentes y consecuentes, en este caso, dentro del componente empleado saludable. Por tanto, la confianza organizacional sería un antecedente de *engagement* de los equipos.

Desde un punto de vista práctico, los resultados de esta investigación pueden ser utilizados por la Dirección de Recursos Humanos desde una perspectiva basada en la prevención continua y acciones de promoción de la salud psicosocial (Llorens, Salanova, Torrente, & Acosta, 2013; Salanova, Cifre, Martínez, & Llorens, 2007; Salanova, Llorens, Torrente, & Acosta, 2013; Salanova, Llorens, Acosta, & Torrente, 2013), con el objetivo de cuidar y desarrollar la confianza organizacional tanto a nivel de equipos (confianza horizontal) como a nivel organizacional (confianza vertical) debido a su impacto positivo en el bienestar de los trabajadores en términos de *engagement* de los equipos. Por ejemplo, de acuerdo a Acosta y cols. (2012) las prácticas organizacionales implementadas por la gestión de recursos humanos que se relacionan con la confianza organizacional y tienen un impacto en el *engagement* de los equipos son: conciliación vida privada - vida laboral, prevención del *mobbing*, programas de salud psicosocial y comunicación e información organizacional. Por tanto, las organizaciones pueden poner en marcha acciones concretas y sostenidas en el tiempo relacionadas a estas prácticas (p.e., horarios flexibles, evaluación de riesgos psicosociales, protocolos de buenas conductas, intranet) permiten que la confianza emerja hacia la organización como un

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todos y en los equipos de trabajo y, a su vez, generan bienestar en los equipos en términos de vigor, dedicación y absorción de los equipos de trabajo.

Podemos concluir que las organizaciones deben fortalecer la confianza entre los equipos de trabajo y en la gerencia debido a tendrán una relación positiva en el vigor, dedicación y absorción de los equipos de trabajo.

### LIMITACIONES E INVESTIGACIONES FUTURAS

El presente estudio tiene diferentes limitaciones que presentamos a continuación así como las diferentes estrategias en la recogida y en diseño que permiten contrarrestarlas en cierta medida. La primera de ellas es que los datos se obtuvieron a través de medidas de autoinforme. Sin embargo, los datos no se trataron a nivel individual sino que se consideraron percepciones agregadas de equipos y de la organización. Como consecuencia, al utilizar estos datos agregados a nivel de equipo y a nivel organizacional podemos minimizar el sesgo del método de la varianza común ya que se encuentran a diferentes niveles de análisis.

Por otra parte, en el estudio se utiliza una muestra de conveniencia. No obstante, la muestra incluye 220 equipos de trabajo pertenecientes a 41 empresas que a su vez pertenecen a diferentes sectores económicos. Este número de empresas y equipos es más que adecuado para llevar a cabo análisis de regresión multinivel (Hox, 2010; Snijders & Bosker, 1999).

El siguiente paso en la investigación futura debería considerar modelos multinivel donde se consideren antecedentes (i.e., recursos y prácticas organizacionales saludables) de la confianza organizacional utilizando modelos lineales jerárquicos (Hox, 2002) que permitan explorar relaciones multinivel sobre efectos e interacciones transnivel entre nivel organizacional y de equipo. Además, será interesante evaluar este modelo usando múltiples organizaciones (no sólo PyMEs Españolas) en diferentes culturas y con estudios longitudinales con el fin de explorar si existen espirales positivas a lo largo del tiempo.

De acuerdo con el Modelo HERO, se asume que los tres elementos (i.e., recursos y prácticas organizacionales saludables, empleados saludables, y resultados saludables) están recíprocamente relacionados a través del tiempo en espirales de

ganancias. En este sentido, otro paso en el estudio debería estar orientado a poner a prueba el modelo incluyendo los resultados organizacionales saludables, como por ejemplo, desempeño de los equipos (medida con la opinión de los supervisores) con el objetivo de explorar la relación de los recursos y prácticas organizacionales saludables y la confianza organizacional sobre los resultados saludables. Esto permitirá poner a prueba el Modelo HERO considerando la relación entre los tres elementos claves.



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**Learn to Trust  
your Company! :**  
A Multilevel-  
Multireferent  
Model to explain  
ROA and Team  
Performance







## **6. LEARN TO TRUST YOUR COMPANY! :**

### A MULTILEVEL-MULTIREFERENT MODEL TO EXPLAIN ROA AND TEAM PERFORMANCE

Marisa Salanova<sup>1</sup>, Hedy Acosta<sup>1</sup>, Susana Llorens<sup>1</sup> and  
Pascale M. Le Blanc<sup>2</sup>

<sup>1</sup> WANT Research Team, Universitat Jaume I

<sup>2</sup> Human Performance Management Group, Eindhoven  
University of Technology

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Correspondence concerning this article should be addressed to Professor Marisa Salanova, Department of Social Psychology, Universitat Jaume I, Av. Sos Baynat, s/n. 12071 Castellón (Spain). Tel. +34 964 729583. Fax +34 964 729262. E-mail: [salanova@uji.es](mailto:salanova@uji.es)



## ABSTRACT

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**Purpose:** This study test a multilevel-multireferent model to understand the relationship between healthy practices and performance via trust (i.e., vertical and horizontal), as the psychological mechanism to explain this social-exchange relationship at two different levels (i.e. organization and team).

**Design/methodology/approach:** We collected data from a sample of 890 employees nested in 177 teams and their immediate supervisors from 31 companies. A multilevel and a HLM analyses was used to test the hypotheses.

**Findings:** Our findings show two independent processes to predict performance (ROA and ratings by immediate supervisors) operating at the organizational and the team level, respectively. However, no cross-level effects were found.

**Implications:** We found evidence for a theoretical and functional quasi-isomorphism on trust research. Firstly, based on the theory of social-exchange we found evidence for our prediction on how trust is the psychological mechanism to explain why healthy practices influence performance. Secondly, our constructs and relationships among constructs function in similar ways at different higher levels of the companies. Such knowledge may help HRM and leaders to implement specific healthy practices and resources from different organizational levels in order to enhance trust and performance.

**Originality/value:** Despite the importance of performance, little is known about the psychological mechanisms by which employees perceive the influence of healthy practices on their excellent performance. Therefore, the study examined in a multilevel-multireferent framework how organizational trust (i.e., vertical and horizontal) is a full mediator of the relationship between healthy practices and performance simultaneously in two collective levels: organization and teams.

*Key words:* healthy practices, vertical trust, horizontal trust, performance.

## LEARN TO TRUST YOUR COMPANY!: A MULTILEVEL-MULTIREFERENT MODEL TO EXPLAIN ROA AND TEAM PERFORMANCE

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### INTRODUCTION

Organizational trust is becoming increasingly more important nowadays because of social and economic turbulence. Specifically, from management and social sciences (Fulmer & Gelfand, 2012; Wong, Ngo, & Wong, 2003) it is known that trust can be considered a source of sustainable competitive advantage (Andersen, 2005; Barney & Hansen, 1994) and a prerequisite for the efficient functioning of organizations and HRM (Wöhrle, van Oudenhoven, Otten, & van der Zee, 2015). Moreover, trust in organizations is vital to organizational success, performance and well-being of employees (Fukuyama 1995; Kramer & Cook, 2004) and may foster innovative and prosocial behaviors that help create economic advantages (Dasgupta, 2000; Fairholm, 1994) especially important in crisis and economic turbulence.

Organizational trust has been considered a relevant construct from different scientific disciplines (Khodykov, 2007). Recent studies have proposed trust as a mediator, linking organizational resources and practices to organizational effectiveness (Acosta, Salanova, & Llorens, 2012; Dirks & Ferrin, 2001, 2002; Kiffin-Petersen & Cordey, 2003; Mayer & Gavin, 2005; Walumbwa, Luthans, Avey, & Oke, 2011). However, further research on the role of trust on different levels (i.e., organizational vs teams) within companies is needed. For instance, Fulmer and Gelfand (2012) conducted a systematic review showing that research on trust has not explored at the collective level, i.e., taking account aggregated perceptions of trust from employees into a company. Hence, they claimed that there is still a lack of evidence on how to increase trust at multiple levels within organizations, and on the relationship between organizational and team trust and different outcomes from business.

We know that organizations are inherently multilevel systems, and trust operates at different levels (i.e., individual, team, and organizational levels of analyses). Therefore, attention to different levels is a theoretical and empirical imperative (Klein, Dansereau, & Hall, 1994) especially research on trust at higher levels such as teams and organizations showing the degree of trust collectively shared by employees into a team (i.e. aggregated degree of trust shared with consensus among team members) or into a company (i.e., aggregated degree of trust shared with consensus among company

employees). The novelty in the present study is that we take a new look at the antecedents and consequences of trust on two levels (organization and teams), in order to test whether similar psychological mechanisms operate at both levels of analysis. In this way, we propose “trust” as an explanatory mechanism behind the relationship between practices/resources implemented by the organization/teams and performance.

## THEORETICAL BACKGROUND AND HYPOTHESES

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### ORGANIZATIONAL TRUST

Positive expectations about trustworthiness and willingness to accept vulnerability are two important dimensions of organizational trust (Fulmer & Gelfand, 2012). This vulnerability is implicit in traditional definitions of trust by Mayer, Davis, and Schoorman, (1995, p. 712) as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”.

On the other hand, employees with high levels of organizational trust are willing to rely on a company despite of the implicit risk by not follow through on its obligations (Colquitt, Scott & LePine, 2007; Das & Teng, 2004). When everything in organization is aligned, trust is expected to grow (Covey, 2006). In that sense, Creed and Miles (1996) pointed out that the design of Human Resources -HR practices, which yield a perception of common goals and provide common resources, should affect the perception of trust. Thus, resources and practices implemented by organizations at different levels (i.e., organizations and teams) are relevant to develop trust and obtain positive outcomes, such as good performance.

### LEVELS AND REFERENT OF ORGANIZATIONAL TRUST

This is important to differentiate “levels” and “referents” of organizational trust. We follow the multilevel-multireferent framework of Fulmer & Gelfand (2012) that differentiate trust at a level of analysis and trust in a referent. For example, the former

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could be at the individual, team or organizational level and here is very important to take account that in the higher levels (i.e. team and organization) the emergence and shared perceptions by members of the unit are really an important issue. Trust in a referent are regarding the "object" of trust such as trust in high management, trust in immediate leaders, trust in teams, trust in co-workers, etc.

In the current study, we used a multilevel-multireferent framework by consider two collective levels of analyses (i.e. organization and teams) and two referents (i.e., top managers or vertical trust, and co-workers or horizontal trust), and even more we test our hypotheses taking account both in a simultaneously way. Recently Legood, Thomas and Sacramento (2016) emphasize on the importance of looking at multiples referents of organizational trust simultaneously. This two-dimensional point of view makes it possible to understand the different dynamics of trust at different levels within organizations. First, vertical trust is focused on trust at an organizational/company level as a whole, that is, the trust at (top) managers. Different scholars have shown that, to increase vertical trust, investment in healthy organizational practices is needed (Bruhn, 2001; Fredrickson & Dutton, 2008; Jain & Sinha, 2005; Kath, Magley & Marmet, 2010; Mone & London, 2010). Second, Horizontal trust is focused on trust at a team level that is, the trust at co-workers (Tan & Lim, 2009). Teams are important because organizations have become flatter and more team-centered. Research has shown that teams play an important role by increasing efficiency and competitiveness (Hodson, 1997), productivity (Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003), and psychosocial health (Wilson et al., 2004). When organizations facilitate positive team working conditions and collaborative working practices, team performance is improved (Kozlowski & Bell, 2003). This collaborative approach means that there are team dynamics (i.e., coordination), which affect team performance. In the team dynamics literature, trust amongst co-workers (i.e., horizontal trust) is the critical mechanism to explain how team resources are related to successful performance (Costa, 2003). Horizontal trust leads employees to act on the basis that they have faith in the words and actions of their peers (Mishra, 1996). This means that, if people trust others, they seek interaction with them, tend to like what they like and see what they see, and share definitions of relevance, thus furthering integration between them (Bijlsma & van de Bunt, 2003). Furthermore, horizontal trust is related to important outcomes such as turnover intention (Ferres et al., 2004), and organizational commitment (Vanhala, Heilmann & Salminen, 2016).

## ORGANIZATIONAL PRACTICES AND RESOURCES AS ANTECEDENTS OF TRUST

Research on HRM and occupational health psychology provides evidence on how organizational practices are related to healthy employees (i.e., vertical and horizontal trust) and healthy outcomes (i.e., organizational and team performance) developing healthy organizations. For example, Salanova, Llorens, Cifre and Martinez (2012, pp.788) defined a Healthy & Resilient Organizations (HERO) as “those organizations that make systematic, planned, and proactive efforts to improve employees’ and organizational processes and outcomes”. These efforts involve carrying out healthy organizational resources and practices that improve: task (autonomy, feedback), social environment (co-workers relations, positive leadership), and companies (excellent performance). A HERO is a company that balances three components: (1) healthy organizational resources and practices (e.g., work/family conciliation); (2) healthy employees (e.g., work engagement, trust), and (3) healthy organizational outcomes (e.g., performance).

In a healthy organization, practices and resources are important in order that employees feel well and perform excellently. For example, Lyubomirski, King, and Diener (2005) proposed that resources help people to thrive and succeed at work, and consequently they are “healthier” in their social relationships and regarding their personal well-being. In this way, previous research also indicated that social resources are one specific type of resources that may act as antecedents of well-being (i.e., work engagement). These social resources are related to the interaction and interdependence among the team members. For instance, Hakanen, Bakker, and Schaufeli (2006) showed that teachers with higher levels of social resources (i.e., innovative climate, supervisor support, and supportive social climate) experienced higher degrees of well-being than teachers with low levels of such resources.

Longitudinal research has also confirmed this relation, as illustrated by Schaufeli, Bakker, and Van Rhenen (2009), who found that social support predicted well-being over a period of one year in a sample of telecom managers. Additionally, at the team level, Torrente and colleagues (2012) studied a sample of 62 teams from 13 companies and showed that team coordination, teamwork, and supportive team climate are related to shared well-being within teams in the form of team work engagement. Thus, the perceptions of resources can be shared by members of the same team (shared beliefs).



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Healthy organizational practices can promote healthy employees/teams (i.e., trust) by increasing employees' shared beliefs about resources. Organizational practices are defined as "the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals" (Wright & McMahan, 1992, p. 298). This refers to the organizational practices implemented by HRM to achieve organizational goals and improve psychological and financial health at different levels of the companies (i.e. employee, team, and organizational) (Salanova et al., 2012).

Research shows that organizations which attempt to implement healthy organizational practices have employees and teams that display more positive experiences (e.g., organizational trust; Bruhn, 2001; Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010) and have more healthy outputs, such as organizational commitment (Mayers & Smith, 2000) and organizational performance (Bacon & Hoque, 2005; Schneider, Hanges, Smith, & Salvaggio, 2003). All in all, healthy organizational practices enhance the appeal of the organization and help it to be perceived as a great place to work (Carlsen, 2008). Consequently, they should be included in the business strategy (Budhwar & Debrah, 2001).

Research based on the European Project EQUAL (2004) presents eight main practices from HRM based on Corporate Social Responsibility (CSR) that can be considered: work-family balance, mobbing prevention, skills development, career development, psychosocial health, perceived equity, communication, and corporate social responsibility (Salanova et al., 2012). Several studies provide evidence that these organizational practices can have a positive impact on employees' well-being and trust. Specifically, in a study conducted on 710 employees nested in 84 groups from 14 small and medium-sized enterprises (SMEs), Salanova and colleagues (2012) showed that organizational practices had a positive impact on employee's well-being (i.e., collective efficacy, engagement, and resilience), which in turn had a positive impact on healthy outcomes (i.e., performance, commitment, and excellent results). Moreover, Acosta and colleagues (2012) showed that organizational practices, specifically work-family balance, mobbing prevention, psychosocial health, and communication, can enhance organizational trust at the organizational level of analysis. This is important to notice that as stated by Fredrickson and Dutton (2008), the positive impact of healthy organizational resources and practices on employees' health only occurs when workers perceive that those strategies are being implemented in the organization to improve their well-being, that is, when employees trust their organization.

Interestingly, the reverse process also occurs when unhealthy practices are implemented by organizations. For example, Wells, & Kipnis (2001) found that distrust of managers by 267 subordinates was related with the use of strong methods of influence, less interaction, less attempts to influence, and the use of personal-related characteristics. All of these bad practices predicted lack of organizational trust.

## ORGANIZATIONAL AND TEAM PERFORMANCE AS CONSEQUENCES OF TRUST

Trust is not only a psychological state, but will also manifest itself in behavior, such as job performance (Costa, 2003). This means that when employees trust their organization (vertical trust) and their co-workers or teams (horizontal trust) they will do their best to exert themselves. Pirson and Malhotra (2011) pointed that employees with high levels of organizational trust are quite engaged to perform well because they are willing to invest their efforts and energy in an employer / company that employees perceived competent or benevolent, for example, implementing healthy practices and resources that are positive for employees.

In this study, we will consider two performance indicators at two different levels of analysis: organizational performance as indicated through Return on Assets (ROA) and team performance as assessed by the immediate supervisor. At the organizational level, we considered financial performance a crucial outcome for a firm. In an early study by McGregor (1960), it was already highlighted that the way employees experience their work world would be reflected in organizational effectiveness. Related to this, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) found that healthy employees (i.e., engaged employees) managed to accomplish higher objective financial returns for the business. Schneider, Hages, Smith, and Salvaggio (2003) presented a similar set of results with data aggregated at the organizational level. Over a period of eight years, they found that organizational attitudes (i.e., job satisfaction and satisfaction with job security) predict financial performance (i.e., ROA).

Team performance refers to in-role and extra-role performance (Goodman and Svyantek, 1999) or task and contextual performance, respectively. Specifically, task performance includes activities that are related to the formal job. On the other hand, contextual performance refers to actions that exceed what the employee is prescribed to do (e.g., helping others or doing voluntary overtime). Hence, considering the two

complementary types of job performance provides a comprehensive view of employees' performance. In this way, different scholars have confirmed the positive relationship between employees' well-being and job performance at the individual level. For instance, Schaufeli, Taris, and Bakker (2006) concluded that engaged employees show more in-role and extra-role performance in a broad range of companies and occupations. In a study conducted by Torrente et al. (2012) findings pointed out that high levels of team social resources (i.e., supportive team climate, coordination, and teamwork) were related to higher levels of team work engagement, which acted as a mediator between team social resources and team performance, as assessed by the immediate supervisor.

Only few studies have documented the relationship between trust and performance (Frazier, Gooty, Little & Nelson, 2015; Goris, Vaught, & Pettit, 2003; Mayer & Gavin, 2005); providing support for this relationship between trust and performance directed at individuals and organizations. However, recently it is requested for more research that account for the non-independence of data and that use objective performance measures (Frazier et al., 2015). We used performance measures rated by immediate supervisors (non-independence of data) and ROA (objective performance).

### THE CURRENT STUDY

In the current study, we assume that the positive relationships between healthy practices (at both levels: organization and teams, and at both referents: top leaders and co-workers), trust and performance are explained by using the positive approach from HERO Model. In that sense, for example employees perceive healthy practices from HRM as being positive for their, and then trust on organization and in turn as they feel well, they perform better. Based on the social exchange theory (Blau, 1964) we could expect that when employees are treated well by their company/employers/teams, they reciprocate by showing higher levels of performance. Excellent performance could be understood as a kind of exchange response of employee due to positive trust developed because healthy practices are implemented in their companies. Finally, we also assume that a similar psychological process can be underlying at the level of the teams. When employees are working in teams, they need cooperate and then exchange of expectations and promises are also involved. So far, social positive exchanges between employees working in teams are likely to strengthen

the reciprocal relationship between employees developing team or horizontal trust and in turn, excellent team performance.

Taking previous research into account, the objective of our study is to test the relationship between healthy practices, and performance considering organizational trust (i.e., vertical and horizontal trust) as the psychological mechanisms to explain this social-exchange relationship in the multilevel systems of the companies. We follow recommendation of Fulmer and Gelfand (2012) using a multilevel-multireferent framework and our definitions and operationalization of organizational trust at higher levels specify how trust is conceptualized at both levels (i.e., organization and teams) and we are clear on the emergence and sharedness of the construct, using the terminology put forth by the levels-of-analysis research (Chan, 1998; Kozlowski & Klein, 2000). Also, we simultaneously consider two referents of trust, i.e., top-managers and co-workers as vertical and horizontal trust, respectively.

At this point we expect (see figure 1), at the organizational level, that healthy organizational practices to be positively related to vertical trust (*Hypothesis 1*), vertical trust to be positively related to organizational performance (*Hypothesis 2*), and vertical trust plays a full mediating role between healthy organizational practices and organizational performance \_ROA (*Hypothesis 3*).

At the team level, we expect that healthy team resources to be positively related to horizontal trust (*Hypothesis 4*), horizontal trust to be positively related to team performance (*Hypothesis 5*), and horizontal trust plays a mediating role between healthy team resources and team performance (*Hypothesis 6*).

Furthermore, we go one step further by evaluating the cross-level relationships between the variables included in this study. That is, healthy organizational practices are expected to be positively related to team performance over and above horizontal trust (*Hypothesis 7*), healthy organizational practices are expected to be positively related to horizontal trust over and above healthy team resources (*Hypothesis 8*), and vertical trust is expected to be positively related to team performance over and above horizontal trust (*Hypothesis 9*).

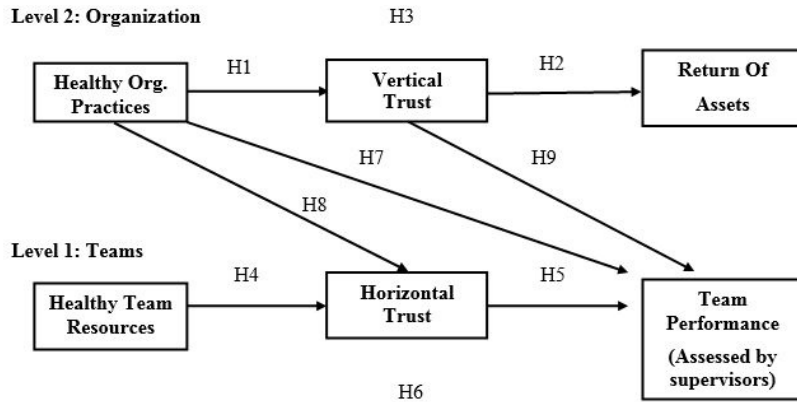


Figure 1. Research model.

## METHODOLOGY

### PARTICIPANTS

The study sample consisted of 890 employees (average response rate per organization was 62%) nested within 177 teams and their 177 immediate supervisors from 31 Spanish companies. Of the employees, 58% were women and 79% had a tenured contract. Their average tenure in the company was 6 years ( $SD = 4.05$ ). Of the supervisors, 51% were female and 86% had a tenured contract. In this case, their average tenure in the company was 15 years ( $SD = 12.21$ ). The average number of people in a team was 5 ( $SD = 2.35$ ) and organizations had 48 employees on average ( $SD = 32.44$ ). Organizations also differed in terms of economic sector: 86% operated in the service sector and 14% in industry.

The Human Resource Managers or CEOs of the participating organizations provided their employees and team supervisors with information regarding the project by different means (e.g., meetings, bulletin board, intranet). In addition, researchers further explained the project by means of information meetings. Employees and

supervisors completed a self-report questionnaire regarding their teams, focusing on their organizational and team perceptions. The questionnaire was distributed by the researchers themselves and took approximately 30 minutes to fill out. In order to guarantee that workers were familiar with the functioning of the organization, only workers with more than six months of organizational tenure were considered for the analyses, since at least three or four months are needed for new employees to get settled into their organization (Feldman, 1988). Confidentiality of the responses was guaranteed. In this way, the research team ensured strict compliance with applicable regulations, especially with regard to the utmost confidentiality in handling data.

## MEASUREMENT INSTRUMENTS

### **At the organizational level:**

*Healthy Organizational Practices* were assessed by five items that represent four practices included in the HERO (Healthy & Resilient Organizations) questionnaire (Salanova et al., 2012). Although eight healthy organizational practices were included in the original survey, a previous study conducted by Acosta, Salanova, and Llorens (2012) demonstrated that four of these are positively related to trust, i.e., work-family balance (one item; *'In the last year, practices and strategies have been introduced in this organization in order to facilitate the work-family balance and the private lives of its employees'*), mobbing prevention (one item; *'In the last year, practices and strategies have been introduced in this organization in order to prevent mobbing at work'*), psychosocial health (one item; *'In the last year, practices and strategies have been introduced in this organization in order to ensure well-being and quality of life at work'*), and organizational communication (two items; *'In the last year, practices and strategies have been introduced in this organization in order to facilitate communication from management to workers'*; *'In the last year, practices and strategies have been introduced in this organization in order to ensure that information about the organizational goals is given to everyone who needs to know about them'*). Internal consistency for the scale was .84, which is above the cut-off point of .70 (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*). In order to lead respondents' attention from the individual level to the organizational level, all the items were focused on organizational perceptions.

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*Vertical Trust* was assessed by four items based on Huff and Kelley's scale (2003). An example item is: '*In this organization, subordinates have a great deal of trust in their supervisors and top managers*'. Internal consistency was .90, which is above the cut-off point of .70 (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*). Again, in order to lead respondents' attention from the individual level to the organizational level, all the items focused on organizational perceptions.

ROA was obtained from the SABI database (<http://sabi.bvdep.com>). This objective database contains general and financial information from each organization. This database includes different indicators related to the financial functioning of each organization. ROA is an independent indicator of how profitable a company is relative to its total assets, and gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. We focused on ROA as a financial indicator that is more stable and consistent over time (Schneider et al., 2003). In this way, return on assets measures a company's earnings in relation to all of the resources it had at its disposal.

### **At the team level:**

*Healthy Team Practices* were assessed by 12 items belonging to four different scales that were included in the HERO questionnaire (Salanova et al., 2013). These are: autonomy (three items; e.g., '*In my team, we decide when to begin, finish and the order in which we do the tasks*'); alpha = .70), coordination (three items; e.g., '*In my team we coordinate our activities*'; alpha = .77), feedback (three items; e.g., '*In my team, the work we do gives us a lot of information to know how well you are doing*'; alpha = .69), and supportive team climate (three items; e.g., '*In my team, constructive criticism is rewarded*'; alpha = .77). Respondents answered using a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*always*).

*Horizontal trust* was assessed by four items based on McAllister's scale (1995). An example item is: '*In my team, we can share our ideas, emotions and hopes*'. Internal consistency was .85, which is above the cut-off point of .70 (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally*

*disagree*) to 6 (*totally agree*). Here, in order to lead respondents' attention from the individual level to the team level, all the items focused on team perceptions.

*Team performance* was assessed by supervisors with a scale of six items adapted from the Goodman and Svyantek scale (1999). Two different scales were considered: in-role performance (three items; e.g., '*The team that I supervise achieves its work goals*';  $\alpha = .84$ ) and extra-role performance (three items; e.g., '*In the team that I supervise employees help each other when somebody is overloaded*';  $\alpha = .71$ ). Team supervisors answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*).

### **Control variables:**

Teamwork was assessed by three items (e.g., '*My team has well-defined team-work goals*';  $\alpha = .75$ ) (Salanova et al., 2012). We consider Teamwork a control variable in order to guarantee that each team shares a common goal and with interrelated tasks. Furthermore, we have included team size (i.e., total number of members per team) at the team level of analysis because previous studies have consistently shown that it affects group dynamics and performance (i.e., cohesion; team goals) (Brewer & Kramer, 1986; Le Blanc & González-Romà, 2012). Finally, organizational size (i.e., total number of employees per organization) was included at the organizational level of analysis, because in this study we are considering enterprises of different sizes.

## ANALYTIC STRATEGY

### **Preliminary analyses: Aggregation indices**

In this study, the questionnaire measures three team-level variables and two organizational-level variables from two different sources of information. Healthy organizational practices and vertical trust were assessed by the employees using the organization as a whole as a referent. Healthy team practices and horizontal trust were assessed by the employees using their team as a referent. Team performance was assessed by the team supervisors using their team as a referent.



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As the variables in our research model – except for ROA – were aggregates of lower-level shared perceptions, interrater reliability and interrater agreement indices had to be computed (Lebreton & Senter, 2008). Employees' agreement was assessed using a two-fold approach: (1) ICC<sub>1</sub> was calculated following a consistency-based method. Although there is no fixed cut-off point for ICC<sub>1</sub>, a value of .01 might be considered a small effect, a value of .10 might be considered a medium effect, and values above .25 might be considered a large effect (see Murphy & Myors, 1998); (2) following a consensus-based approach, the Average Deviation Index was computed (AD<sub>M(i)</sub>; Burke, Finkelstein, & Dusig, 1999), whereby agreement among team members or the organization as a whole is established when AD<sub>M(i)</sub> is equal to or less than 1 for 7-point Likert-type scales (Burke et al., 1999). Analyses of Variance (ANOVA) were also computed in order to ascertain whether there was significant between-group discrimination for the measures at the organization and the team levels. All the variables showed between small and medium effects for ICC<sub>1</sub>, and ANOVA analyses indicated a significant discrimination of variables between groups or organizations (from .18 to .47) (see Table 1). AD<sub>M(i)</sub> indices showed values lower than 1 (average AD<sub>M(i)</sub> was .80). In conclusion, overall aggregation results indicated agreement at the organizational level regarding employees' perceptions of healthy organizational practices and vertical trust. In a similar way, aggregation indices also showed an adequate level of agreement for the team-level variables, that is, healthy team resources, horizontal trust, and teamwork. Finally, we computed descriptive statistics and intercorrelations among the scales based on data aggregated at the team level and at the organizational level, respectively.

### Data Analyses

Harman's single factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) was performed for the employee variables in the study in order to test for bias due to common method variance. However, it is important to keep in mind that the dependent variables in our database (i.e., ROA and supervisor perceptions of performance) and the independent ones came from different sources. Finally, we used regression analyses by PASW 18.0 to test Hypotheses 1 and 2 (at the organizational level), and 4 and 5 (at the team level).

## Mediation Analyses

To test Hypothesis 3, the bootstrapping procedure was used (see MacKinnon et al., 2002; Preacher and Hayes, 2004). This method is recommended to examine mediation in small sample sizes (Shrout & Bolger, 2002), and offers an empirical means of determining the significance of statistical estimates (Efron & Tibshirani, 1993). We used the bootstrapping procedure in AMOS 18.0 (Analyses of MOment Structures; Arbuckle, 1987).

To test Hypothesis 6, SEM by AMOS 18.0 (Arbuckle, 1987) was used. Healthy team practices (i.e., autonomy, coordination, feedback, and supportive team climate) comprised one indicator. Horizontal trust (i.e., four items) comprised one indicator. Finally, performance (supervisor-rated performance) comprised one indicator. For all these variables, the error variance of each indicator was constrained in all the models in order to avoid unidentified problems by using the formula,  $(1-\alpha) * \dots$ . Maximum likelihood estimation methods were used, in which the input for each analysis was the covariance matrix of the items. Two absolute goodness-of-fit indices were assessed to evaluate the goodness-of-fit of the models: (1) the  $\chi^2$  goodness-of-fit statistic, and (2) the Root Mean Square Error of Approximation (RMSEA). The  $\chi^2$  goodness-of-fit index is sensitive to sample size, for this reason the use of relative goodness-of-fit measures is recommended (Bentler, 1990; Marsh, Balla, & Hau, 1996). Thus, four relative goodness-of-fit indices were used: (1) Comparative Fit Index (CFI), (2) Normed Fit Index (NFI); (3) Tucker-Lewis Index (TLI, also called the Non-Normed Fit Index); and (4) Incremental Fit Index (IFI). For RMSEA, values smaller than .05 are considered to indicate an excellent fit, .08 are considered to indicate an acceptable fit, whereas values greater than .10 should lead to model rejection (Browne & Cudeck, 1993). For the relative fit indices, values greater than .90 are indicative of a good fit (Hu & Bentler, 1999).

The mediation effect was assessed using the approach developed by Baron and Kenny (1986), and the Sobel test (Sobel, 1988).

### *Hierarchical linear models*

In the current study, Hypotheses 7, 8 and 9 were tested by means of hierarchical linear modeling or random coefficient modeling (Gavin & Hofmann, 2002). The Intraclass Correlation Coefficient or ICC is also interpreted as a measure of non-independence, and tests the percentage of variance explained by a set of contextual variables (Bliese, 2000). Therefore, the higher the ICC is, the larger the variability in the

dependent variable that can be explained by variables from the higher level of analysis will be (i.e., the organization in the current study). A baseline ANOVA model was computed to evaluate non-independence ICC. This model is used within the general hierarchical linear modeling procedure as a comparison model, as well as to evaluate the percentage of variance for the levels involved in the analyses (Hox, 2010).

Apart from the baseline ANOVA model, two other models were tested following a step-by-step approach using maximum likelihood as implemented by LISREL 8.8 (Jöreskog & Sörbom, 2006). First, we conducted a *random-coefficient regression model* (Model 1), in which random coefficients were freed to vary between organizations. Team-level controls and predictors were also included in the model equation. This model provides tests of lower-level predictors while taking into account the nested structure of the data as well as controlling for lower-level covariates. The second, or *intercepts-as-outcomes*, model (Model 2) included organizational-level controls and predictors in the equation for the intercept. In the current study, this model makes it possible to test the effect of organizational level variables over and above the effect of lower-level predictors and covariates, while also controlling for higher-level covariates.

For the random-coefficient regression model, team-level variables were grand-mean centered. In this case, under grand-mean centering, the variance in the intercept term is an adjusted estimator of the variance between organizations, thus making its interpretation easier (Hofmann, Griffin, & Gavin, 2000). For the second model, involving tests of cross-level relationships, organizational level variables were also grand-mean centered, since it facilitates general model estimation as it occurs in multivariate regression (Bliese, 2002). Grand-mean centering also deals with multicollinearity, as it reduces the correlation between intercept and slope estimates across the higher level of analysis (Hofmann & Gavin, 1998). Furthermore, team-level predictors were group-mean centered in the second model in order to yield an unbiased estimate for the within-group slope. Therefore, results are more accurate when testing cross-level effects and spurious cross-level interactions are less likely to appear (Hofmann & Gavin, 1998).

## RESULTS

### CORRELATION AND CONFIRMATORY FACTOR ANALYSES

Means, standard deviations, Cronbach's alphas, and intercorrelations among the variables at the individual, the team, and the organizational levels are displayed in Table 1, Table 2, and Table 3, respectively. As expected, all study variables were positively and significantly correlated. The results of Harman's single factor test (Podsakoff et al., 2003) on the individual database ( $N = 871$ ) revealed a bad fit to the data,  $\chi^2(18) = 169.658$ ,  $p = .000$ , RMSEA = .201, CFI = .676, NFI = .587, TLI = .565, IFI = .678. In order to avoid the problems related to the use of Harman's single factor test (see Podsakoff et al., 2003), we compared the results of the one latent factor model with a model considering four latent factors. Results showed a significantly lower fit of the model with one single factor in comparison to the model with multiple latent factors, Delta  $\chi^2(2) = 109.424$ ,  $p < .001$ . Consequently, we may consider that common method variance is not a serious deficiency in this dataset.

**Table 1.**

*Means, standard deviations, aggregation indices, and intercorrelations among the study variables at the individual level ( $N = 871$ )*

Variables	M	SD	$\alpha$	ICCl	ADw(i)	1	2	3	4	5	6	7	8	9
1. Healthy Org. Practices	3.44	1.44	.84	.45	.89	-								
2. Vertical Trust	3.88	1.34	.90	.52	.65	.68***	-							
3. ROA	1.60	19.77	-	-	-	.14***	.19***	-						
4. Healthy Team Resources	4.33	1.00	.77	.32	.78	.49***	.44***	.05	-					
5. Horizontal Trust	4.27	1.13	.85	.28	.64	.47***	.57***	.10**	.51***	-				
6. Performance	4.94	.86	.71	.18	.91	.30***	.28***	.14***	.46***	.45***	-			
7. Teamwork	4.83	1.16	.75	.47	.95	.43***	.41***	.06	.70***	.45***	.45***	-		
8. Org. size	48.37	31.67	-	-	-	-.80*	-.23***	.00	-.00	-.61	.13***	-.05	-	
9. Team size	5.35	2.42	-	-	-	-.32	-.12***	.13***	.00	-.58	.12***	-.01	.38***	-

\*\* $p < .01$ . \*\*\* $p < .001$ .

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**Table 2.**

*Means, standard deviations, and intercorrelations among the study variables at the team level (N = 162).*

Variables	M	SD	1	2	3	4	5
1. Healthy Team Resources	4.38	.69	-				
2. Horizontal Trust	4.33	.74	.58***	-			
3. Performance	4.91	.58	.50***	.50***	-		
4. Teamwork	4.88	.81	.81***	.54***	.49***	-	
5. Team size	5.03	4.2	-.08	-.12	.06	-.90	-

\*\*\* $p < .001$ .

**Table 3.**

*Means, standard deviations, and intercorrelations among the study variables at the organizational level (N = 31).*

Variables	M	SD	1	2	3	4
1. Healthy Org. Practices	3.45	.56	-			
2. Vertical Trust	3.94	.60	.81***	-		
3. ROA	.71	17.22	.25***	.32**	-	
4. Org. size	.48	34.50	-.18*	.39***	-.02	-

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## HYPOTHESES TESTING

Hypotheses 1, 2, 4 and 5 were confirmed through regression analysis. Hypothesis 1, which proposed that healthy organizational practices are positively related to vertical trust at the organizational level of analysis, was confirmed ( $\beta = .84$ ,  $p < 0.001$ ). Moreover, organizational size was negatively and significantly related to vertical trust ( $\beta = -.04$ ,  $p < 0.001$ ). Healthy organizational practices explained 71% of the variance in vertical trust (see Table 4). Hypothesis 2, stating that vertical trust is positively related to organizational performance (financial indicator, Return on Assets;

ROA), was also confirmed ( $\beta = .47, p < 0.001$ ). Organizational size was not significantly related to organizational performance ( $\beta = .03, ns$ ), and vertical trust explained 11% of the variance in ROA-2010 (see Table 4). Hypothesis 4, which states that healthy team practices are positively related to horizontal trust at the team level of analysis was also confirmed ( $\beta = .62, p < 0.001$ ), whereas team size was not significantly related to horizontal trust ( $\beta = -.01, ns$ ). Healthy team resources explain 34% of the variance in horizontal trust (see Table 5). Finally, Hypothesis 5, which posited that horizontal trust is positively related to (supervisor-rated) team performance, was confirmed ( $\beta = .40, p < 0.001$ ). Again, team size was not significantly related to team performance ( $\beta = .02, ns$ ). Horizontal trust explained 26% of the variance in team performance (see Table 5).

**Table 4**  
Regression Analyses by aggregating data ( $N = 31$ )

<b>Vertical Trust</b>			
<b>Predictor variables</b>	<b>B</b>	<b>SE B</b>	<b><math>\beta</math></b>
1. Healthy Org. Practices	.81	.04	.76***
2. Org. Size	-.00	.00	-.26***
R <sup>2</sup> = .71			
$\Delta R^2 = .71$			
<b>ROA 2010</b>			
<b>Predictor variables</b>	<b>B</b>	<b>SE B</b>	<b><math>\beta</math></b>
1. Vertical Trust	.47	.05	.33***
2. Org. Size	.03	.05	.05
R <sup>2</sup> = .11			
$\Delta R^2 = .10$			

Notes. \*\*\* $p < .001$ .

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**Table 5**  
Regression Analyses by aggregating data ( $N = 162$ )

Predictor variables	B	Horizontal Trust	
		SE B	$\beta$
1. Healthy Team Resources	.62	.07	.57***
2. Team Size	-.01	.01	-.07
R <sup>2</sup> = .34 $\Delta R^2 = .33$			

Predictor variables	B	Performance (supervisor-rated)	
		SE B	$\beta$
1. Horizontal Trust	.40	.05	.52***
2. Org. Size	.01	.00	.12
R <sup>2</sup> = .26 $\Delta R^2 = .26$			

Notes. \*\*\* $p < .001$ .

To test Hypothesis 3, in which vertical trust mediates the relationship between healthy organizational practices and ROA at the organizational level, we used a bootstrapping procedure, also controlling for organizational size. The procedure involves repeated random sampling observations with replacement from the data and calculation of the statistic of interest in each resample. In our case, we consider a resample of  $N = 500$ . Results indicated that vertical trust fully mediated the relationship between healthy organizational practices and ROA. The non-significant direct relationship between healthy organizational practices and ROA indicated that there is indeed full mediation. The 95% confidence interval of the mediation model does not include 0, which indicates that the proposed model is statistically significant (Preacher & Hayes, 2004) (see Table 6). To confirm the mediation effects, we performed the Sobel Test (Sobel, 1988), which showed a significant result (Sobel  $t = 2.52$ ,  $p = .001$ ) (see Table 7).

**Table 6**

*Bootstrapping for healthy organizational practices, vertical trust, and ROA-2010 mediation model aggregated data (N = 31)*

Indirect effects	Bootstrap		BC 95% CI		P
	Estimate	SE	CI Lower	CI Upper	
<b>ROA - 2010</b>					
Healthy Org. Practices	1.17		.81	1.69	.01
		.30			

*Notes.* Number of bootstrap resamples = 500

To test Hypothesis 6, in which horizontal trust mediates the relationship between healthy team resources and performance (supervisor-rated performance) at the team level, we performed SEM-analyses with AMOS. Two models were tested, (M1): full mediation, and (M2): partial mediation. Teamwork and team size were included as control variables. Table 6 shows the results of the SEM conducted to test the relationship among healthy team practices, horizontal trust, and team performance. The findings of these analyses indicate that M1 and M2 fitted the data well. M1:  $\chi^2(11) = 15.52$ , RMSEA = .04, CFI = .97, NFI = .91, TLI = .89, IFI = .92. M2:  $\chi^2(10) = 12.04$ , RMSEA = .03, CFI = .98, NFI = .91, TLI = .89, IFI = .90. The difference between the two models was not significant, Delta  $\chi^2(1) = 3.48$ , *ns*, which means that both models fit the data well. So, these results give evidence for M1, since it is more parsimonious than M2.

To confirm the mediation effect, we performed the Sobel Test (Sobel, 1988), which yielded a significant result (Sobel  $t = 3.55$ ,  $p = .001$ ). These results provide evidence for M1, that is, horizontal trust fully mediates the relationship between healthy team practices and supervisor-rated team performance. As expected, healthy team practices have a positive and significant relationship with horizontal trust ( $\beta = .62$ ,  $p < .001$ ), which in turn is positively and significantly related to supervisor-rated team performance ( $\beta = .40$ ,  $p < .001$ ). It is interesting to note that healthy team practices explain 34% of the variance in horizontal trust ( $R^2 = .34$ ), which in turn explains 26% of the variance in team performance ( $R^2 = .26$ ).



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**Table 7**

*Fit Indices for Structural Equation Models by aggregated data (N = 162)*

Models	$\chi^2$	df	RMSEA	CFI	NFI	TLI	IFI	$\Delta\chi^2$	$\Delta df$	$\Delta RMSEA$	$\Delta CFI$	$\Delta NFI$	$\Delta TLI$	$\Delta IFI$
M1	15.52	11	.04	.97	.91	.89	.92							
M2	12.04	10	.03	.98	.91	.89	.90							
Diff. M2 -M1								3.48	1	.01	.01	.00	.00	.02

Notes.  $\chi^2$  = Chi-square; df = degree of freedom; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; NFI = Normed Fit Index, TLI = Tucker-Lewis Index; IFI = Incremental Fit Index. Diff. = Differences

Following Hypothesis 7, healthy organizational practices were expected to be positively related to team performance over and above horizontal trust. Table 7 includes the results for the hierarchical linear models predicting performance. Model 1 included horizontal trust in the equation together with team-level control variables (i.e., teamwork, team size). Results for Model 1 show that horizontal trust has a positive and significant relationship with team performance ( $\beta = .31, p < .001$ ). Model 2 included organizational level variables in order to test for cross-level effects, that is, healthy organizational practices, and organizational size as a control variable. Unexpectedly, healthy organizational practices were not significantly related to team performance ( $\beta = -.03, ns$ ). Hypothesis 7 was thus not confirmed.

Following Hypothesis 8, healthy organizational practices were expected to be positively related to horizontal trust over and above healthy team resources. Model 1 included healthy team resources in the equation together with team-level control variables (i.e., teamwork, team size). Model 2 included organizational-level variables in order to test for cross-level effects, that is, healthy organizational practices and organizational size as a control variable. Nevertheless, it turned out that the baseline, ANOVA model was 3%. This means that only 3% of the variance of horizontal trust is explained by variables at other levels. In our case, 3% of the variance is explained by variables at the organizational level. According to Bliese (2000), more than 5% is needed to enable hierarchical linear modeling to be conducted. Therefore, this cross-level effect was not tested because one preliminary condition, that is ANOVA model, was not favorable. Hypothesis 8 was therefore not confirmed.

Following Hypothesis 9, vertical trust was expected to be positively related to team performance over and above horizontal trust. Table 9 includes results for the hierarchical linear models predicting team performance. Model 1 included horizontal

trust in the equation together with team-level control variables (i.e., teamwork, team size). Model 1 results again show that horizontal trust has a positive and significant relationship with performance ( $\beta = .31, p < .001$ ). Model 2 included organizational level variables in order to test for cross-level effects, that is, vertical trust and organizational size as a control variable. Unexpectedly, again, vertical trust was not significantly related to team performance ( $\beta = .03, ns$ ). Thus, Hypothesis 9 was not confirmed.

Hence, from these results it can be concluded that there are no cross-level effects of organization-level variables on the team-level outcomes. That is to say, there are two different processes where different types of trust have a mediating role. At team level, horizontal trust has a fully mediating role between healthy team practices and team performance. And, at organizational level, vertical trust has a fully mediating role between healthy organizational practices and ROA.

**Table 8**

*Results for the hierarchical linear models predicting Performance (ICC = 12%)*

Parameters	Model 1	Model 2
Intercept	4.90*** (0.05)	4.91*** (0.05)
Level 1 (teams)		
Teamwork	0.19*** (0.04)	0.19*** (0.05)
Team size	-0.01 (0.00)	-0.01 (0.00)
Horizontal Trust	0.31*** (0.05)	0.31*** (0.05)
Level 2 (organizations)		
Organizational size		-0.00 (0.00)
Healthy Org. Practices		-0.03 (0.11)

*Note.* Standard errors are in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

**Table 9**

Results for the hierarchical linear models predicting Performance (ICC=12%)

Parameters	Model 1	Model 2
Intercept	4.90*** (0.05)	4.92*** (0.04)
Level 1 (teams)		
Teamwork	-0.19*** (0.04)	-0.19*** (0.05)
Team size	-0.01 (0.00)	-0.01 (0.00)
Horizontal Trust	0.31*** (0.05)	0.31*** (0.05)
Level 2 (organizations)		
Organizational size		-0.00 (0.00)
Vertical Trust		0.04 (0.10)

Note. Standard errors are in parentheses.

\*  $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## DISCUSSION

The current study contributes to our understanding of the relationship among healthy organizational practices and performance explained by a psychological mechanism such as organizational trust at different levels and referents of companies based on social-exchange processes. Following a multilevel-multireferent framework, we have considered the aggregate perceptions from the teams and organization in order to test the mediator role of organizational trust (i.e., vertical and horizontal trust) between healthy organizational and team resources and practices and performance at the organizational and team levels of analyses.

### THEORETICAL IMPLICATIONS

Specifically, the current study offers evidence of: (a) *at the organizational level*, the positive and significant relationship between healthy organizational practices and vertical trust (Hypothesis 1); the positive and significant relationship between vertical trust measured and financial performance –ROA (Hypothesis 2); and the fully mediating role of vertical trust in the relationship between healthy organizational practices and financial performance (ROA) (Hypothesis 3); and (b) *at the team level*, the

positive and significant relationship between healthy team resources and (supervisor-rated) team performance (Hypothesis 4); the positive and significant relationship between horizontal trust and (supervisor-rated) team performance (Hypothesis 5); and the fully mediating role of horizontal trust in the relationship between healthy team practices and (supervisor-rated) team performance (Hypothesis 6). Contrary to our expectations, (c) we did not find evidence for *cross-level effects*.

Through regression analysis, with data aggregated at the organizational level, we have confirmed (Hypothesis 1) the relationship between healthy organizational practices implemented by HRM (i.e., work-family balance; mobbing prevention, psychosocial health and communication) and vertical trust. This result is in line with previous studies that pointed out that when organizations develop practices oriented toward improving the well-being of their employees, trust emerges (Acosta et al., 2012; Covey, 2006; Wright & McMahan, 1992). This is important information for HR practitioners on how to develop trust in their organizations. For example, by means of work-family balance practices (e.g., teleworking) allow employees/teams to conciliate their personal life and career (Cifre & Salanova, 2005).

Regarding Hypothesis 2, the relationship between organizational trust (i.e., vertical trust) and organizational performance (i.e., financial performance: ROA) was confirmed through regression analysis. This result is in line with the studies by Schneider and colleagues (2003) and Smith (1977), where employee attitudes at work are related to financial performance within organizations. In our case, if employees or teams trust their organizations, financial performance is improved.

Results of testing Hypothesis 3 with SEM using bootstrapping analysis revealed that organizational trust fully mediated the relationship between healthy organizational practices implemented by HRM (i.e., work-family balance, mobbing prevention, psychosocial health, and communication) and healthy outcomes (i.e., organizational financial performance). These results extend previous research conducted at the individual level of analysis, where healthy organizational practices are positively related to healthy employees and healthy organizational outcomes (Halbesleben, 2010; Lyubomirsky, King, & Diener, 2005; Dirk & Ferrin, 2001; Salanova, Agut, & Peiro, 2005; Walumbwa, Luthans, Avey, & Oke, 2011). The present study used aggregated perceptions at the organizational level as proposed by Fulmer and Gelfand (2012), and external (objective) criteria of performance, that is, ROA. This result therefore confirms the key role of vertical trust in organizational processes for competitive advantage

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(Andersen, 2005). Thus, vertical trust is a pivotal element for employees to feel good and perform well at work. We can conclude that organizations must foster trust between employees and supervisors/top managers because healthy practices implemented by HRM will impact positively on organizational performance (i.e., financial performance) via organizational trust.

Hypothesis 4 was tested through regression analysis with data aggregated at the team level. We have confirmed the relationship between healthy team practices (autonomy, coordination, feedback, and supportive team climate) and horizontal trust. This result shows that when groups share beliefs regarding their practices, they feel better. In this study, we can say that shared positive perceptions about the team resources allow trust in their co-workers to emerge. This result is in line with Torrente et al. (2012), where the authors pointed out that when teams perceived that they have team resources, healthy employee perceptions emerge (i.e., team work engagement).

Regarding Hypothesis 5, through regression analysis with data aggregated at the team level, we have confirmed the positive relationships between horizontal trust and (supervisor-rated) team performance. Following the recommendation to focus on a more collective level of analysis proposed by Wilson et al. (2004), the present study used ratings of team performance provided by the supervisor. It seems that when there is horizontal trust in a team, supervisor perceptions about team performance are more favorable. This result also confirms previous studies conducted by Costa (2003), where she pointed out that high work team trust leads to high team? task performance.

Results of the SEM of analyses for testing Hypothesis 6, revealed that horizontal trust fully mediated the relationship among healthy team practices (i.e., autonomy, coordination, feedback, and supportive team climate) and performance tested at the team level. Here, we have also considered an external criterion, which is team performance as evaluated by the supervisor. This result allows us to confirm the key role of trust at the team level. This means that when teams perceived that they have autonomy, they are coordinated, they receive feedback, and they have a supportive climate, horizontal trust emerges among co-workers and their (supervisor-rated) team performance is improved. Thus, organizations must consider implementing healthy practices in their teams in order to develop horizontal trust, because if members of a team trust each other, team performance will be better.

Hypotheses 7, 8 and 9 were not supported. These hypotheses considered the cross-level effects between the variables included in this study. Previous studies have demonstrated the positive relationship between organizational practices and performance (Budhwar & Debrah, 2001; Lyubomirski et al., 2005; Tremblay et al., 2010) or healthy employees and performance (Hakanen et al., 2006; Torrente et al., 2012), considering individual or team perceptions performance of employees' performance. However, using a multilevel framework, in the present study these relationships were not found. Our results show two motivational and parallel processes, where trust plays a key role as a mediator at the team (i.e., horizontal trust) and the organizational (i.e., vertical trust) levels. Therefore, organizations have to implement both healthy organizational practices (work-family balance; mobbing prevention, psychosocial health, and communication) and healthy team practices (i.e., autonomy, coordination, feedback, and supportive team climate) at the same time in order to develop trust at different organizational levels (i.e., vertical trust and horizontal trust) and thereby obtain high levels of performance (i.e., organizational financial performance and supervisor-rated team performance).

To sum up, the present study contributes theoretically to previous organizational trust research in two ways. First, it extends the body of knowledge about the key role of organizational trust (i.e., horizontal trust and vertical trust) in the relationship between healthy organizational resources and practices, and performance (team and organizational) using data aggregated at the organizational and team levels. The positive relationships that were found lend support and extend the social exchange theory (Rousseau, 2011). Previous research based on trust as a product of a social-exchange process (Vanhalo, Heilmann & Salminen, 2016) found positive relations between organizational trust dimensions and a positive outcome such as organizational commitment. In our study, at the organizational level, employees generate "(vertical) trust" on the organization when receive healthy practices and in turn, as a kind of "exchange" they perform better for the benefit of the company. Employees trust on the organization when promises regarding work-family balance, mobbing prevention, wellness & well-being and open communication are implemented in the company. This exchange response of employee due to positive trust developed because healthy practices are implemented in their company, as we mentioned earlier. Also, employees generate "(horizontal) trust" when they receive positive resources from the team such as autonomy, positive feedback, and supportive team positive climate. In turn, they perform better as a team as a way of benefits "exchange".

Second, although it is recognized that trust in organizations occurs at multiple levels (Rousseau et al., 1998) and using different referents (Fulmer & Gelfand, 2012), there is no clear findings about how different levels of organizational trust operates simultaneously with different referents, and it is missing research about this topic as Legood, Thomas and Sacramento (2016) pointed. In the current study, we tested two collective levels (organization vs. teams) of trust (vertical vs. horizontal) operating simultaneously in the same companies. So far, the main finding of the current research was that when studying organizational trust simultaneously in different companies and teams, the same process of social-exchange occurs as a kind of positive exchange of promises and expectations among employers and employees. However, this process only occurs in a parallel way due to we didn't find cross-level effects of trust between organization/teams. So far, although all variables at different levels of analysis and different referents in the current study correlated positively with each other, their influence only occurs in parallel. Therefore, "a positive mirror effect" is possible, where organizational and team social-exchange processes of trust are operating in the same way but being in parallel (as a mirror). This finding agrees with the assumption of construct quasi-isomorphism pointed by Fulmer and Gelfand (2012). So far, our findings confirm that trust across levels agree with the dimensions of positive expectations and willingness to be vulnerable and that the relations between these two dimensions (vertical vs horizontal trust) are comparable across levels (organization and team levels respectively). So, we show evidence for theoretical quasi-isomorphism drawn heavily on social exchange theory, as well as functional quasi-isomorphism because our constructs and relationships among constructs function in similar ways at different levels.

### PRACTICAL IMPLICATIONS

From a practical point of view, our findings could provide practitioners both in human resource management and business strategy, as well as managers in organizations, a better understanding of organizational trust as well as new and fresh knowledge and a more holistic understanding of the linkage between healthy practices, organizational trust and performance. Our results can facilitate different healthy practices and actions that could be carried out by HRM in order to build organizational trust in their teams and the organization as a whole from a perspective based on continuous prevention and promotion actions (Salanova, Llorens, Acosta, & Torrente, 2013). The organizational process results show the relevance of investing in work-family

balance, mobbing prevention, psychosocial health, and organizational communication in organizations. Investment in these practices will be interpreted by employees as a sign that the organization is concerned about their well-being, and consequently (vertically) trust in the organization will be enhanced. In turn, this will result in improved financial performance of the organization (i.e., ROA). The team process results show the relevance of investing in autonomy, coordination, feedback, and a supportive team climate. These healthy team practices are able to enhance (horizontal) trust and healthy team outcomes (i.e., supervisor-rated team performance).

### LIMITATIONS AND RESEARCH DIRECTIONS

The present study has some limitations. The first one is that most of the data were obtained by self-report instruments. However, aggregate rather than individual perceptions of teams and organizations have been considered and a multilevel framework was used, as proposed by Hox (2010). Moreover, two external and objective criteria were considered (i.e., ROA and supervisor-rated team performance) to minimize the common method variance bias, as recently recommended by Whitman, Van Rooy, and Viswesvaran (2010).

Secondly, the employee data in this study are mainly cross-sectional study. However, we have enclosed the ROA indicator of the next year as a depend variable at organizational level of analysis. Future studies should test the model including different waves. This would offer the opportunity to test the relationship between healthy organizational resources and practices, organizational trust (i.e., vertical trust and horizontal trust), and healthy organizational outcomes over time.

We agree with Fulmer and Gelfand (2012) that another interesting future area of research is about the trust climate construct considering the direct consensus or referent-shift models by Chan (1998). Using longitudinal designs, we could increase the knowledge about multilevel antecedents and consequences of trust climate as well as the influence of strength of the trust climate on important business outcomes such as performance.



## CONCLUSION

In conclusion, our findings suggest that healthy organizational/team practices influence organizational/team performance via organizational trust (vertical vs. horizontal). Two motivational and parallel processes were found. First, at the organizational level, vertical trust plays a fully mediating role between healthy organizational practices and organizational performance (ROA). Second, at the team level, horizontal trust plays a fully mediating role between healthy team resources and (supervisor-rated) team performance. Researchers and practitioners should use these results about the role of organizational trust in order to enhance positive organizations and business.

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**We can, We trust,  
and We do it!:**

Spirals of  
Collective  
Efficacy,  
Horizontal Trust,  
and Performance





# 7. WE CAN, WE TRUST, AND WE DO IT!: SPIRALS OF COLLECTIVE EFFICACY, HORIZONTAL TRUST, AND PERFORMANCE

Hedy Acosta<sup>1</sup>, Marisa Salanova<sup>1</sup>, Susana Llorens<sup>1</sup> and  
Pascale M. Le Blanc<sup>2</sup>

<sup>1</sup> WANT Research Team. Universitat Jaume I,

<sup>2</sup> Human Performance Management Group, Eindhoven  
University of Technology

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Correspondence concerning this article should be addressed to Hedy Acosta, Department of Social Psychology, Universitat Jaume I, Av. Sos Baynat, s/n. 12071. Castellón (Spain). Tel. +34 964729569. Fax +34 964729262. E-mail: hacosta@uji.es.



## ABSTRACT

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This present longitudinal study explored the role of horizontal trust in the relationship between collective efficacy beliefs and group performance (leader-rated) over time on a risky task. Based on Bandura's Social Cognitive Theory and the Healthy and Resilient Organization Model (Salanova, Llorens, Cifre, & Martínez, 2012), we tested how collective efficacy beliefs and group performance are reciprocally and indirectly related over time through their impact on horizontal trust. Specifically, in a three-wave longitudinal laboratory study among 494 individuals nested in 118 groups (rated by the 118 groups leaders) over time. Data were analysed at the group level. Our results showed that (1) horizontal trust has a mediating role between collective efficacy beliefs and group performance; and (2) a gain spiral exist whereby collective efficacy believes significantly increase over time. Theoretical and practical implications of our findings are discussed.

Key words: collective efficacy beliefs, horizontal trust, group performance, gain spirals.

### Practitioner Points

- Trust is a key element in the development of HEROs across time.
- Specially, the investment in horizontal trust produce across time an increase in efficacy beliefs and performance at collective level based a positive or gain spiral.

# WE CAN, WE TRUST, AND WE DO IT! SPIRALS OF COLLECTIVE EFFICACY, HORIZONTAL TRUST, AND PERFORMANCE

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## INTRODUCTION

Nowadays, organizational literature considers trust as imperative for the development and survival of organizations (Costa, 2000), especially, in this context of environmental changes and turmoil. The predominant literature on trust is focused at the individual level and studies its' relationships with different drivers and outcomes, for example, leadership effectiveness (Dirks & Ferrin, 2002; Gillespie & Mann, 2004), human resource management (HRM) perceptions (Graham & Tarbell, 2006), employee satisfaction (Edwards & Cable, 2009), and citizenship behavior (Mayer & Gavin, 2005; Walumbwa, Luthans, Avey, & Oke, 2011). Moreover, recent cross-sectional research pointed out that trust is an important underlying psychological mechanism in the relationship of organizational practices and resources with organizational outcomes, at different levels (i.e., group/team and organizational levels) (Salanova, Acosta, Llorens, & Le Blanc, 2017).

At the team level of analysis, there is cross-sectional evidence regarding the mediating role of trust in the relationship of team performance and effectiveness (Costa, 2000). Also, Acosta, Salanova, and Llorens (2012) showed that trust has a fully mediating role between healthy organizational practices (i.e., work-family balance, mobbing prevention, psychosocial health and communication) and work engagement (in term of vigor, dedication and absorption). We consider that organizations are essentially multilevel systems, and that trust operates at different levels within organizations, that is, the individual, team, and organizational levels of analysis. Therefore, attention to different levels is a theoretical and empirical imperative in research on trust (Klein, Dansereau, & Hall, 1994).

In many areas of human activity and endeavour, research has shown how groupwork can lead to greater efficiency or effectiveness (Weldon & Weingart, 1993). For example, when students work in cooperative groups rather than individually, they work harder, help less able group members, and learn more (Slavin, 1983). Reasons for the importance of working in a group are: (1) groups are the best way to enact

organizational strategy (Cohen & Bailey, 1997); (2) promote improved quality management (West, 2002); (3) effects upon financial performance (Macy & Izumi, 1993); and (4) models of group development suggest that over time as groups gain experience with the task and with each other, they develop processes and structures that facilitate goal accomplishment (Kozlowski, Gully, Nason, & Simith, 1999).

Based on above rationale, our study focused on the group level of analysis because by interacting within their group work, individuals are likely to develop shared perceptions, expectations, patterns of understanding, and norms of behaviour with their group colleagues, creating thereby opportunity for shared view to emerge (Anderson & West, 1998; West & Anderson, 1996). In this sense, individuals who trust their colleagues often engage in cooperative behaviors and do not monitor the work of their colleagues (Costa, Roe, & Taillieu, 2001). Trust in group is vital to team members' preparedness to cooperate (Korsgaard, Brodt, & Sapienza, 2003).

Furthermore, an important gap in the literature on trust is how it evolves over time. As Salanova and their colleagues (2011) pointed out, reciprocal gain processes are consistent with cyclic relationships between psychological states that positive relate to each other over time. In line with this rationale, the present study investigates how collective efficacy beliefs, horizontal trust, and group performance are reciprocally related to each other, thus creating gain spirals. Furthermore, and as we mentioned above, we propose that horizontal trust has a mediating role, as an underlying psychosocial mechanism, in the relationships of collective efficacy beliefs and group performance over time.

To do that, we are based on the HHealthy and Resilient Organization Model (HERO Model; Salanova et al., 2012). We understand HEROs to be those organizations that make systematic, planned, and proactive efforts to improve employees' and organizational processes and outcomes (Salanova, 2008, 2009; Salanova, Cifre, Llorens, Martinez, & Lorente, 2011). The HERO model has three main components: (1) healthy organizational resources and practices, (2) healthy employees, and (3) healthy organizational outcomes. Here, Salanova and her colleagues (2012) evidencing that healthy employee's component (e.g. trust) has a mediating role between healthy organizational resources and practices (e.g. work-family balance) and healthy organizational outcomes (e.g. performance). This evidence is in line with the previous research where trust has a mediating role in group processes acting as an underlying mechanism who allow that group resources to have an impact on group performance.



## 7. Horizontal Trust Over Time

Some characteristics of the HERO Model are: First, the variables included in the model are tested at different levels of analysis (i.e., individual, team/group and organizational). And second, the components of the model are interrelated between each other's. This last statement gives us insight about how these positive relationships can create gain spirals over time. Therefore, we investigate for the very first time how collective efficacy beliefs, horizontal trust, and group performance (rated by the leader) are dynamically and reciprocally related to each other, thus creating spirals. In other words, we attempt to provide evidence supporting horizontal trust as an underlying psychological mechanism in the relationship between collective efficacy beliefs and group performance (rated by the leader).

### EFFICACY BELIEFS

Efficacy beliefs are an important topic in psychology both at an individual level (self-efficacy) and at the collective level (i.e., collective efficacy). According to the Social Cognitive Theory (SCT), self-efficacy refers to "beliefs in one's capabilities to organize and execute the courses of action required producing given attainments" (Bandura, 1997, p.3). So, efficacy beliefs influence how people feel, how much effort they invest in actions, how long they persevere in the face of obstacles and failures, and how resilient they are to adversity (Salanova, Llorens, & Schaufeli, 2011). At the collective level, efficacy beliefs serve similar functions and operate through similar processes as self-efficacy beliefs do (Bandura, 1997). That means that people working in groups share beliefs in their collective power to produce desired results (Salanova et al., 2011). Following this rationale, we can define collective efficacy beliefs as "beliefs in the team capabilities to organize and execute the courses of action required to produce given attainments".

In the HERO Model (Salanova et al., 2012) efficacy beliefs are considered a positive psychological resource belonging to the component of healthy employees at the collective level of analysis (i.e., group level). Resources are defined as 'those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions or energies' (Hobfoll, 1989, p.516). For example, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) found that psychological resources such as self-efficacy, mental and

emotional competences, organizational-based self-esteem, and optimism are positively associated to well-being.

Bandura (2001) assumed that when people, at individual level, feel contented and satisfied they are more likely to believe that they are efficacious. George (1990, 1996) proposed that people who work together share beliefs (i.e., collective efficacy beliefs) and affective experience, thus displaying similar motivational and behavioural patterns. From these statements, we can assume that people who trust in their co-workers perform better thanks to positive shared perceptions and emotions about their group's ability to perform. In this way, Stajkovic, Lee, and Nyberg (2009) thought a meta-analysis revealed a positive correlation between collective efficacy and group performance. However, different studies (Bligh, Pearce, & Kohles, 2006; Salanova et al; 2011) posit that in the relationship between collective efficacy beliefs and performance there is an underlying psychological mechanism (i.e., trust).

## HORIZONTAL TRUST

Puusa and Tolvanen (2006) proposed that trust is both an interpersonal and collective phenomenon and is expressed at three levels within organizations: individual, team/group, and organizational. In this study, we consider the group level of trust, that is, horizontal trust, because: (1) study on trust at the group level has grown considerably, and (2) organizations have moved towards flatter and more team-based structures (Costa & Anderson, 2011). Based on Tan & Lim (2009) definition of organizational trust, we understood horizontal trust as employees' willingness at being vulnerable to the actions of their group, whose behaviour and actions they cannot control. Following this, Vandewaerde, Voordeckers, Lambrechts, and Bammens (2011) argue that people involved in groups have exchanges and the opportunity to demonstrate their trustworthiness and, when they accept each other's influence, to signal that they trust each other. Furthermore, horizontal trust reflects positive shared perceptions among group members and is likely to influence and be influenced by individual propensities and perceptions of trustworthiness and lead to behaviour patterns that reflect that positive work environment (Costa & Anderson, 2011).

Dresher, Korsgaard, Welpé, Picot, and Wigand (2014) proposed that trust is a critical mechanism, which leads to increased performance. Furthermore, these authors'

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state that trust is a dynamic attribute of the group. This argument provides a reason to examine explanatory mechanisms for the relationship between resources (i.e. collective efficacy beliefs) and performance (i.e. group performance). Simmons and Peterson (2000) consider that trust at the group level is a shared perception by the group and directly related to collective performance. For example, Bligh et al., (2006) pointed out that building trust among group members is one route through which changes in shared leadership may benefit performance.

Trust is likely to increase the overall effort individuals apply to group tasks and the degree to which they cooperate in the pursuit of collective goals (McEvelly, Perrone, & Zaheer, 2003). The relation between trust and high performance has been suggested by many authors (e.g., Bromiley & Commings, 1995; Butler, 1991; McAllister, 1995). Also, in a recent study, De Jong and Dirks (2012) proposed that group trust should foster higher levels of group performance.

## GROUP PERFORMANCE

Group performance refers to in-role and extra-role performance (Goodman and Svyantek, 1999) or task and contextual performance, respectively. Specifically, task performance includes activities that are related to the formal job. On the other hand, contextual performance refers to actions that exceed what the employee is prescribed to do (e.g., helping others or doing voluntary overtime). Hence, considering the two complementary types of job performance provides a comprehensive view of employees' performance. Different scholars have confirmed the positive relationship between employees' well-being and job performance at the individual level. For instance, Schaufeli, Taris, and Bakker (2006) concluded that engaged employees show more in-role and extra-role performance in a broad range of companies and occupations. In a study conducted at the team level, by Torrente, Salanova, Llorens, and Schaufeli (2012) pointed out that high levels of team social resources (i.e., supportive team climate, coordination, and teamwork) were related to higher levels of team work engagement, which acted as a mediator between team social resources and team performance, as assessed by the immediate supervisor.

As trusting bonds develop within the group, more individuals should be willing to engage in extra effort towards helping their trusted colleagues and the group as a

whole. As trust spreads through the group, cooperative behavior should proliferate, contributing to increase in performance. For example, individuals who trust one another spend less time monitoring each other (Langfred, 2004) freeing up attention and effort for other work activities (McEvely et al., 2003; Serva, Fuller, & Mayer, 2005). So, trust is critical to cooperation and performance within groups (Colquitt, Scott, & LePine, 2007; De Jong & Dirks, 2012) as a strong link between group resources and performance.

### SPIRALS OF COLLECTIVE EFFICACY BELIEFS, HORIZONTAL TRUST, AND GROUP PERFORMANCE

According to Bandura's social cognitive theory, efficacy beliefs may act as powerful antecedents of well-being (i.e., horizontal trust) and organizational behaviour (i.e., group performance). However, there is strong evidence in the literature that also provides empirical examples of reciprocal causation. In this way, the research conducted by Llorens and her colleagues offer evidence about the power of efficacy beliefs over time, that is: (1) Llorens, García, Salanova, and Cifre (2003) found that job resources in terms of easy access to information and relevant materials, increased work engagement and future efficacy beliefs, whereas in the reversed direction engagement and efficacy beliefs increased the availability of resources; (2) Llorens, García, and Salanova (2005) found that poor efficacy beliefs led to exhaustion and cynicism (the core of burnout) and *vice versa* in a two-wave longitudinal study with teachers; and (3) Llorens, Schaufeli, Bakker, and Salanova (2007) carried out a two-wave study among Spanish university students who had to perform two group problem -solving tasks by means of computers in a laboratory setting. Their results showed the existence of a positive gain spiral. Efficacy beliefs played a mediating role between task resources and engagement. Moreover, engagement increased efficacy beliefs, which in turn increased task resources over time.

Other example of the efficacy beliefs over time is the research conducted by Salanova, Bakker, and Llorens (2006) in a two-wave study with teachers found that efficacy beliefs have a reciprocal effect on social resources (i.e., organizational social climate) and well-being (i.e. flow).

Reciprocal causation is quite plausible because we are dealing with dynamic processes that unfold over time, rather than with one-directional causal relationship

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(Bandura, 1997, 2001). Gain spirals refer to amplifying loops in which cycling reciprocal relationship among constructs build on each other positively over time (Lindsley, Brass, & Thomas, 1995). As Salanova and her colleagues (2011) pointed out we need to understand the sequences of psychosocial experiences that explain these relationships rather than just isolate episodes. For this reason, the concept of reciprocal gain processes plays a key role. A longitudinal research design is necessary to disentangle cause and effect. In order for a gain spiral to exist, three basic conditions have to be met: (1) normal and reversed causation (also known as a reciprocal relationship); (2) an increment in the mean levels of the variables over time; and (3) gain spirals should be examined in longitudinal research with at least three waves that make it possible to test for an increase, decrease, or stability of the mean levels across time. Hence, there is a need for theory-grounded longitudinal field studies that assess variables over time using proper sequences and intervals that enhance confidence in (reciprocal) causal relationships (Mathieu & Taylor, 2006).

### THE CURRENT STUDY

Taking previous research on efficacy beliefs from SCT, the objective of our study is to examine, for the very first time, a reciprocal structural model of dynamic gain spirals of collective efficacy beliefs, horizontal trust, and group performance (rated by the leader). From a collective perspective, we test how efficacy beliefs influence group performance (rated by supervisor) indirectly over time through their impact on horizontal trust. Specifically, our hypothesis is:

H<sub>1</sub>: It is expected that collective efficacy beliefs and group performance are reciprocally and indirectly related over time through their impact on horizontal trust.

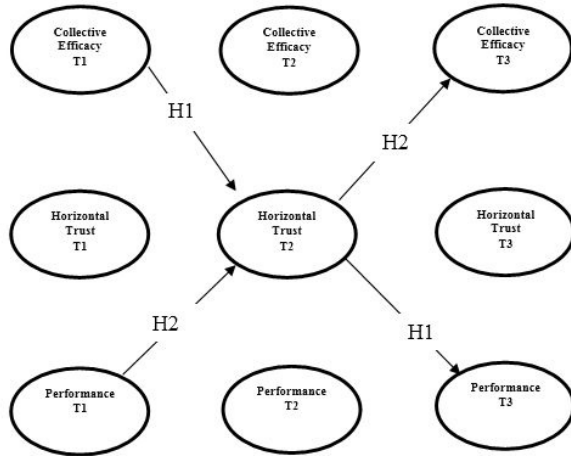


Figure 1. Research model

## METHOD

### SAMPLE AND PROCEDURE

At the beginning of the academic year 2009, we invited university students to participate voluntarily in a three-wave laboratory study. In order to be able to participate, each student had to invite two more participants (non-students). We created a virtual platform, which enabled students to choose their schedule to participate in the experiment. We explained to the participants that the aim of this study was to investigate group functioning during the performance of a risky task. Participants received a financial reward (20 €) afterwards.

We organized laboratory sessions with 118 groups. A heterogeneous sample was composed with university students from different areas (Psychology, Economics, Law, Engineering, Communications; 71.6%), full time workers (16.8%) from a wide range of occupations, and unemployed people (11.6%). The total sample consisted of 494 participants, 320 women (64.7%) and 174 men (35.3 %) with an average age of

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23.2 years. Participants were randomly assigned to the 118 groups, which were similar in magnitude (i.e., four to six members each) and structure (i.e. similar combination of students, employed and unemployed people). The oldest participant of a group was assigned the role of group leader. The task that had to be performed by the groups was a risky task where newly formed groups had to take decisions regarding an organization-management simulation. We used the SITMECOM program (<http://www.aloj.us.es/gideao/sitmecom.html>) to conduct this laboratory experiment. This program is usually used in economical sciences to simulate managing an organization in different contexts. More specifically, the risky task consisted of participants taking management decisions about an Information & Communication Technology organization in four organizational areas that have an impact on organizational outcomes: Productivity, Finances, Marketing and Human Resources. All newly formed groups began the simulation risk task, during three wave laboratory sessions (T1, T2, and T3), in the same starting point, that means that all groups starting in each sessions in the same conditions given for the SITMECOM program. Before starting the risky task, the participants filled out a questionnaire regarding their collective efficacy beliefs and after finishing the risky task, they filled out a questionnaire regarding their perceptions of horizontal trust. The leaders of each group filled out a questionnaire regarding group performance at T1, T2 and T3 after finishing the risky task.

## MEASURES

### **Independent variables**

*Collective Efficacy Beliefs* were assessed by a six-item self-constructed questionnaire based on Salanova, Llorens, Cifre, Martínez, and Schaufeli (2003). An example item is: 'My group is able to do this task, even though it is complex'. Internal consistencies for the scale were above the cut-off point of .70 (alpha T1= .90; alpha T2= .93; alpha T3= .95) (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally unable to do*) to 6 (*totally able to do*). In order to lead respondents' attention from the individual level to the group level, all the items were focused on group perceptions.

*Horizontal trust* was assessed by means of four items based on McAllister's scale (1995) and validated in the HERO questionnaire (Salanova et al., 2012). An example item is: '*In my group, we can share our ideas, emotions and hopes*'. Internal consistencies for the scale were above the cut-off point of .70 (alpha T1= .80; alpha T2= .85; alpha T3= .88) (Nunnally & Bernstein, 1994). Respondents answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*). Again, in order to lead respondents' attention from the individual level to the group level, all the items focused on group perceptions.

### **Dependent variable**

*Group performance* was assessed by six items adapted from the Goodman and Svyantek scale (1999). An example item is e.g., '*The group that I lead achieves its work goals*'. Internal consistencies for the scale were above the cut-off point of .70 (alpha T1= .87; alpha T2= .90; alpha T3= .92). Group leaders answered using a 7-point Likert-type scale ranging from 0 (*totally disagree*) to 6 (*totally agree*).

### **Preliminary analyses: Aggregation indices**

The questionnaire measures in this study involved group-level variables from two different sources of information. Collective efficacy beliefs and horizontal trust were assessed by the group members using their own group as a referent. Group performance was assessed by the group leaders using their own group as a referent. All scales were included in the HERO Questionnaire adapted to laboratory setting (Salanova, Llorens, Cifre, & Martínez, 2012).

As the variables in our research model were aggregates of lower-level shared perceptions, interrater reliability and interrater agreement indices had to be computed (Lebreton & Senter, 2008). Group-level agreement was assessed using a two-fold approach: (1) following a consistency-based approach, ICC<sub>1</sub> was calculated. Although there is no fixed cut-off point for ICC<sub>1</sub>, a value of .01 might be considered a small effect, a value of .10 might be considered a medium effect, and values superior to .25 might be considered a large effect (see Murphy & Myers, 1998); (2) following a consensus-based approach, the Average Deviation Index was computed (AD<sub>M(i)</sub>; Burke, Finkelstein, &



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Dusig, 1999), whereby agreement among group members or organization as a whole is established when  $AD_{M(j)}$  is equal to or less than 1 for 7-point Likert-type scales (Burke et al., 1999). Analyses of Variance (ANOVA) were also performed in order to ascertain whether there was significant between-group discrimination for the measures at the group level. All the variables showed between small and medium effects for  $ICC_1$  and ANOVA analyses indicated a significant discrimination of variables between groups (T1 from .03 to .25; T2 from .13 to .38; and T3 from .18 to .43).  $AD_{M(j)}$  indices showed values lower than 1 (average  $AD_{M(j)}$  was .74 in T1, .83 in T2 and .86 in T3). In conclusion, results indicated that group-level agreement for collective efficacy beliefs and horizontal trust was sufficient to justify the aggregation of individual scores to the group level. Finally, we computed descriptive statistics and intercorrelations among the scales based on data aggregated at the group level.

### Data Analyses

Firstly, we calculated internal consistencies (Cronbach's  $\alpha$ ) for individual data using the PASW 18.0 software application. Secondly, Harman's single factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) was performed for the group members' variables in the study in order to test for bias due to common method variance. However, it is important to keep in mind that the dependent variables in our database (i.e. group leader perceptions of performance) came from different sources than the independent ones. Finally, we used Structural Equation Modeling (SEM) to test our hypothesis (at the group level of analysis). That is, we expected that collective efficacy beliefs and group performance are reciprocally and indirectly related over time through their impact on horizontal trust.

### Data analyses: Model Fit

To test our hypothesis, we used SEM. Five competitive models were tested: (1) the *Stability Model* (M1) without cross-lagged structural paths, but with temporal stabilities and synchronous correlations among variables at T1 and among variables at T2 and T3. Temporal stabilities were specified as correlations between the corresponding constructs at T1, T2 and T3 without specifying the variance in direct or indirect paths (Pitts, West, & Tein, 1996); (2) the *Causality Model* (M2), which includes additional

cross-lagged structural paths from T1 collective efficacy beliefs to T2 horizontal trust, and to T2 group performance (leader-rated), as well as from T2 to T3 variables; (3) the *Reversed Causation Model* (M3), which is also identical to M1, but includes additional cross-lagged structural paths from T1 group performance (leader-rated) to T2 horizontal trust and T2 collective efficacy beliefs, and from T1 horizontal trust to T2 collective efficacy beliefs, as well as the same relationships between T2 to T3 variables; (4) the *Reciprocal Model (Hypothesized Model)*(M4) which includes reciprocal relationships among collective efficacy beliefs, horizontal trust, and group performance (leader-rated) at three waves, and therefore, includes all the paths of M2 and M3; and (5) the *Constrained Model* (M5), in which different parameters are constrained to be equal in order to control for the stability between the constructs from T1 to T2 and, to T3. We allowed the measurement errors of the corresponding indicators of T1, T2, and T3 to covary over time (Pitts, West, & Tein, 1996).

We used maximum likelihood estimation methods in which the input for each analysis was the covariance matrix of the items. We assessed three absolute goodness-of-fit indices to evaluate the goodness-of-fit of the models: (1) the  $\chi^2$  goodness-of-fit statistic; (2) Adjusted Good-fitness-of-fit (AGFI); and (3) the Root Mean Square Error of Approximation (RMSEA). The  $\chi^2$  goodness-of-fit index is sensitive to sample size, for this reason is recommended to use relative goodness-of-fit measures (Bentler, 1990; Marsh, Balla, & Hau, 1996). So, four relative goodness-of-fit indices were used: (1) Comparative Fit Index (CFI), (2) Normed Fit Index (NFI); (3) Tucker-Lewis Index (TLI, also called the Non-Normed Fit Index); and (4) Incremental Fit Index (IFI). For RMSEA, values smaller than .05 are considered as indicating an excellent fit, values smaller than .08 are considered as indicating an acceptable fit whereas values greater than .1 should lead to model rejection (Browne & Cudeck, 1993). For the relative fit indices, values greater than .90 are indicative of a good fit (Hu & Bentler, 1999). Furthermore, a repeated measures MANOVA test was conducted to assess if there were significant differences in the scores on the study variables on T1, T2 and T3.

## RESULTS

### DESCRIPTIVE ANALYSES

Means, standard deviations, Cronbach's alphas, and intercorrelations among the variables at the individual, the team, and the organizational levels are displayed in Table 1, Table 2, and Table 3, respectively. As expected, all study variables were positively and significantly correlated. The results of Harman's single factor test (Podsakoff et al., 2003) on the individual database ( $N = 871$ ) revealed a bad fit to the data,  $\chi^2(18) = 169.658$ ,  $p = .000$ , RMSEA = .201, CFI = .676, NFI = .587, TLI = .565, IFI = .678. In order to avoid the problems related to the use of Harman's single factor test (see Podsakoff et al., 2003), we compared the results of the one latent factor model with a model considering four latent factors. Results showed a significantly lower fit of the model with one single factor in comparison to the model with multiple latent factors, Delta  $\chi^2(2) = 109.424$ ,  $p < .001$ . Consequently, we may consider that common method variance is not a serious deficiency in this dataset.

**Table 1**

*Means, standard deviations, aggregation indices, and intercorrelations among the study variables at the individual level ( $N = 494$ ) and at the group level ( $N = 118$ )*

Variables	M	SD	$\alpha$	ICCL	AD <sub>(M)</sub>	1	2	3	4	5	6	7	8	9
1. Efficacy Beliefs T1	3.52	.52	.90	.25	.81	-	.27***	.30***	.51***	.14**	.21***	.40***	.15**	.16***
2. Horizontal Trust T1	4.77	.53	.80	.03	.67	.27***	-	.41***	.29***	.61***	.28***	.18***	.52***	.24***
3. Performance T1	4.29	.95	.87	-	-	.30**	.35***	-	.44***	.36***	.90***	.53***	.30***	.58***
4. Efficacy Beliefs T2	4.27	.55	.93	.38	.92	.50***	.25***	.47***	-	.23***	.37***	.59***	.22***	.35***
5. Horizontal Trust T2	5.10	.52	.85	.13	.74	.13*	.68**	.30**	.23*	-	.42***	.24***	.67***	.36***
6. Performance T2	4.94	1.00	.90	-	-	.20**	.24**	.92***	.46***	.32***	-	.55***	.33***	.61***
7. Efficacy Beliefs T3	5.52	.68	.95	.43	.94	.40***	.19**	.68*	.66***	.29**	.75***	-	.21***	.48***
8. Horizontal Trust T3	5.85	.60	.88	.18	.77	.14*	.53***	.24*	.24*	.69***	.26***	.26**	-	.55***
9. Performance T3	5.62	.96	.92	-	-	.16*	.25***	.38***	.38***	.30***	.63***	.53***	.55**	-

Note: Correlations are presented at the individual-level (above the diagonal) and at the group-level (below the diagonal)  
\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

## THE HYPOTHESISED STRUCTURAL MODEL

Table 2 displays the overall fit indices of the competing models. The model fit of the *causality model* (M2) is superior to that of the *stability model* (M1) [Delta  $\chi^2(10) = 20.22, p < .001$ ]. This suggests the relevance of cross-lagged paths from T1 collective efficacy beliefs to T2 horizontal trust and T3 group performance (leader-rated). Furthermore, the *reversed causality model* (M3) also fits the data significantly better than the *stability model* (M1) [Delta  $\chi^2(12) = 24.68, p < .001$ ] and than the *causality model* (M2) [Delta  $\chi^2(4) = 9.46, p < .01$ ]. This indicates that the model with the cross-lagged paths from T1 group performance (leader-rated) to T2 horizontal trust and T3 collective efficacy beliefs, also shows a better fit to the data than both the model including only temporal stabilities and synchronous correlations (M1) and the model including causal relationships among the variables (M2). Moreover, the *reciprocal model* (M4) appears to be superior to the *stability model* (M1) [Delta  $\chi^2(16) = 45.27, p < .001$ ], the *causality model* (M2) [Delta  $\chi^2(6) = 25.05, p < .001$ ], and the *reversed causality model* (M3) [Delta  $\chi^2(4) = 15.59, p < .001$ ]. Finally, the *reciprocal model* (M4) also appears to be superior to the *constrained model* (M5) [Delta  $\chi^2(1) = 9.12, p < .001$ ]. Thus, both the causal and the reversed causal paths are important, as the model with cross-lagged reciprocal relationships between collective efficacy beliefs, horizontal trust, and performance (leader-rated) (M4) fits the data best, even when temporal stability between the constructs has been controlled for. The final model with only the significant paths is depicted in Figure 2.

**Table 2**

*Fit Indices for Structural Equation Models by aggregated data (N = 118)*

Models	$\chi^2$	df	RMSEA	GFI	AGFI	NFI	IFI	TLI	CFI	AIC	Difference Test
M1 Stability	66	30	.11	.87	.82	.59	.73	.66	.71	285.32	
M2 Causality	45.78	20	.11	.93	.80	.72	.88	.63	.79	246.46	a = 20.22 (10)***
M3 Reversed	36.32	18	.11	.91	.81	.71	.81	.62	.79	213.21	a = 24.68(12)*** a = 9.46(4)**
M4 Reciprocal	20.73	14	.06	.96	.87	.87	.95	.86	.95	198.45	a = 45.27(16)*** a = 25.05(6)*** a = 15.59(4)**
M5 Constrained	29.85	15	.06	.95	.88	.86	.94	.85	.94	201.15	a = 36.15(15)*** a = 24.07(5)*** a = 6.47(3)** a = 9.12(1)*

Note.  $\chi^2$  = Chi-square; df = degrees of freedom; GFI = Goodness-of-Fit Index; AGFI = Adjusted Goodness-of-Fit Index; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; TLI = Tucker-Lewis Index; AIC = Akaike Information Criterion; ECVI = Expected Cross-Validation Index. \*\*  $p < .01$ \*\*\*  $p < .001$ ; a = Chi-square differences.

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The findings from this study show that T1 collective efficacy beliefs are related to T3 performance (leader-rated) indirectly through T2 horizontal trust. More specifically, T1 collective efficacy beliefs are positively related to T2 horizontal trust ( $\beta = .22, p < .001$ ) and T3 performance (leader-rated) ( $\beta = .34, p < .001$ ). Additionally, reversed causal effects were also observed: T1 performance (leader-rated) is positively related to T2 horizontal trust ( $\beta = .31, p < .001$ ) and T3 collective efficacy ( $\beta = .48, p < .001$ ). As an expected, T1 horizontal trust is positive related to T2 collective efficacy beliefs ( $\beta = .32, p < .01$ ) and T2 group performance ( $\beta = .12, p < .01$ ). Furthermore results show that T1 collective efficacy beliefs are significantly related to T2 horizontal trust ( $r = .55$ ) and T3 group performance ( $r = .12$ ). Also T2 collective efficacy beliefs are significantly related to T3 horizontal trust ( $r = .46$ ).

A repeated measures MANOVA test was conducted to assess if there was significant difference in the scores on the study variables depending on time: collective efficacy beliefs, horizontal trust, and group performance. Significant multivariate effects were found for the main effect of time (T1, T2, T3), Wilks's Lambda = .348  $F(116, 427), p < .0$ , multivariate  $\eta^2 = .21$ ). Intra-subject contrasts revealed a significant quadratic trend for collective efficacy beliefs [ $F(1, 125) = 13.14, p < .01, r = .23$ ]; horizontal trust [ $F(1, 125) = 18.26, p < .01, r = .32$ ]; and for group performance [ $F(1, 125) = 11.45, p < .01, r = .11$ ]. These results suggest that there are gain spirals from T1 via T2 to T3 in terms of collective efficacy beliefs, horizontal trust and group performance.

Finally, we conducted Sobel tests (Sobel, 1988) to confirm the mediating role of horizontal trust in each time. Within each of the waves, the mediation effects were all significant, that is, T1 horizontal trust mediates the relationship between T1 collective efficacy beliefs and T1 group performance (Sobel  $t = 2.45, p = .01$ ); T2 horizontal trust mediates the relationship between T2 collective efficacy beliefs and T2 group performance (Sobel  $t = 3.84, p = .001$ ); and T3 horizontal trust mediates the relationship between T3 collective efficacy beliefs and T3 group performance (Sobel  $t = 3.96, p = .001$ ). Furthermore, we performed a Sobel test regarding the mediating role of T2 horizontal trust in the relationship between T1 collective efficacy beliefs and T3 group performance, which again turned out to be significant (Sobel  $t = 3.78, p = .01$ ).

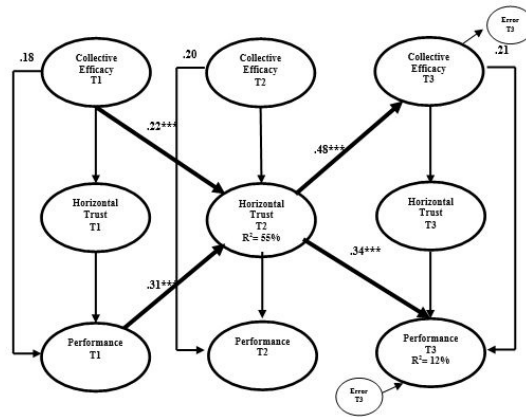


Figure 2. Structural path coefficients of the reciprocal Model (hypothesized model) (M4) among new-former group (N= 118).

Notes: Solid lines represent direct and reversed causality. We display only significant coefficient.

## DISCUSSION

In this longitudinal laboratory study among 118 groups working on a management simulation, we tested a structural model of dynamic gain spirals of collective efficacy beliefs. Specifically, we examined if collective efficacy beliefs and group performance (rated by the leader) are reciprocally and indirectly related over time through their impact on horizontal trust. The results of this study contribute to our understanding of the important role efficacy beliefs play in dynamic gain spirals which increase both horizontal trust and group performance. Also, we confirm the pivotal role of trust as a mediator of the relationships between collective efficacy beliefs and performance over time.

Our findings show that high levels of T1 collective efficacy beliefs impact group T3 performance via T2 horizontal trust creating a gain spiral over time. The effect of horizontal trust as underlying mechanism linking collective efficacy beliefs and group

## 7. Horizontal Trust Over Time

performance over time is indicating that is important to invest in group resources such as collective efficacy beliefs (i.e., through the four sources of efficacy beliefs) because they allow horizontal trust to emerge and impact group performance. Furthermore, this study provides evidence for the idea that in groups, people develop shared perceptions through their social interactions allowing collective (group) perceptions to emerge. Our study focused on the relationship between collective efficacy beliefs, horizontal trust and group performance (rated by the leader) over time. Studying trust at the group level of analysis and over time represents a novelty in the research of trust. As Costa and Anderson (2011) proposed, horizontal trust reflects shared perceptions among group members and is likely to influence and be influenced by individual propensities and perceptions of trustworthiness, leading to behaviour patterns that reflect those shared perceptions. In this way, trust is likely to increase the overall effort individuals apply to group tasks and the degree to which they cooperate in the pursuit of collective goals, thus leading to better group performance (McEvelly et al., 2003).

Also, results of this study offer evidence that supported one of the premises of the HERO Model, that is, that healthy employee is a key element. This means that, if the organizations implement healthy resources and practices, they have a positive impact on employee health, which in turn has a positive impact on organizational outcomes. If organizations have positive outcomes, is more likely that they will again implement resources and practices in order to create a positive spiral over time. Empirical evidence on the importance of collective efficacy beliefs as a promotor of reciprocal gain spirals within groups and organizations is solid and consistent (Llorens, et al., 2007; Salanova, et al., 2011). Collective efficacy beliefs can be considered resources that are positively related to well-being and good performance (Stajkovic, Lee, and Nyberg, 2009; Xanthopoulou, Bakker, Demerouti, and Schaufeli, 2009). To summarize, our results show that when a group has high levels of collective efficacy beliefs, group members trust each other, and as a consequence they perform better.

Moreover, our findings demonstrate positive gain spirals of efficacy beliefs. We observed significant increases in collective efficacy beliefs as well as in horizontal trust and group performance over time. It is interesting to point out that in this study we used data aggregated at the group level of analysis ( $N=118$ ) that showed a positive relationship between collective efficacy beliefs, horizontal trust and group performance, as well as significant quadratic trend at three variables considered in the study.

## THEORETICAL AND PRACTICAL IMPLICATIONS

Regarding theoretical implications, the results of our study corroborate previous evidence in the study of SCT where efficacy beliefs represent a strong antecedent of group processes over time (Salanova, et al., 2011). According to several researchers (Fulmer and Gelfand, 2012; Salanova et al., 2011), studying group processes at collective levels of analysis over time is an imperative because this approach contributes to understanding the group functioning based on shared perceptions. Here, the HERO model emerges as a positive and modern organizational approach to explain group and organizational processes from a collective and longitudinal perspective. For this reason this study addresses the call from researchers to study trust at the collective level and tests the reciprocal causal relationship of collective efficacy beliefs, horizontal trust and group performance. Following the HERO Model, we confirm the relationship of the two main components of the HERO model over time. That is, healthy employees (in terms of collective efficacy beliefs and horizontal trust), and healthy outcomes (in terms of group performance rated by supervisors).

In terms of practical implications, organizations could invest in promoting collective efficacy, for example, through the four sources of efficacy beliefs, that is, mastery experiences, vicarious experiences, social persuasion, and emotional affective states; in order to increase or develop horizontal trust and group performance over time. Specifically, a group could increase their emotional affective states through emotional intelligence training programs. Furthermore, group leaders could be train on how to provide feedback about group performance as a social persuasion mechanism in order to achieve the group goals. Finally, the group could celebrate their success and mastery experiences in order to increase their efficacy as a group.

## LIMITATIONS AND STRENGTHS OF THE STUDY AND FUTURE RESEARCH

A limitation of this study is the use of self-report measures. On the other hand, our study has the following strengths: (1) the use of longitudinal research design that tests the cross-lagged effects between three waves, (2) two sources of information, that is, data on collective efficacy beliefs and horizontal trust were provided by group members and, group performance was evaluated by the group leader, (3) the sample was composed of 118 groups representing a large sample over the three waves.



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Future research could be oriented to performing and evaluating positive interventions in groups in order to increase collective efficacy beliefs and horizontal trust. As mentioned above, interventions to promote efficacy beliefs could be focused, for example, on emotional intelligence (emotion affect) or giving and receiving feedback (social persuasion).

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## **¿Confiar o no Confiar?:**

El rol mediador  
de la confianza  
entre el trabajo  
en equipo y el  
engagement en el  
trabajo







## 8. ¿CONFIAR O NO CONFIAR?: EL ROL MEDIADOR DE LA CONFIANZA ENTRE EL TRABAJO EN EQUIPO Y EL *ENGAGEMENT* EN EL TRABAJO

Hedy Acosta<sup>1,2</sup>, Susana Llorens<sup>2</sup>, Roberto Escaff<sup>1</sup>,  
Juan-Pablo Díaz-Muñoz<sup>1</sup>, Silvia Troncoso<sup>1</sup>, Marisa  
Salanova<sup>2</sup> y Jorge Sanhueza<sup>1</sup>

Universidad Adolfo Ibáñez<sup>1</sup>

WANT Research Team. Universitat Jaume I<sup>2</sup>

### **Nota del Autor**

Este estudio ha sido efectuado en el marco de un proyecto de investigación para optar al título del Magister en Psicología Organizacional de la Universidad Adolfo Ibáñez.

La correspondencia sobre este artículo debe enviarse a Hedy Acosta, Departamento de Psicología Social. Universitat Jaume I. Av. Sos Baynat, s/n., 12071 Castellón (Spain). Tel. +34 964729955. Fax +34 964729262. E-mail: hacosta@uji.es.



## RESUMEN

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El presente estudio analiza el rol mediador de la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) en la relación existente entre trabajo en equipo y el *engagement*. La muestra está compuesta por 365 trabajadores de 3 organizaciones chilenas que completaron un cuestionario pensando en su equipo de trabajo de acuerdo al cuestionario del Modelo de Organizaciones Saludables y Resilientes, HERO (Salanova, Llorens, Cifre, & Martínez, 2012). A través de ecuaciones estructurales, los hallazgos empíricos evidencian que la confianza del equipo actúa como mediador total entre trabajo en equipo y el corazón del *engagement* en el trabajo. Finalmente se discuten los resultados desde el Modelo HERO, así como sus aplicaciones teóricas y prácticas.

*Palabras clave:* confianza del equipo, trabajo en equipo, *engagement* en el trabajo

## ABSTRACT

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The present study aim to analyze the mediating role of trust on team (i.e., trust in the supervisor and horizontal trust) between the relationship of teamwork and work engagement. Sample was composed by 365 employees belong three Chilean organization. They filled out a questionnaire thinking in their teams based on the HERO Model (Salanova, Llorens, Cifre, & Martínez, 2012). Through structural equation model, the results have showed that trust on team fully mediate the relationship between teamwork and work engagement. Based on the HERO Model the results are discussed. Finally, theoretical, and empirical implications are proposed.

*Keywords:* team trust, teamwork, work engagement.

## ¿CONFIAR O NO CONFIAR?: EL ROL MEDIADOR DE LA CONFIANZA ENTRE EL TRABAJO EN EQUIPO Y EL *ENGAGEMENT* EN EL TRABAJO

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### INTRODUCCIÓN

La confianza es un constructo estudiado desde diferentes disciplinas, por ejemplo, desde la Psicología, la Economía, la Sociología y las Ciencias Políticas (Fernández, 2015; Fukuyama, 1996; Sandoval, 2011; Sanhueza, 2008; Valenzuela, 2007; Zaheer, McEvily, & Perrone, 1998). Estas disciplinas comparten sus hallazgos con respecto a la relevancia de la confianza como proceso subyacente en las interacciones interpersonales y organizacionales. En el contexto organizacional, se ha puesto en evidencia que si existe confianza las relaciones son más efectivas, existe seguridad emocional y psicológica para que las personas conecten con los demás y desplieguen sus fortalezas (Fernández, 2015; Sandoval, 2011).

Entendemos por confianza organizacional “la voluntad de los empleados a ser vulnerables a las acciones de su organización, sin que los empleados tengan control sobre estas acciones y conductas” (Tan & Lim, 2009, p.46). Las investigaciones sobre la relación de la confianza en los procesos organizacionales evidencian que tiene un rol mediador entre las prácticas y recursos que las organizaciones implementan, el bienestar de los trabajadores y los resultados organizacionales positivos (Costa, 2003; Kiffin-Petersen & Cordery; Salanova, & Llorens, 2015; Lin, 2010; Olveira, Llorens, Acosta, & Salanova, 2017).

#### **Chile: Una evidencia poco alentadora**

De acuerdo con los datos del World Values Survey (2010 – 2014; citado en Santander - Centro UC Políticas Públicas, 2015), sólo el 12,4% de los chilenos/as piensa que se puede confiar en la mayoría de las personas, ubicando a Chile dentro del 30% de países con menor confianza social del mundo, cayendo este indicador a casi la mitad en los últimos 20 años (Santander - Centro UC Políticas Públicas, 2015). Similar evidencia muestra el Barómetro de la Política (Mori-Cerc, marzo 2015): mientras en julio de 2001, el 19% de los chilenos decía confiar en la mayoría de las personas, en marzo de 2015

solo lo hacía el 10%. En materia político - institucional, el porcentaje de personas que dice tener mucha confianza en el gobierno, los tribunales de justicia y el parlamento llega al 5,5%, 4,1% y 1,5% respectivamente, los guarismos más bajos de la muestra (PNUD 2011). El Índice Paz Ciudadana - GfK Adimark (enero 2015) muestra que la evaluación del gobierno, pasa de una nota 4,5 (con mínimo 1 y máximo 7) el año 2010, a un 3,8 en 2014. Para los mismos años, los tribunales de justicia descienden de 3,4 a 2,9 y el Parlamento de 3,3 a 2,7. En el ámbito económico, el indicador mensual de confianza empresarial (ICARE - Universidad Adolfo Ibáñez, agosto 2015) entrega un valor de 39,7 puntos (escala de 0 a 100), ubicando las expectativas empresariales en un nivel pesimista, mientras el catastro de proyectos de inversión (Sociedad de Fomento Fabril, 2014) muestra una disminución del 9,3% en el monto invertido en relación al año anterior. Estos datos hacen reflexionar con respecto a una crisis de confianza en las organizaciones chilenas. Dado que la confianza es un elemento central en las organizaciones debido a que permite que los procesos organizacionales se realicen exitosamente, se hace necesario evidenciar desde una perspectiva positiva y apreciativa que elementos ayudan a crear confianza en las organizaciones chilenas.

Los datos señalados anteriormente son poco alentadores en nuestro país, por tanto, el presente estudio propone una mirada apreciativa respecto de lo que sucede con la confianza en las organizaciones, una perspectiva de lo que funciona bien y abre posibilidades en el quehacer organizacional. De este modo, desde la psicología ocupacional positiva, el Modelo de Organizaciones Saludables y Resilientes (HERO; *HEalthy & Resilient Organizations*; Salanova, Llorens, Cifre, & Martínez, 2012), resulta ser un marco teórico adecuado para la propuesta de este estudio.

La psicología clásica, a través del psicoanálisis y el conductismo, han tenido una mirada patologizante de la persona humana. Por el contrario, movimientos como la indagación apreciativa, la psicología positiva y el estudio de los recursos y fortalezas, sostienen que el ser humano está impelido por naturaleza hacia la evolución y el crecimiento personal, y que, en las condiciones y contextos adecuados, emerge lo mejor de nosotros (Fernández, 2015). Es en este último contexto que se desarrolla el Modelo HERO, que corresponde en su denominación a las siglas del inglés ***HEalthy and Resilient Organization***, esto es, organizaciones saludables y resilientes.

El modelo HERO es un modelo teórico y heurístico que nace a partir de la evidencia teórica proveniente de diferentes áreas de estudio (i.e., estrés laboral, ciencias del comportamiento organizacional, Gestión de Recursos Humanos y la

## 8. El Rol de la Confianza en Los Equipos de Trabajo

Psicología de la Salud Ocupacional Positiva (Salanova, Llorens, Torrente, & Acosta, 2013), las que sostienen la idea de que los recursos y prácticas implementados por la organización son esenciales para generar salud y bienestar en los empleados y buenos resultados organizacionales., y por otro, potencian los recursos y el bienestar (Bakker & Demerouti, 2013). El Modelo heurístico de organizaciones saludables (OS) propuesto por Wilson y sus colaboradores en el 2004 y Dejoy y sus colaboradores el 2010, representaron una primera aproximación en el estudio y validación de un modelo de OS el cual contemplaba el contexto organizacional (i.e., demandas) y el rendimiento de la empresa. Sin embargo, este modelo consideró solo una fuente de información (i.e, empleados) y un instrumento de medida. Además, al considerar variables de diferentes niveles este modelo no contempló análisis a diferentes niveles (i.e., modelos jerárquicos lineales).

Entendemos como organizaciones saludables y resilientes aquellas que hacen esfuerzos sistemáticos, planeados y proactivos para mejorar a los empleados, los procesos organizacionales y los resultados (Salanova, 2009). De esta manera, el Modelo HERO (Salanova et al., 2012) combina tres componentes clave que interaccionan entre sí: (1) recursos y prácticas organizacionales saludables (i.e., recursos de la tarea, recursos del equipo y prácticas organizacionales), (2) empleados saludables (i.e., creencias de eficacia, confianza organizacional, engagement en el trabajo) y (3) resultados organizacionales saludables (i.e., compromiso, resultados). Estos elementos se influyen unos a otros, siendo el pilar fundamental de estos elementos los recursos y prácticas organizacionales saludables debido a que cuando una organización los implementa de forma adecuada tendrán un impacto positivo en empleados y equipos de trabajo (Bowen & Ostroff, 2004; Fredrickson & Dutton, 2008). Además, el modelo tiene características que lo hacen un modelo pionero tanto teórica como metodológicamente. Esto es: (1) considera una perspectiva positiva e integradora; (2) considera diferentes fuentes de información (i.e., empleados/equipos, supervisores, CEO's, clientes); (3) considera metodología cualitativa y cuantitativa; (4) considera una aproximación multinivel; (5) considera el uso de referentes individual, equipos, supervisor inmediato y la organización como un todo; y (6) plantea la hipótesis de espirales virtuosos en el tiempo.

Algunos ejemplos empíricos son los siguientes: (1) Acosta, Salanova y, Llorens (2012) evidenciaron que la confianza organizacional (i.e, confianza vertical) media de forma total la relación entre las prácticas organizacionales implementadas por la Gestión de Recursos Humanos (i.e, conciliación vida laboral-vida privada, prevención

del *mobbing*, programas de salud psicosocial y comunicación e información organizacional) y el corazón del *engagement* de los equipos; (2) Torrente, Salanova, Llorens, y Schaufeli (2012) evidenciaron que el *engagement* de los equipos media de forma total la relación entre los recursos del equipo (i.e, trabajo en equipo, clima de apoyo y coordinación) y el desempeño evaluado por el supervisor directo (3) Cruz-Ortiz, Salanova, y Martínez (2013) evidenciaron que el *engagement* de los equipos media de forma total la relación entre liderazgo transformacional y desempeño del equipo evaluado por el supervisor directo; (4) Meneghel, Salanova, y Martínez (2014) evidenciaron que la resiliencia de los equipos media la relación entre las emociones positivas del equipo y el desempeño evaluado por el supervisor directo; (5) Oliveira, Llorens, Acosta, y Salanova (2017) evidenciaron que la confianza horizontal media la relación entre liderazgo transformacional y desempeño del equipo en contexto sanitario.

Figura 1. Modelo HERO



HERO integra diferentes variables en cada uno de sus elementos clave y dado que se trata de un modelo heurístico (Acosta, Cruz-Ortiz, Salanova, & Llorens, 2015),



## 8.El Rol de la Confianza en Los Equipos de Trabajo

permite poner a prueba relaciones específicas entre algunas variables (Meneguel et al., 2014; Oliveira et al., 2017).

En este sentido, si bien los tres elementos del modelo HERO están positivamente relacionados, se ha probado empíricamente que los empleados saludables median totalmente la relación entre recursos y prácticas organizacionales saludables y resultados organizacionales saludables (Salanova et al., 2012). Otras investigaciones comprueban el rol mediador que juega la confianza organizacional entre las prácticas organizacionales saludables (i.e., conciliación vida laboral, vida privada, prevención del *mobbing*, programas de salud psicosocial y comunicación e información organizacional) y el engagement en el trabajo (Acosta et al., 2011); del engagement colectivo entre los recursos personales y la calidad del servicio (Hernández et al., 2014); y del *engagement* del equipo entre los recursos del equipo y el rendimiento del mismo según la evaluación de los supervisores (Torrente et al., 2012). Para ver más evidencia del modelo revisar Salanova y Llorens (2016, pp.161-164) en Papeles del Psicólogo.

Dado lo expuesto, nos centraremos en dos componentes específicos del modelo HERO, esto es, (1) recursos y prácticas organizacionales saludables, donde abordaremos los recursos del equipo (i.e., trabajo en equipo); y (2) empleados saludables (i.e., confianza horizontal, *engagement* en el trabajo), variables que serán analizadas a nivel de percepciones individuales con respecto a fenómenos colectivos (i.e., equipo).

### **Trabajo en equipo y su relación con el bienestar de los trabajadores**

En cuanto a los recursos del equipo, estos son un elemento clave del componente recursos y prácticas organizacionales saludables. Los recursos se refieren a aquellos aspectos físicos, psicológicos, sociales y organizacionales del trabajo que son funcionales para alcanzar los objetivos del trabajo, reducen las demandas laborales y los costos físicos y psicológicos asociados, y, además, estimulan el crecimiento personal, aprendizaje y desarrollo (Salanova et al., 2011). Concretamente en esta investigación se considerará el trabajo en equipo debido a que en las organizaciones actuales cada vez más se requiere que estos equipos sean de excelencia y de alto rendimiento representando un gran desafío para la gestión de los recursos humanos (Fernández, 2015). Entenderemos como trabajo en equipo a personas con objetivos comunes y con interdependencia de tareas (Richardson & West, 2010).

Tal como se mencionó anteriormente, el gran desafío hoy para las organizaciones es lograr que los equipos de trabajo logren realmente trabajar en equipo, de manera de integrar de forma eficaz y eficiente las contribuciones de sus miembros para dar valor añadido a la organización. Algunos de los aspectos clave dentro de este proceso son la comunicación, la coordinación para la toma de decisiones, la satisfacción de sus miembros, la viabilidad y la innovación (Gil, Rico, & Sánchez-Manzanares, 2008). El actual interés en el trabajo en equipo en las organizaciones, refleja un profundo reconocimiento de que esta forma de trabajo posibilita lograr mayores y mejores resultados que a través del trabajo individual (West & Markiewicz, 2004).

Para desarrollar trabajo en equipo, se debe comprender y permitir el proceso de desarrollo del equipo, que incluye objetivos claros, roles, procesos de comunicaciones y toma de decisiones y para que se logren realizar tareas colectivas, que suponen cooperación, coordinación y aprendizaje (West & Markiewicz, 2004). Siendo uno de los aspectos más importante que entre los miembros del equipo se desarrolle confianza, dado que se requiere asumir un riesgo interpersonal, dependencia mutua y adaptación continua a las necesidades y acciones de los demás (Gil et al., 2008). Por tanto, cuando se trabaja en equipo, la confianza resulta ser un eje central para el bienestar del equipo.

### **Confianza organizacional**

Tan y Lim (2009, p.46) proponen la confianza como la voluntad de los empleados a ser vulnerables a las acciones de su organización, los cuales a su vez no tienen control sobre las acciones organizacionales. La importancia de la confianza al interior de las organizaciones es clave y se ha evidenciado como una ventaja competitiva (Costa, 2003) y fundamental para los procesos de trabajo que requieren cooperación (Suárez, Caballero, & Sánchez (2008). En esta investigación, consideramos la confianza en el equipo la cual comprende dos dimensiones: *la confianza horizontal* y *la confianza en el supervisor directo*. Ambas dimensiones resultan fundamentales al momento de evaluar la confianza en el equipo (Costa & Anderson, 2011), debido a que permiten evidenciar un mejor clima de trabajo y desempeño de los equipos (Tan y Lim, 2009). La confianza horizontal la entenderemos como la confianza entre los compañeros de trabajo de un equipo y, la confianza en el supervisor directo como la confianza entre el supervisor directo y su equipo. Siguiendo la definición Tan y Lim (2009, p. 46), propondremos que la confianza en el equipo es "la voluntad de una persona a ser

vulnerable a las acciones de los compañeros de trabajo y del supervisor directo, sin que tengamos control sobre aquellas acciones”.

En este sentido, iremos un paso más allá en el Modelo HERO incorporando las percepciones del supervisor directo y los compañeros de trabajo como confianza horizontal, constructo que denominaremos confianza del equipo, correspondiendo a la disposición a ser vulnerables a las acciones de los miembros del equipo, basado en la expectativa positiva que tienen respecto de sus intenciones y comportamientos. Hasta ahora la confianza ha mostrado evidencia que la relaciona al bienestar de los empleados y equipos de trabajo (Acosta et al., 2012; Acosta, Torrente, Llorens, & Salanova, 2016). Concretamente, la confianza organizacional (i.e., vertical y horizontal) medida en 41 PyMEs y 220 equipos de trabajo mostro la confianza organizacional se relaciona con el bienestar de los equipos en términos de vigor, dedicación y absorción, esto es, *engagement* en el trabajo.

### **Engagement en el trabajo**

Se entiende como un estado mental positivo, de plenitud, relacionado con el trabajo y caracterizado por el vigor, la dedicación y la absorción (Salanova, 2009). El vigor se identifica por altos niveles de energía mientras se trabaja, de persistencia y de un fuerte deseo de esforzarse en el trabajo. La dedicación se manifiesta en altos niveles de significado del trabajo, de entusiasmo, inspiración, orgullo y una sensación de reto relacionados con el trabajo que uno realiza, y por último, la absorción se caracteriza por estar plenamente concentrado y feliz realizando el trabajo, mientras se tiene la sensación de que el tiempo pasa volando y uno se deja llevar por el trabajo.

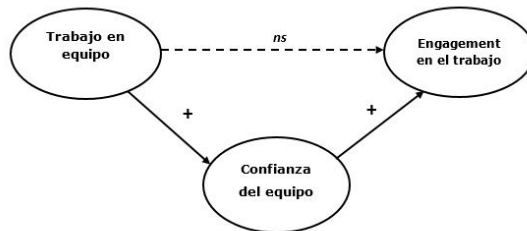
Así, el *engagement* en el trabajo está profundamente relacionado al bienestar de las personas y al mejoramiento de su desempeño en el trabajo (Cruz-Ortiz et al., 2013; Fernández 2015). Por ejemplo, mejora el clima de servicio y el desempeño de los empleados de servicio (Salanova, Agut, & Peiró, 2005); mejora el afecto positivo y la eficacia colectiva a través de espirales positivas (Llorens & Salanova, 2014); mejora el desempeño de los equipos (Cruz-Ortiz et al., 2013; Oliveira, et al., 2017). En este sentido en *engagement* ha demostrado ser un sólido indicador de bienestar en el trabajo (Bakker & Leiter, 2010; Bakker, Van Emmerik, & Euwena, 2006; Harter, Schmidt, & Hayes, 2002; Lin, 2010; Salanova, Llorens, & Schaufeli, 2011), por lo que su estudio en diferentes contextos laborales y nacionales se ha convertido en una avenida de

investigación importante para conocer el vigor, la dedicación y la absorción de una persona y/o equipos de trabajo en las empresas. Esto, sin duda, permite tomar decisiones estratégicas importantes a la hora de implementar acciones para su optimización que contemplen la salud de trabajador como eje central de la planificación estratégica de una organización (Salanova, Llorens, Torrente, & Acosta, 2013b).

En cuanto a las dimensiones del *engagement* en el trabajo, Schaufeli, Bakker, y Van Rhenen (2009) evidencian la alta correlación entre vigor, dedicación y absorción, sin embargo, Lorente, Salanova, Martínez, y Schaufeli (2008), y Acosta et al., (2011), señalan que el corazón del *engagement* corresponde sólo al vigor y la dedicación, esto argumento se basa en la dimensión de absorción debido a que también es una dimensión relevante para el constructo de adicción al trabajo y *flow at work*. Por tanto, consideramos las sugerencias de Lorente et al., (2008) y Acosta et al. (2011) y este estudio se centra en las dimensiones de vigor y dedicación, considerando también espirales positivas a través del tiempo (Llorens & Salanova, 2014).

Dado lo anteriormente mencionado, el objetivo de este estudio es evaluar, por primera vez en Chile, el rol de la confianza del equipo, entre el trabajo en equipo y el corazón del *engagement* en el trabajo basado en el modelo HERO. Concretamente, se pretende evidenciar el rol mediador de la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) entre los recursos del equipo (i.e., trabajo en equipo) y el *engagement* en el trabajo (i.e., vigor y dedicación) considerando las percepciones individuales de los miembros de los equipos de trabajo respecto a fenómenos colectivos. Esto quiere decir, que los trabajadores contestaron de forma individual pensando en sus equipos de trabajo.

Figura 2. Modelo de investigación



## MÉTODO

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### MUESTRA Y PROCEDIMIENTO

La muestra del estudio está compuesta por 365 trabajadores pertenecientes tres organizaciones chilenas (una empresa productiva del estado, una empresa de servicios del estado y una empresa privada) (47% de ellas se encuentran geográficamente en la región metropolitana y el 53% restante en otras regiones del país).

La muestra es por conveniencia, donde 269 (73,7%) encuestados pertenecen a una empresa productiva del estado chileno. De los restantes encuestados, 54 (14,8%) pertenecen a una empresa de servicio del estado chileno con operaciones a lo largo de todo el país y 42 (11,5%) a una empresa privada. Para el caso de la empresa del estado, tras la autorización para realizar el estudio, se procedió a enviar un comunicado interno vía intranet donde se solicitaba a los trabajadores su colaboración. En las otras organizaciones, la invitación fue cursada vía correo electrónico. Para todos los casos, la participación en esta investigación fue de carácter voluntario y se cursó utilizando un formulario electrónico creado en la plataforma One Drive de Microsoft, quedando alojadas en su base de datos, las respuestas al instrumento de investigación. Se garantizó la confidencialidad de la información y manejo de datos, así como también, el estricto cumplimiento de los aspectos éticos que basan el rigor de la investigación científica.

Del total de la muestra, el 77% (281) de los encuestados son hombres. Respecto al nivel educacional, el 64% (234) posee educación universitaria y el 30% (110) posee estudios de postgrado (master, magíster o doctorado). En relación a la antigüedad laboral, el 82% (299) declara más de 4 años en la empresa, y de ellos, el 38% (114) más de 10 años. Teniendo en cuenta la posición jerárquica de los encuestados, el 14% (51) corresponde al nivel de alta dirección (director, gerente o subgerente), el 34% (124) a jefaturas intermedias y el 53% (190) restante reporta no tener personal a cargo. El tiempo aproximado de realización del cuestionario fue de 15 minutos.

## MEDIDAS

El *Trabajo en equipo*, fue evaluado a través de 3 ítems incluidos en el cuestionario HERO (Salanova et al., 2012) (un ejemplo de ítem: *¿En nuestro equipo de trabajo, se cuenta con personas con experiencia y conocimientos adecuados?*). La consistencia interna de la escala cumplió con el criterio de .70 (Nunnally & Bernstein, 1994) (alfa = .73). Los encuestados respondieron utilizando una escala Likert de 7 puntos de anclaje que oscila entre 0 ('nunca') a 6 ('siempre').

La *confianza del equipo*, se evaluó a través de 19 ítems basados en el cuestionario HERO (Salanova et al., 2012) y considera dos dimensiones: confianza en el supervisor directo (11 ítems; e.g. *'Nuestro jefe directo toma en consideración nuestros puntos de vista'*; alfa = .97) y confianza horizontal (8 ítems; e.g. *'Si compartimos nuestros problemas con los compañeros, sabemos que ellos nos van a comprender'*; alfa = .93). Ambas dimensiones cumplieron con el criterio de .70 (Nunnally & Bernstein, 1994). Los empleados respondieron utilizando una escala Likert de 7 puntos de anclaje que oscila entre 0 ('Totalmente en desacuerdo') a 6 ('Totalmente de acuerdo').

El *engagement en el trabajo* se evaluó a través de 11 ítems incluidos en el cuestionario HERO, y que corresponden al corazón del *engagement*: vigor (7 ítems; e.g. *'En nuestro equipo de trabajo, cuando el trabajo ha terminado, tenemos suficiente energía para participar activamente en otras actividades'*, alfa = .82) y dedicación (4 ítems; e.g. *'En nuestro equipo de trabajo, nos sentimos motivados por hacer un buen trabajo'*, alfa = .89). La consistencia interna de ambas dimensiones cumplieron con el criterio de .70 (Nunnally & Bernstein, 1994).

Todas las variables utilizadas en este estudio se basaron en las percepciones individuales de fenómenos colectivos (i.e., el equipo). Es decir, los trabajadores respondieron de forma individual sus percepciones de las variables contempladas en el estudio sobre el equipo de trabajo al que pertenecían.

## ANÁLISIS DE DATOS

En primer lugar, se calcularon los análisis de fiabilidad ( $\alpha$  de Cronbach) y la matriz de correlaciones (Pearson) de las distintas variables, mediante la base de datos individual, utilizando el programa PASW 22.0. En segundo lugar, se realizó el test de

Harman's para las variables del estudio con el objetivo de poner a prueba el sesgo del método de la varianza común, también con la base de datos individual. Finalmente, se utilizó el programa estadístico AMOS 22.0 para realizar diferentes modelos de ecuaciones estructurales, con el objetivo de conocer la relación entre recursos del equipo, confianza del equipo y *engagement* en el trabajo. Se evaluaron dos modelos de mediación: el primero de ellos denominado M<sub>1</sub>, Modelo de Mediación Total, en el cual la confianza del equipo media de forma total la relación entre recursos del equipo y *engagement* en el trabajo; el segundo denominado M<sub>2</sub>, Modelo de Mediación Parcial, en el cual la confianza del equipo media de forma parcial la relación entre recursos del equipo y *engagement* en el trabajo. Además, se probó un Modelo Alternativo, M<sub>A</sub>, para comprobar que la relación propuesta en la hipótesis de esta investigación era adecuada debido a que los datos son de carácter transversal (Kline, 1998).

El método de estimación utilizado fue el de máxima probabilidad, en el cual la entrada para cada análisis fue la matriz de covarianza de los ítems. Evaluamos dos índices absolutos para evidenciar la bondad del ajuste de los modelos: el estadístico  $\chi^2$  y el Root Mean Square Error of Approximation (RMSEA). El  $\chi^2$  es sensible al tamaño de la muestra, por lo que se recomienda el uso de índices relativos para evaluar la bondad del ajuste de los modelos. Dado lo anterior, fueron evaluados 5 índices relativos de bondad del ajuste de los modelos: (1) CFI (Comparative Fit Index); (2) NFI (Normed Fit Index); (3) TLI (Tucker-Lewis Index, llamado también Non-Normed Fit Index); (4) IFI (Incremental Fit Index); y (5) GFI (Goodness of Fitt Index). Posteriormente, utilizamos el índice AIC (Akaike Information Criterion) para comparar modelos no anidados. Para el RMSEA, valores menores que .05 se consideran como un ajuste excelente; .08 es considerado como un ajuste aceptable y valores superiores a .1 nos indican que debemos rechazar el modelo (Browne y Cudeck, 1993). Para los índices de ajuste relativo, valores de .90 se consideran indicadores de un buen ajuste. Para el índice AIC, valores más bajos indican que el ajuste es mejor (Akaike, 1987; Hu y Bentler, 1998).

Para evaluar la mediación y sus efectos se realizaron los pasos de Baron y Kenny (1986) y el test de Sobel (Sobel, 1988). En cuanto a los pasos de Baron y Kenny se evaluó: Paso 1, la relación entre trabajo en equipo y *engagement* en el trabajo; Paso 2, la relación entre trabajo en equipo y confianza en el equipo y; Paso 3, la relación entre trabajo en equipo y *engagement* en el trabajo agregando confianza en el equipo. En cuanto al Test de Sobel se evalúa la significancia de los estimadores de los efectos de mediación a\*b.

## RESULTADOS

### ANÁLISIS DESCRIPTIVOS

La Tabla 1 muestra las medias, desviaciones típicas y las intercorrelaciones de todas las variables incluidas en el estudio (N = 365), esto es, trabajo en equipo, confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) y *engagement* en el trabajo (i.e., vigor y dedicación), utilizando el programa PASW 22.0. Los resultados mostraron que, tal y como se esperaba, las variables correlacionan de forma positiva y significativa, oscilando entre .39 y .68. La media de las correlaciones fue de .52.

Además, el resultado de la ANOVA para evaluar diferencias significativas entre las organizaciones que se incluyen en el estudio no fue significativa ( $p = 0.11$ ), por lo que se continuó con los análisis considerando la muestra total.

**Tabla 1.** Medidas de desviación estándar e intercorrelaciones (N= 365)

Variables	Media	dt	1	2	3	4	5
1. Trabajo en equipo	4.34	1.06	-				
2. Confianza en el supervisor directo	4.39	1.15	.68***	-			
3. Confianza horizontal	4.39	.94	.56***	.45***	-		
4. Vigor	4.05	.89	.43***	.39***	.36***	-	
5. Dedicación	5.01	.90	.47***	.39***	.46***	.62***	-

Nota: \*\*\* $p < 0.001$ .

### AJUSTE DEL MODELO: MODELOS DE ECUACIONES ESTRUCTURALES

Para realizar los modelos de ecuaciones estructurales (SEM) utilizamos la base de datos individual (N= 365). Se utilizaron cinco variables latentes donde: (1) trabajo en equipo está compuesto por un indicador; (2) la confianza del equipo está compuesta por dos indicadores: confianza en el supervisor directo y confianza horizontal, y (3)



## 8.El Rol de la Confianza en Los Equipos de Trabajo

Finalmente, el *engagement* en el trabajo comprende dos indicadores referentes al corazón del *engagement*: vigor y dedicación en el trabajo.

La Tabla 2 muestra los resultados de los modelos de ecuaciones estructurales dirigidos a evaluar la relación entre trabajo en equipo, confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) y *engagement* en el trabajo (i.e., vigor y dedicación).

Los hallazgos de estos análisis de ecuaciones estructurales indican que el modelo propuesto de mediación total ( $M_1$ ), en el cual la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) media de forma total la relación trabajo en equipo y el *engagement* en el trabajo (i.e., vigor y dedicación), ajusta bien a los datos,  $\chi^2(4) = 15.25$ ,  $p = .04$ , RMSEA = .08, GFI = .98, TLI = .96, CFI = .98, NFI = .98, IFI = .98, AIC = 35.25, al mismo tiempo que los efectos entre las variables son todos significativos ( $p < 0.05$ ). Dado lo anterior, el modelo  $M_1$  muestra índices de bondad del ajuste adecuados y apoya la hipótesis de que la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) actúa como mediador total entre los recursos del equipo (i.e., trabajo en equipo) y el *engagement* (i.e., vigor y dedicación).

El modelo de mediación total propuesto ( $M_1$ ) se muestra gráficamente en la figura 2. En este modelo, es importante señalar que todas las escalas manifiestas puntúan significativamente en los factores latentes previstos. Al examinar los resultados, se muestra que todos los indicadores de recursos del equipo, confianza del equipo y *engagement* en el trabajo tienen un peso factorial superior a .64. En segundo lugar, una revisión de los pesos de regresión revela que, tal y como esperábamos, el trabajo en equipo se relaciona positiva y significativamente sobre la confianza del equipo ( $\beta = .93$ ,  $p < 0.01$ ) y la confianza del equipo a su vez se relaciona positiva y significativamente con el *engagement* en el trabajo ( $\beta = .67$ ,  $p < 0.01$ ).

Para evaluar la mediación y sus efectos se realizaron los pasos de Baron y Kenny (1986) y el test de Sobel (Sobel, 1988). Los pasos de Baron y Kenny (1986) mostraron que: (1) trabajo en equipo está relacionado positiva y significativamente y con *engagement* en el trabajo ( $\beta = .54$ ,  $p < 0.05$ ); (2) confianza del equipo (i.e., confianza entre los miembros del equipo y confianza en el supervisor directo) está relacionado positiva y significativamente con el *engagement* en el trabajo ( $\beta = .67$ ,  $p < 0.01$ ); y (3) la relación entre trabajo en equipo y *engagement* en el trabajo deja de ser

significativa cuando confianza del equipo es introducida en el modelo ( $\beta = .34$ ,  $p = .16$ ). El test de Sobel evidencio ser significativo (Sobel  $t = 0.85$ ,  $p < 0.001$ ). Esta información nos permite tener argumentos para apoyar la hipótesis del estudio.

Es interesante resaltar que el trabajo en equipo explica el 86% de la varianza en confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) ( $R^2 = 86\%$ ), la cual explica el 45% de la varianza en *engagement* en el trabajo (i.e., vigor y dedicación) ( $R^2 = 45\%$ ).

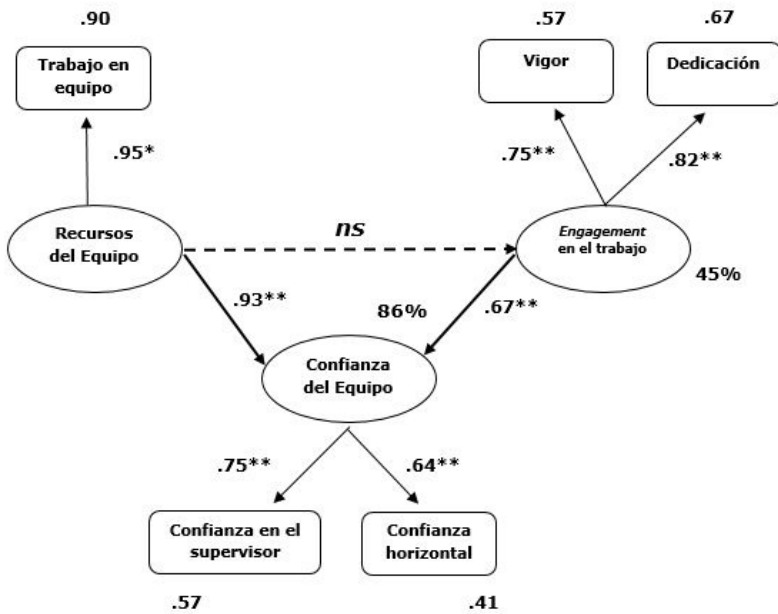
Por su parte en el modelo M2, la relación entre trabajo en equipo y el *engagement* en el trabajo (i.e., vigor y dedicación) no es significativa ( $p = .50$ ) y más importante aún, que la relación directa entre confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal) y *engagement* en el trabajo (i.e., vigor y dedicación) no es significativa ( $p = .37$ ). Por su lado, con el modelo alternativo M<sub>A</sub> donde el trabajo en equipo media la relación entre confianza del equipo y *engagement* en el trabajo. Los resultados comprueban que la relación propuesta de las variables en la investigación es la adecuada, ya que el índice de ajuste absoluto RMSEA, para el modelo alternativo M<sub>A</sub>, es mayor que 0.1 (RMSA= 0.25) lo que nos indica que debemos rechazar este modelo alternativo (Browne, 1993).

**Tabla 2.**

Modelos	$\chi^2$	gl	p	RMSEA	GFI	TLI	CFI	NFI	IFI	AIC	$\Delta\chi^2$	$\Delta gl$	$\Delta p$	$\Delta RMSEA$	$\Delta GFI$	$\Delta TLI$	$\Delta CFI$	$\Delta NFI$	$\Delta IFI$	$\Delta AIC$	
M <sub>1</sub>	15.25	4	.04	.08	.98	.96	.98	.98	.98	35.25											
M <sub>2</sub>	11.13	3	.01	.09	.99	.96	.98	.98	.99	37.13											
DIF M <sub>2</sub> -M <sub>1</sub>											-4.12**	1	.03	.01	.01	.00	.00	.00	.00	.01	2.12
M <sub>3</sub>	195.62	8	.00	.25	.85	.65	.82	.81	.82	221.62											

Notes.  $\chi^2$  = Chi-cuadrado; gl = grados de libertad; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; NFI = Normed Fit Index, TLI = Tucker-Lewis Index; IFI = Incremental Fit Index; AIC = Akaike information Criterion. Dif. = diferencia. \*\* $p < 0.05$

Figura 3. Modelo estructural de recursos del equipo, confianza y *engagement* en el trabajo (n=365). Se presentan los coeficientes significativos a  $**p < 0.05$ .



## DISCUSIÓN

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El objetivo de nuestro estudio era evaluar, por primera vez en Chile, la relación entre trabajo en equipo, confianza del equipo (horizontal y en el supervisor directo) y el corazón de *engagement* en el trabajo (vigor y dedicación), en el contexto del modelo teórico de organizaciones saludables y resilientes (HERO). Específicamente, hemos probado el papel mediador de la confianza del equipo, entre el trabajo en equipo y el *engagement* en el trabajo, tal como evidencian diferentes investigaciones (Acosta et al., 2012; Lin, 2010). Nuestra hipótesis era que la confianza del equipo mediaba de forma total la relación entre el trabajo en equipo y el *engagement* en el trabajo, cuestión que se comprueba con los resultados obtenidos.

El presente estudio contribuye a nuestra comprensión sobre la relación entre dos de los elementos que componen el Modelo HERO, esto es recursos y prácticas organizacionales saludables, donde abordamos los recursos del equipo; y empleados saludables donde consideramos el *engagement* en el trabajo y la confianza, utilizando percepciones individuales respecto de fenómenos colectivos, en una muestra de 365 empleados de empresas o servicios del estado y empresas privadas en Chile.

Los resultados de los Modelos de Ecuaciones Estructurales revelaron que el modelo de mediación total (M1) ajustó mejor a los datos que el modelo de mediación parcial (M2). Este resultado da evidencia para considerar que la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal), actúa como un mecanismo psicosocial subyacente entre los recursos del equipo (i.e., trabajo en equipo) y el *engagement* en el trabajo (i.e., vigor y dedicación). Esto quiere decir, que el trabajo en equipo es una variable relevante como recurso social para garantizar el bienestar de los trabajadores y un buen desempeño laboral. En esta investigación consideramos el trabajo en equipo como personas con objetivos comunes y con interdependencia de las tareas (Richardson & West, 2010). Por tanto, si se perciben como equipo de trabajo aumentará su bienestar en términos de vigor y dedicación solo si existe confianza en el equipo. Los resultados de esta investigación van en sentido a lo propuesto por el Modelo HERO, debido a que el elemento recursos y prácticas organizacionales saludables es un pilar fundamental para que se desarrolle la salud de los trabajadores y equipos. Esto quiere decir, que el Modelo HERO plantea que desde la Gerencia se deben poner en marcha acciones que garanticen la salud tanto de los trabajadores/equipos como la organización en su totalidad. Cuando una organización pone en marcha estas acciones

de forma adecuada potencia el buen desempeño de sus trabajadores (Fredrickson & Dutton, 2008) como también su evolución profesional como personal (Fernández, 2015).

## FORTALEZAS DEL ESTUDIO

Dentro de las fortalezas que identificamos en este trabajo, podemos destacar: (1) Que corresponde al primer estudio donde se evalúan factores psicosociales positivos en organizaciones en Chile, en empresas de diferente naturaleza, propiedad y ubicación geográfica; (2) Que se utilizan ecuaciones estructurales para el análisis de datos, lo que otorga mayor robustez a la comprobación de las relaciones evidenciadas; (3) Que comprobamos que la confianza en el contexto organizacional es un elemento determinante, por lo que inversiones en la formación de equipos de trabajo, sin tener a la base un capital suficiente de confianza, no tendrán los impactos esperados en el vigor y la dedicación en el trabajo de parte de los colaboradores.

Asimismo, nos resulta de suma importancia relevar el papel que juega hoy en día la confianza, no sólo circunscrita al ámbito organizacional, sino como un elemento a considerar dentro de la problemática social y económica actual que vive nuestro país, teniendo en cuenta que Chile presenta bajísimos niveles de confianza y un deterioro constante de ella en el tiempo, lo cual evidentemente imposibilita, o al menos dificulta, la credibilidad en las instituciones rectoras, el pleno respeto al estado de derecho y la capacidad de desarrollar a plenitud el potencial económico que tiene nuestro país.

Por lo antes dicho, sostenemos que este estudio restablece el valor de la confianza como un elemento fundamental del tejido social y de la convivencia humana, y específicamente en las organizaciones, del desarrollo de relaciones sustentadas en la credibilidad hacia el otro, la creencia positiva de que actuará de buena fe y con ello, generar el compromiso e involucramiento emocional y cognitivo necesario con la tarea, el equipo y la organización.

## LIMITACIONES E INVESTIGACIONES FUTURAS

Como todo estudio, evidentemente el presente contiene algunas limitaciones. La primera de ellas tiene relación con la muestra utilizada, siendo una muestra por

conveniencia y no una de carácter aleatorio, sin embargo, se consideraron tres tipos de organizaciones para la captura de datos: empresas públicas, empresas privadas y servicios del estado. Otra limitación es que en esta investigación se utilizaron percepciones individuales para evaluar fenómenos colectivos, no obstante, la muestra es suficiente para un estudio como el que aquí se expone (N=365). Seguidamente, nuestra muestra tiene un sesgo hacia organizaciones del sector público (88,5% de la muestra) y como consecuencia de ello, nuestras afirmaciones podrían tener mayor aplicabilidad hacia este sector, por lo que será de interés para futuros estudios contar con una muestra más balanceada, todo ello en el supuesto de que estos sectores se comportan de manera diferente. Este estudio es del tipo transversal, por lo que no se pueden determinar atribuciones causales, siendo de interés poder realizar el análisis en el tiempo para el estudio de estas variables. En esta misma línea de investigaciones futuras, será interesante realizar el estudio a nivel agregado de equipo, para lo cual se deberá aumentar la muestra para realizar un análisis multinivel. Finalmente, en nuestro estudio no se incluyó variables que componen el tercer elemento clave del modelo HERO, esto es, resultados organizacionales saludables, por lo que creemos que el paso siguiente para vincular los tres componentes del modelo HERO.

### IMPLICACIONES TEÓRICAS Y PRÁCTICAS

Desde el punto de vista teórico, el presente estudio amplía el conocimiento del modelo HERO, respecto del rol que juega la confianza del equipo entre los recursos del equipo y el *engagement* en el trabajo. De acuerdo a ello, nuestra investigación valida la hipótesis respecto de que la confianza del equipo (i.e., confianza en el supervisor directo y confianza horizontal), actúa como mediador total entre los recursos del equipo (i.e., trabajo en equipo) y el *engagement* en el trabajo (i.e., vigor y dedicación), ofreciendo evidencia obtenida en Chile a lo conceptualizado en el modelo HERO, siendo a su vez, el primer estudio en nuestro país que relaciona estas variables. En relación a lo citado, al ser la primera vez que se aplica parte del cuestionario HERO en Chile, de acuerdo a las variables planteadas en el presente estudio, permite el desarrollo de iniciativas de investigación que comparen estos resultados con los obtenidos en países europeos.

Adicionalmente, este estudio refuerza el rol de la confianza, el cual ha sido relevado como clave, por ejemplo, en investigaciones sobre equipos de alto desempeño, donde la alta conectividad de los procesos humanos se da en espacios emocionales en

que prima la confianza, permitiendo ello la generación de un clima caracterizado por emociones expansivas, lo que a su vez produce alta creatividad e innovación, productividad y eficiencia, comunicación eficaz, ampliación de las posibilidades de acción y por consiguiente, repertorios conductuales que tienden a la mejora de los resultados organizacionales (Araneda, Cordero, & Landaeta, 2006).

Desde un punto de vista práctico, los resultados de esta investigación quedan disponibles para ser utilizados por las Gerencias de Personas de cualquier organización, con el objetivo de focalizar sus recursos y esfuerzos organizacionales hacia el desarrollo de sus equipos de trabajo, teniendo siempre en cuenta que logrará mejorar el bienestar psicológico de sus empleados, si y solo si está presente la confianza del equipo. Esto quiere decir, que las organizaciones deben poner en marcha acciones concretas para fortalecer el trabajo en equipo debido a que potenciará la confianza del equipo y su bienestar en términos de vigor y dedicación. Para realizar esto, un ejemplo es el desarrollo de prácticas como el *team training and team building* (Salas, Díaz-Granados, Weaver, & King, 2008). Concretamente, los encargados de Recursos Humanos podrían realizar capacitaciones relacionadas a cómo ser un equipo de alto rendimiento, identificar al equipo con un nombre, realizar actividades *outdoor* que potencien el trabajo en equipo.



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# GENERAL CONCLUSION

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## INTRODUCTION

As we mentioned in the introduction section, 'nowadays, there is a deep crisis of values in our society regarding trust and transparency'. This thesis research project represented a valuable opportunity to obtain information regarding a classic topic, as is trust, from a contemporary view: A positive organizational approach, the HHealthy & Resilient Organizations Model (HERO; Salanova, Llorens, Cifre, & Martínez, 2012). Different disciplines have studied trust (i.e., biology, psychology, management), and all of them consider trust pivotal to our life and well-being. For example, in biology, oxytocin allows an increase trust and it is necessary to our subsistence; in psychology and management, trust represents a key element for organizational success and the development of well-being at the work place (Khodyakov, 2007).

Mayer, Davis, and Schoorman, (1995, p. 712) described trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party"; and Rousseau, Sitkin, Burt, and Camerer (1998, p. 395) defined trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another". Based on these definitions, organizational trust as a multilevel phenomenon within organizations is defined by Tan and Lim (2009) as "an employee's willingness to be vulnerable to the actions of the organization, whose behaviour and actions he or she cannot control" (p. 46). Despite its relevance, trust within organizations has been studied from an individual perspective and there is no agreement about its antecedents and consequences in the workplace. Fulmer and Gelfand (2012) proposed to study trust as a multilevel phenomenon. And Costa (2003) evaluated trust as a underlying psychosocial mechanism allowing development and organizational survival. More important, the Global Plan of Action of WHO (2010) proposed a set of five objectives for a healthy job: (1) To devise and implement policy instruments on workers' health; (2) To protect and promote health at the workplace; (3) To promote the performance of, and access to, occupational health services; (4) To provide and communicate evidence for action and practice; (5) To incorporate workers' health into other policies.

Therefore, the study of trust seems crucial to improve and develop healthy jobs and HERO's. For this reason, this dissertation specifically focused on trust in the Healthy & Resilient Organizations Model (Salanova et al., 2012). Concretely, our main goal of this project was study the dynamics of trust from a positive perspective bears the opportunity to shed light on how this psychosocial phenomenon happens in the actual work context. Specifically, it began with the question: how CEO's define a HERO, what organizational practices and resources enhance trust within organizations (i.e., vertical and horizontal trust) and how trust impacts team and organizational wellbeing (i.e., team work engagement, affective organizational commitment), and team and organizational performance (i.e., task, contextual and economical). To answer these questions eight empirical chapter was carry on. Each chapter had its hypotheses, and they were investigated through heterogeneous sample of Small and Medium-sized Enterprises in Spain and Chile and using a multimethod design. This thesis provides the following answers to the earlier, proposed research questions:

## ANSWERING THE RESEARCH QUESTIONS

### **Answering the first research question: From a qualitative perspective, what are the perceptions of CEOs about Healthy Organizations?**

This question was addressed in Chapter 2 through of the perceptions of key stakeholders from 14 Spanish organizations regarding how they define a healthy organization and what they consider the comprising elements. The question was: how do CEOs and human resources managers conceptualize a healthy and resilient organization? Results were as follows: (1) content analysis focused on definitions show that there is a 'partial' fit between the definition proposed theoretically by the HERO Model (Salanova et al., 2012) and the empirical definition provided by the key stakeholders, as the latter offered a much more restrictive definition in which employees' health is at the core of the discourse; (2) content analysis focused on the elements comprising a HERO expand and specify the variables belonging to each key element of the model (healthy organizational resources and practices, healthy employees and healthy organizational outcomes). Specifically, healthy organizational resources and practices, where social resources emerge, such as communication, leadership, teamwork and interpersonal relationships. These kinds of resources are important in organizations because they serve two purposes (Schaufeli & Bakker, 2004):

first, they increase psychosocial wellbeing (healthy employees) and healthy organizational outcomes, and secondly, they decrease psychosocial impairment (such as burnout and stress). Furthermore, channels of communication, strategic planning, traditional human resources practices (such as hiring and recruitment) and working conditions (such as kind of contract) emerge specifically as organizational practices. These results are in line with the previous research proposed by Alfes, Shantz, and Truss (2012), these authors proposed that when employees and teamwork have a positive perceptions pf the practices implemented by their organizations, they could experiment high level of well-being and the have more positive attitude at work and their organization.

From this study, we can gain insight into how CEOs define a HERO. Specifically, their limited perceptions about a HERO mainly focused on the health of employees. These results are interesting because on the one hand, there are a clearly discourse referent to the importance of wellbeing of employees (in terms of health) for the development of a healthy and resilient workplace. It could be referring to the new way to manage organizations that focuses on employee health and considering that in organizational strategic plans.

However, our results showed a partial fit between the definition proposal theoretically and the empirical definition from CEO's. Contemporary CEO's require information about how to develop health in their workplace (i.e., trust) and its (positive) consequences. As we have mentioned above, a possible explanation to this gap of information from CEOs to define a HERO - based on the health of the employee - could be a social desirability attitude from CEO's. Specially, because the information about practices implemented in a good place to work, is viral thanks to internet. However, in their discourse new variables emerge that are associated to the three elements of the HERO Model. It is interesting, because the information provided by these key agents could extend the variables that compose each element that compose HERO Model originally. To integrate and to test the relationships of this new variable (i.e., organizational reputation) in the HERO model could be an avenue for further research.



**Answering the second research question: At the team level of analysis, what part does trust play in the relationship between healthy organizational practices and team work engagement?**

In Chapter 3 Structural Equation Modeling was conducted with data aggregated at the work-unit level of analyses. We hypothesized that organizational trust fully mediated the relationship between healthy organizational practices (eight practices proposed by the HERO Model) and work engagement when data were aggregated at the team level in a sample of 518 employees nested within 55 work-units from 13 SMEs in Spain. Unexpectedly, the model with the eight original items of healthy organizational practices did not fit to the data (neither for the full nor for the partial mediation model). Based on an iterative process, the original scale was reduced to five items distributed on four practices. In this study, we extend the corpus of knowledge about the key role of organizational trust in the relationship between healthy organizational practices and team work engagement. On the one hand, we got information's about what practices are relevant to develop and increase vertical trust in organizations and well-being of teams in terms of work engagement at the team level of analysis. It is very important information for practitioners in order to implement actions to increase trust since organizational resources are limited. On the other hand, we expect that the rest of the practices (i.e, skill development, career development, perceived equity, and corporate social responsibility) could be relevant to other variables included in healthy employee's (e.g., efficacy beliefs, optimism, resilience) and healthy organizational outcomes (e.g., commitment, excellent results). With the four practices (i.e, work-family balance, mobbing preventions, psychosocial health programs, organizational communication) we can conclude that organizations must foster trust between employees and supervisors or top managers because healthy practices implemented by Human Resources Management will impact positively on teams work engagement if there is organizational trust. In this chapter, we considered trust at the team level of analysis. In the next chapter, using the organization level of analysis, we tried to answer a gap in the trust research (Fulmer & Gelfand, 2012; Katou & Budhwar, 2010). That is, to measure HRM practices and organizational trust and affective commitment from a multilevel approach.

**Answering the third research question: At the organizational level of analysis, how is trust related to healthy organizational practices and organizational affective commitment?**

In chapter 4, using Bootstrapping analysis with AMOS with data aggregated at the organizational level, we tested the role of trust between HOP and organizational affective commitment. Specifically, this study offers evidence of the fully mediated role of organizational trust in the relationship between HOP and organizational affective commitment. Using the same four practices as in chapter 3, that is work-family balance, mobbing prevention, psychosocial health and communication, results pointed out that: (1) when organizations develop practices oriented towards improving the well-being of their employee's trust emerges (Acosta, Salanova, & Llorens., 2012; Covey, 2006; Wright & McMahan, 1992), (2) trust plays a mediating role in organizational processes (i.e. Hughes, Avey, & Norman, 2008; Lin, 2010; Rispens, Geer, & Jehn, 2006). The results of this study confirm that trust is the psychological mechanism between HOP implemented by HRM and affective organizational commitment at the organizational level. This means that HOP will have an impact on employees if they trust in the organizations (Hughes, Avey, & Norman, 2008). In this way, trust emerges when employees perceive that organizations are implementing practices to improve their well-being. For example, positive interventions such as a work-family balance practices (e.g. telework) allow employees/teams to arrange their private lives and jobs so that they better fit to each other (Cifre & Salanova, 2004; Salanova, Llorens, Acosta, & Torrente, 2013; Llorens, Salanova, Torrente, & Acosta, 2013). In this sense, when employees manage to reach a balance between work and non-work life, they could attain positive states in terms of trust in their organizations and positive feelings in terms of organizational commitment. In this way, we confirm the mediating role of trust (as an element of healthy employees) between practices (as an element of healthy organizational resources and practices) and commitment (as an element of healthy organizational outcomes), supporting the heuristic HERO Model.

**Answering the fourth research question: Considering a multilevel approach, what is the role of organizational trust for team work engagement?**

Chapter 5 addresses this question with a multilevel approach, which tested the cross-level effect of organizational trust (i.e., vertical trust and horizontal trust) as is considered in the HERO Model on all dimension of team work engagement (i.e., team vigor, team dedication, team absorption). Using aggregated data at team and organizational levels the sample was composed of 41 organizations and 220 teams. Bakker and Leiter (2010) stated that potential differences in dimensions of engagement need to be studied considering the diverse nature of experiences that represent each dimension and their practical implications regarding policies and interventions.

The results of these multilevel models showed that vertical trust had positive and significant cross-level effects on the three dimensions of engagement when controlled for the effects of horizontal trust. No difference between the dimensions were found with respect to vertical and horizontal trust. In this way, we can conclude that more trust within organizations increases all dimensions of team work engagement, that is, team vigor, team dedication and team absorption. In this sense, if organizations strengthen trust in their organization and in their teams, team work engagement emerges.

From a theoretical point of view, we used the new scale proposed of team work engagement developed by Torrente, Salanova, Llorens, and Schaufeli (2013) confirming the multilevel nature of the variable proposed by the HERO and its cross-level relationships. However, we also tested, the interaction of vertical and horizontal trust on the dimensions of team work engagement. These interactions were not significant, indicating that the dimensions of trust could have different relationships with and effects on the variables of the HERO Model depending of the level of analysis.

**Answering the fifth research question: Considering a multilevel and multi-referent mediation approach, how to explain organizational and team performance through the relations between trust and healthy organizational practices?**

Chapter 6 followed a multilevel-multi-referent framework, we have considered the aggregate perceptions from the teams and organization in order to test the mediator

role of organizational trust (i.e., vertical and horizontal trust) between healthy organizational and team resources and practices, and performance at the organizational and team levels of analysis. Specifically, the current study offers evidence of: (a) at the organizational level: the positive and significant relationship between healthy organizational practices and vertical trust (Hypothesis 1); the positive and significant relationship between vertical trust measured and financial performance –ROA (Hypothesis 2); and the fully mediating role of vertical trust in the relationship between healthy organizational practices and financial performance (ROA) (Hypothesis 3); and (b) at the team level: the positive and significant relationship between healthy team resources and (supervisor-rated) team performance (Hypothesis 4); the positive and significant relationship between horizontal trust and (supervisor-rated) team performance (Hypothesis 5); and the fully mediating role of horizontal trust in the relationship between healthy team practices and (supervisor-rated) team performance (Hypothesis 6). Contrary to our expectations, (c) we did not find evidence for cross-level effects.

To sum up, the present study contributes theoretically to previous organizational trust research in two ways. First, it extends the body of knowledge about the key role of organizational trust (i.e., horizontal trust and vertical trust) in the relationship between healthy organizational resources and practices, and performance (team and organizational) using data aggregated at the organizational and team levels. The positive relationships that were found lend support to and extend the social exchange theory (Rousseau, 2011). Previous research based on trust as a product of a social-exchange process (Vanhala, Heilmann, & Salminen, 2016) found positive relations between organizational trust dimensions and a positive outcome such as organizational commitment. In our study, at the organizational level, employees generate “(vertical) trust” when they receive healthy practices and in turn, as a kind of “exchange” they perform better for the benefit of the company. Employees develop trust in the organization when practices regarding work-family balance, mobbing prevention, wellness & well-being and open communication are implemented in the company. Also, employees generate “(horizontal) trust” when they receive positive resources from the team such as autonomy, positive feedback, and supportive team positive climate. In turn, they perform better as a team as a way of benefits “exchange”.

Second, although it is recognized that trust in organizations occurs at multiple levels (Rousseau, Sitkin, Burt, & Camerer, 1998) and using different referents (Fulmer & Gelfand, 2012), there are no clear findings about how different levels of organizational

trust operate simultaneously with different referents. Research about this topic is still missing, as pointed out by Legood, Thomas, and Sacramento (2016). In the current study, we tested two collective levels (organization vs. teams) of trust (vertical vs. horizontal) operating simultaneously in the same companies. So far, the main finding of the current research was that when studying organizational trust at these different levels simultaneously in different companies and teams, the same process of social-exchange occurs as a kind of positive exchange of promises and expectations among employers and employees. However, this process only occurs in a parallel way within levels. as we didn't find cross-level effects of trust between organization/teams (although all variables at different levels of analysis and different referents in the current study correlated positively). Therefore, "a positive mirror effect" is possible, where organizational and team social-exchange processes of trust are operating in the same way but being in parallel (as a mirror). This finding agrees with the assumption of construct quasi-isomorphism pointed by Fulmer and Gelfand (2012). So, we show evidence for theoretical quasi-isomorphism drawn heavily on social exchange theory, as well as functional quasi-isomorphism because our constructs and relationships among constructs function in similar ways at different levels.

From a practical point of view, our findings could provide practitioners both in human resource management and business strategy, as well as managers in organizations, with a better understanding of organizational trust as well as new and fresh knowledge and a more holistic understanding of the linkage between healthy practices, organizational trust and performance. Our results can facilitate different healthy practices and actions that could be carried out by HRM in order to build organizational trust in their teams and the organization as a whole from a perspective based on continuous prevention and promotion actions (Salanova, Llorens, Acosta, & Torrente, 2013). The organizational process results show the relevance of investing in work-family balance, mobbing prevention, psychosocial health, and organizational communication in organizations. Investment in these practices will be interpreted by employees as a sign that the organization is concerned about their well-being, and consequently (vertical) trust in the organization will be enhanced. In turn, this will result in improved financial performance of the organization (i.e., ROA). The team process results show the relevance of investing in autonomy, coordination, feedback, and a supportive team climate. These healthy team practices are able to enhance (horizontal) trust and healthy team outcomes (i.e., supervisor-rated team performance).

**Answering the Sixth research question: Using a longitudinal approach at team level, what are the dynamics between trust, efficacy, and performance over time?**

Chapter 7 was a longitudinal laboratory study among 118 groups working on a management simulation, in which we tested a structural model of dynamic gain spirals of collective efficacy beliefs. Specifically, we examined if collective efficacy beliefs and group performance (rated by the leader) are reciprocally and indirectly related over time through their impact on horizontal trust. Our findings show that high levels of T1 collective efficacy beliefs impact group T3 performance via T2 horizontal trust creating a gain spiral over time. The effect of horizontal trust as underlying mechanism linking collective efficacy beliefs and group performance over time is indicating that is important to invest in group resources such as collective efficacy beliefs (i.e., through the four sources of efficacy beliefs) because they allow horizontal trust to emerge and thus impact group performance. Furthermore, this study provides evidence for the idea that in groups, people develop shared perceptions through their social interactions allowing collective (group) perceptions to emerge. Our study focused on the relationship between collective efficacy beliefs, horizontal trust and group performance (rated by the leader) over time. Studying trust at the group level of analysis and over time represents a novelty in the research of trust. As Costa and Anderson (2011) proposed, horizontal trust reflects shared perceptions among group members and is likely to influence and be influenced by individual propensities and perceptions of trustworthiness, leading to behaviour patterns that reflect those shared perceptions. In this way, trust is likely to increase the overall effort individuals apply to group tasks and the degree to which they cooperate in the pursuit of collective goals, thus leading to better group performance (McEvely et al., 2003).

Also, results of this study offer evidence that supported one of the statements of the HERO Model, that is, that a healthy employee is a key element. This means that, if the organizations implement healthy resources and practices, they have a positive impact on employee health, which in turn has a positive impact on organizational outcomes. If organizations have positive outcomes, is more likely that they will again implement resources and practices in order to create a positive spiral over time. Empirical evidence on the importance of collective efficacy beliefs as a promotor of reciprocal gain spirals within groups and organizations is solid and consistent (Llorens & Salanova 2014). Collective efficacy beliefs can be considered resources that are positively related to well-being and good performance (Stajkovic, Lee, and Nyberg, 2009;

Xanthopoulou, Bakker, Demerouti, and Schaufeli, 2009). To summarize, our results show that when a group has high levels of collective efficacy beliefs, group members trust each other, and as a consequence they perform better (Mayers & Gavin, 1995).

Moreover, our findings demonstrate positive gain spirals of efficacy beliefs. We observed significant increases in collective efficacy beliefs as well as in horizontal trust and group performance over time. It is interesting to point out that in this study we used data aggregated at the group level of analysis (N=118) that showed a positive relationship between collective efficacy beliefs, horizontal trust and group performance, as well as a significant quadratic trend for three variables considered in the study.

Regarding theoretical implications, the results of our study corroborate previous evidence in the study of Social Cognitive Theory (Bandura, 1999) where efficacy beliefs represent a strong antecedent of group processes over time (Salanova, Llorens, & Schaufeli, 2011). According to several researchers (Fulmer and Gelfand, 2012; Salanova, et al., 2011), studying group processes at collective levels of analysis over time is an imperative because this approach contributes to understanding the group functioning based on shared perceptions. Here, the HERO model emerges as a positive and modern organizational approach to explain group and organizational processes from a collective and longitudinal perspective. For this reason, this study addresses the call from researchers to study trust at the collective level and tests the reciprocal causal relationship of collective efficacy beliefs, horizontal trust and group performance. Following the HERO Model, we confirm the relationship of the two main components of the HERO model over time. That is, healthy employees (in terms of collective efficacy beliefs and horizontal trust), and healthy outcomes (in terms of group performance rated by supervisors).

In terms of practical implications, organizations could invest in promoting collective efficacy, for example, through the four sources of efficacy beliefs, that is, mastery experiences, vicarious experiences, social persuasion, and emotional affective states; in order to increase or develop horizontal trust and group performance over time. Specifically, a group could increase their emotional affective states through emotional intelligence training programs. Furthermore, group leaders could be trained on how to provide feedback about group performance as a social persuasion mechanism in order to achieve group goals. Finally, the group could celebrate their success and mastery experiences in order to increase their efficacy as a group.

**Answering the Seventh research question: Same evidence about the role of trust in HERO Model, is found with a Chilean Sample?**

Chapter 8 emerged during a working stay in Chile. In the context of the Master's Degree on Work and Organizational Psychology at Universidad Adolfo Ibáñez, we had the opportunity to test the HERO Model relationships proposed in this thesis project. Given the evidence from research on public opinion about trust within organizations in Chile (ICARE, 2015) and the importance of team resources on healthy organizations, it was interesting to evaluate how horizontal trust and team work engagement interact in a private organization as compared to the public sector. The aim was to evaluate the relationship of trust on the relationship between team work and work engagement using a team as a referent and considering the individual perceptions. In this study, we went a step further considering two dimensions of trust in teams, that is, trust in the direct supervisor and horizontal trust (trust in the colleagues). This improvement is based on the considerations of Costa (2003); Frazier, Gooty, Little, and Nelson (2015); Legood, Thomas, and Sacramento (2016); and Tan and Lim (2009) who include both dimensions of trust as trust in teams. Following this proposal, the results supports the full mediation role of trust in teams (i.e., trust in the supervisor and trust in their colleagues) on the relationship between teamwork and work engagement. This evidence allows to improve the conception of horizontal trust/ trust in teams in the HERO Model by including both dimensions in the organizational trust. Furthermore, this evidence show us the relevance of teamwork as a promotor of trust in teams and work engagement. When a team has clear goals and they perceive themselves as a team they could develop positive experiences in the workplace, such as, trust and work engagement. Therefore, HRM practitioners could consider implementing actions to strengthen teamwork as positive interventions. Specially, in the Chilean context, where trust in organization is an important challenge to achieve in order to improve the well-being in organizations thought effective interventions based on theoretical and robust empirical results belong to the research to be applied in contemporary organizations to develop HEROs.



## THEORETICAL AND PRACTICAL CONTRIBUTIONS OF THIS THESIS

**Theoretical contribution.** In summary, this research adds to current evidence on The HERO Model by examining: (a) CEOs definitions of healthy organizations, and (b) the role of trust within organizations in the relationships between its three main components: (1) healthy organizational resources and practices, (2) healthy employee and teams; (3) and healthy organizational outcomes. Each study presented in this thesis expands upon the knowledge of HERO and the role of trust in the theoretical model considering a multimethod approach. Based on the qualitative study (Chapter 2), we can explore the meaning of Healthy Organizations according to CEO's. They give us information about other variables to include to the HERO Model, for example, interpersonal relationships at work and organizational reputation. Using different sample and statistical techniques, all studies included in this thesis showed that trust has a mediator role between the variables that constitute the HERO Model. Moreover, in the first place, we can conclude that trust is a pivotal underlying psychosocial mechanism of the relationships between the resources and practices implemented by the organization and the result in terms of healthy employee/teams and organizational results. Considering organizational trust as a mediator in the organizational processes based on a positive psychosocial approach seems to be key information to take account in the contemporary organizations. These results are in line with the framework proposed by Positive Occupational Psychology (POP), because we focused on studying the strengths of employees and people's optimal behavior within organizations (Luthans, Avolio, Avey, & Norman, 2007; Peterson & Seligman, 2004; Salanova, Martinez, & Llorens, 2005).

Secondly, especially Chapter 5, Chapter 6 and Chapter 8, contribute to understanding that trust in organizations is a multidimensional construct (vertical and trust in teams), validating the multidimensional conceptualization of trust in the HERO Model. Furthermore, Chapters 5 and 6, using a multilevel approach, confirm the premise of different levels of analyses posted by Salanova et al., (2012). In the same way, these chapters make clear that dimensions of trust (i.e., vertical and team trust) have two different pathways to develop. Vertical trust is predicted by organizational practices and has effects on organizational and team outcomes (i.e., ROA, affective commitment, team work engagement); and team trust is predicted by resources (i.e., efficacy beliefs, coordination) having effect on team outcomes only (i.e., team performance rated by the supervisor). This is important information to implement practices and resources in order to create trust and a HERO.

Thirdly, we confirm the gain spirals proposed by the theoretical model through Chapter 7. In this study, we include efficacy beliefs from Social Cognitive Theory proposed by Bandura as a key promotor of spirals over time. We also concluded, based on longitudinal data with three waves, that horizontal trust (trust in the colleagues) is a mediator over time and allow the gains spirals to emerge. This evidence also supports the statements of The HERO Model where resources increase well-being and performance over time. According to the HERO Model, the three elements (i.e., healthy organizational practices, healthy employee, and healthy outcomes) are assumed to be related to each other over time by a gain spiral (Llorens et al., 2007). Finally, chapter 8 gives theoretical support for The HERO Model in another culture, such as the Chilean culture where trust within organizations is generally low.

**Practical contributions.** This dissertation offers information to practitioners about which practices and resources are relevant when organizations require to develop or to increase organizational trust in their organization. At the organizational level, practitioners could implement actions in order to improve work family balance, mobbing prevention, psychosocial health programs and communications. These four practices develop vertical trust. For example, telework is a good practice, but as we mentioned above, all practices need to be implemented well to be considered positive by employees. At the team level, practitioners could develop team resources such as, autonomy, teamwork, collective efficacy, coordination, supportive climate, and feedback. For example, if organizations develop training programs to improve the competences of his/her his leaders in giving feedback this could increase trust in team and result in a better team performance.

## LIMITATIONS OF THIS THESIS

### **This research has some limitations:**

*In the empirical study 1 (chapter 2)*, information was obtained by one source of information, that is, 14 key stakeholders belonging to 14 Spanish organizations. However, the sample size is appropriate for performing content analysis (Salanova et al., 2012). The perceptions of the key stakeholders (CEOs) are varied and provide a perspective of the concept being studied from both the services and production sub-sectors. On the other hand, the analysis is focused on qualitative information only.

*In tree of the empirical studies, i.e., study 2 (Chapter 3), study 3 (Chapter 4); and study 4 (Chapter 5):* data were obtained by self-report instruments and we used one source of information's (i.e., employee's perceptions). However, in chapter 3, aggregate rather than individual perceptions of teams have been considered for healthy organizational practices, organizational trust and the core of team work engagement. In chapter 4, aggregate data at the organizational level of analysis were considered. And, in chapter 5, aggregate data at the organizational level (i.e., vertical trust) and at the team level (i.e., horizontal trust and team work engagement) were used for hierarchical linear modeling (Hox, 2002) in order to explore cross-level effects and interactions between variables at the organizational and team levels.

*In the empirical study 5 (Chapter 6)* most of the data were obtained by self-report instruments. However, aggregate rather than individual perceptions of teams and organizations have been considered, as proposed by Hox (2010). Moreover, two external and objective criteria were considered (i.e., ROA and supervisor-rated team performance) to minimize the common method variance bias, as recently recommended by Whitman, Van Rooy, and Viswesvaran (2010). Secondly, the employee data in this study are mainly cross-sectional. However, we have enclosed the ROA indicator of the next year as a dependent variable at the organizational level of analysis. Future studies should test the model including different waves of data collection. This would offer the opportunity to test the relationship between healthy organizational resources and practices, organizational trust (i.e., vertical trust and horizontal trust), and healthy organizational outcomes over time.

*In the empirical study 6 (Chapter 7)* a limitation is the use of self-report measures. On the other hand, our study has the following strengths: (1) the use of a longitudinal research design that tests the cross-lagged effects between three waves, (2) two sources of information, that is, data on collective efficacy beliefs and horizontal trust were provided by group members and, group performance was evaluated by the group leader, (3) the sample was composed of 118 groups representing a large sample over the three waves.

*The empirical study 7 (Chapter 8)* is based on a convenience sample. However, three different kind of Chilean organizations are included. Also, we used a self-report measures considering the individual perceptions of collective variables, that means, that we used teams as referents.

## FUTURE RESEARCH

Across the empirical chapters, we conclude that Organizational trust is a pillar of strength in organizations. Developing and increasing trust at different organizational levels is a positive way to create HEROs.

Future research could combine qualitative and quantitative methodologies, which would enable us to triangulate the information, such as through self-report questionnaires or daily diary studies by employees, supervisors, and customers of the organization. These different sources of information would provide a more integrated, comprehensive view of what is meant by a healthy organization and provide specific proposals for future interventions (such as training).

Furthermore, it should be interesting to test trust as a multidimensional construct using multiple organizations (not only Spanish and Chilean SME) in cross-cultural and longitudinal studies in order to explore the existence of positive spirals over time (Llorens & Salanova, 2014). We agree with Fulmer and Gelfand (2012) that another interesting future area of research is the concept of 'trust climate' thereby considering the direct consensus or referent-shift models by Chan (1998). Using longitudinal designs, we could increase the knowledge about multilevel antecedents and consequences of trust climate as well as the influence of strength of the trust climate on important business outcomes such as performance.

Furthermore, the relevance of the gender perspective in the government policies and agenda around the world made necessary to incorporate this variable to the research and interventions.

In this way, future research could be oriented to performing and evaluating positive interventions in groups to increase trust considering the different predictors of trust at different levels of analysis. As mentioned above, interventions to promote efficacy beliefs could be focused, for example, on emotional intelligence (emotion affect) through emotional regulation and mindfulness.

## MAIN CONCLUSION/ FINAL NOTE

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This thesis project offers a multimethod approach to understand organizational trust based on the HERO Model. Based on the results of this project, we concluded that the results of the qualitative study show that CEOs vision of the healthy organization focuses mainly on employee health. From their discourse, a new important variable to be considered in the Theoretical Model emerged, that is, reputations. That's means, that internal and external organizational reputations are relevant to be a HERO, specially, for the capitation and retention of talent. Regarding to trust within organizations - mainly topic of this thesis - we can conclude that it is an underlying mechanism which mediates the relationship between the three components of the theoretical HERO Model. The quantitative empirical studies contained in this project contributed to a more in-depth understanding of which antecedents and consequences are related to the dimensions of organizational trust. Furthermore, the dimensions of trust (vertical and trust in teams (i.e, direct supervisor and horizontal trust) represent two path to develop or improve organizational trust. This information will be relevant to CEO's in order to make decisions regarding how to develop trust in their organizations as an important competitive advantage, i.e. to be a HERO. In Summary, we used qualitative, cross-sectional and over time perspectives and different samples and sources of information.

**'Creating a Healthy & Resilient  
Organization based on organizational  
trust are necessary'**

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# CON RESPECTO A LA AUTORA

## Y SU CAMINO ACADÉMICO



**Hedy Acosta Antognoni** nació en Santiago de Chile y vivió en la ciudad de Curicó (*Aguas Negras - en mapudungun*) con sus padres y hermanos. Estudió Contador General como carrera técnica en el Instituto Santa Marta (Chile). Posteriormente, se trasladó para comenzar a estudiar en la Universidad de Talca (Chile) la carrera de Contador Público y Auditor para luego seguir con la carrera de Psicología. Durante los primeros años en Psicología se dio cuenta que la investigación le provocaba interés y entusiasmo. Por tanto, comenzó a participar de forma voluntaria en proyectos de investigación. Asimismo, comenzó a realizar diferentes ayudantías en el área de psicología organizacional durante la carrera.

Cursando el tercer año de Psicología conoció el '**síndrome de Burnout**' debido a un proyecto de investigación de la asignatura 'Trabajo y Salud'. Esto marcó el inicio de su camino académico debido a que se contactó, por primera vez, con Marisa Salanova para pedir información. Dado el interés, novedad y relevancia del tema en Chile, realizó la Tesis de Fin de Título para optar al grado de Psicóloga en '*Burnout en Académicos*'.

Por motivos personales viaja en diciembre del 2006 a Valencia (España) y aprovecha la oportunidad para reunirse en la Universitat Jaume I de Castelló de la Plana. De esta conversación emergen nuevos desafíos e ilusiones.

El 2008 obtiene la Beca de la Fundación UJI para realizar la segunda versión del Máster Oficial de Psicología del Trabajo, de las Organizaciones y en Recursos Humanos y la Beca Santiago Grisolia de la Comunitat Valenciana para formarse como personal investigador dentro del equipo (llamado en ese tiempo) WoNT – Prevención Psicosocial.

En el Máster y gracias a su rendimiento académico logra cuatro matrículas de honor que le permiten realizar los dos itinerarios del máster: Salud Ocupacional y Desarrollo de Recursos Humanos. Además, sigue la línea de investigación del máster realizando y publicando el trabajo titulado: 'How healthy organizational practices predict team work engagement: The role of the organizational trust'.

En el año 2011, gracias al apoyo de sus tutoras accede a la Beca Predoctoral de la Universitat Jaume I.

Durante estos años (2008-2015) en el equipo (nombre actual) 'WANT – Prevención Psicosocial y Organizaciones Saludables' y antes de doctorarse ha tenido 'la gran oportunidad' de participar colaborativamente en **8** proyectos concursables con financiamiento público y privado en España y Chile. Ha realizado **19** artículos científicos, **4** capítulos de libro, **1** libro, y ha participado en **18** congresos tanto en ponencias como simposios. Sumado a esto, todas aquellas instancias formales e informales de aprendizaje (p.e., sesiones doctorales, seminarios, taller de formación interna de metodología, consultoría).

Desde agosto del 2015 a enero del 2017 formó parte de la Universidad Adolfo Ibáñez como académica a tiempo completo, desarrollando docencia en pre y post grado, así como, investigación en el área de la psicología organizacional.

Actualmente, asumió el desafío de ser co-directora de la Revista Latinoamericana de Psicología Positiva ([www.acpp.cl](http://www.acpp.cl)) y forma parte de diferentes proyectos de investigación-aplicada, lo que representa 'the next step' en su camino académico: intervenciones saludables y éticas para mejorar y optimizar el bienestar de las personas y contextos organizacionales.

A continuación, un resumen de sus principales publicaciones y participación a congreso:

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